AUCKLAND PLAN 2050

Auckland Plan 2050

June 2018

Auckland Council
Te Kaunihera o Tāmaki Makaurau

Contents

He Mihi

Tērā tō waka te hoea ake e koe i te moana o te Waitematā kia
ū mai rā ki te ākau i Ōkahu.
Ki reira, ka mihi ake ai ki ngā maunga here kōrero,
ki ngā pari whakarongo tai,
ki ngā awa tuku kiri o ōna manawhenua, ōna mana ā-iwi
taketake mai, tauiwi atu
E koro mā, e kui mā i te wāhi ngaro, ko Tāmaki Makaurau tā
koutou i whakarere iho ai,
ki ngā reanga whakaheke, ki ngā uri whakatupu – ki tō iti, ki tō rahi.
Tāmaki – makau a te rau, murau a te tini, wenerau a te mano.
Kāhore tō rite i te ao.

Tō ahureinga titi rawa ki ngā pūmanawa o mātou kua
whakakāinga ki roto i a koe.
Kua noho mai koe hei toka herenga i ō mātou manako katoa.
Kua ūhia nei mātou e koe ki te korowai o tō atawhai,
ki te āhuru o tō awhi,
ki te kuku rawa o tō manawa.
He mea tūturu tonu whakairihia,
hei tāhuhu mō te rangi e tū iho nei,
hei whāriki mō te papa e takoto ake nei.
Kia kōpakina mātou e koe ki raro i te whakamarumaru o āu
Manaakitanga.

E te marae whakatutū puehu o te mano whāioio,
e rokohanga nei i ngā muna, te huna tonu i ō whāruarua
i ngā hua e taea te hauhake i ō māra kai,
i ngā rawa e āhei te kekerihia i ō pūkoro.
Te mihia nei koe e mātou.

Tāmaki Makaurau, ko koe me tō kotahi i te ao nei, nōku te
māringanui kia mōhio ki a koe,
kia miria e te kakara o te hau pūangi e kawe nei i ō rongo.
Ka whītiki nei au i taku hope ki ngā pepehā o onamata, ki ōku
tūmanako mō āpōpō
me ōku whakaritenga kua tutuki mō te rā nei.

Tāmaki Makaurau, tukuna tō wairua kia rere.

Let your canoe carry you across the waters of the Waitematā
until you make landfall at Ōkahu.
There, to greet the mountains, repository of all that has been
said of this place,
there to greet the cliffs that have heard the ebb and flow of the
tides of time,
and the rivers that cleansed the forebears of all who came
those born of this land and the newcomers among us all.
To all who have passed into realms unseen, Auckland is the
legacy you leave to those who follow,
your descendants – the least, yet, greatest part of you all.
Auckland – beloved of hundreds, famed among the multitude,
envy of thousands.
You are unique in the world.

Your beauty is infused in the hearts and minds of those of us
who call you home.
You remain the rock upon which our dreams are built.
You have cloaked us in your care,
taken us into the safety of your embrace,
to the very soul of your existence.
It is only right that you are held in high esteem,
the solid ground on which all can stand.
You bestow your benevolence on us all.

The hive of industry you have become
motivates many to delve the undiscovered secrets of your realm,
the fruits that can still be harvested from your food stores
and the resources that lie fallow in your fields.
We thank you.

Auckland you stand alone in the world, it is my privilege to know you,
to be brushed by the gentle breeze that carries the fragrance of
all that is you.
And so I gird myself with the promises of yesteryear, my hopes for
tomorrow and my plans for today.

Auckland let your spirit soar.

About the Auckland Plan 2050

Auckland Plan 2050 explained

The Auckland Plan 2050 is our long-term spatial plan to ensure Auckland grows in a way that will meet the opportunities and challenges of the future.

It is required by legislation to contribute to Auckland's social, economic, environmental and cultural well-being.

Auckland Council has developed the Auckland Plan 2050 with, and on behalf of, all Aucklanders. Auckland now has a shared responsibility for implementing it.

The plan outlines the big issues facing Auckland and recommends the way in which Aucklanders and others involved in the future of Auckland can best respond to them.

The Development Strategy and six outcomes set Auckland's strategy to 2050.

They consider how we will address the key challenges of high population growth and environmental degradation, and how we can ensure shared prosperity for all Aucklanders.

The plan is intended to set high level direction for Auckland. It does not contain a detailed set of actions.

Read about the specific requirements of the plan in sections 79 and 80 of the Local Government (Auckland Council) Act 2009 on the New Zealand Legislation website.[1]

The 2012 Auckland Plan and why we revised it

The first Auckland Plan, produced in 2012, was a landmark document covering every aspect of Auckland life and economy. It was accompanied by a highly detailed series of objectives and targets, and progress has been made towards achieving them.

One of its provisions was that it would be reviewed after six years.

Our fast-changing world meant that the 2012 plan no longer provided the necessary direction for decision-making.

The Auckland Plan 2050, adopted in June 2018, is a more streamlined spatial plan with a simple structure and clear links between outcomes, directions and measures. It shows how Auckland is expected to grow and change during the next 30 years.

The evidence report 'Developing the Auckland Plan 2050' provides further information on the process undertaken to develop the plan, and how the issues identified with the 2012 Auckland Plan have been addressed.

The terms 'we', 'us' and 'our' used in this plan refer to Auckland and Aucklanders. Specific organisations or agencies are identified by name.

What is in the Auckland Plan 2050?

The Auckland Plan 2050 describes Auckland in general terms, outlines the major challenges that we face, and sets the direction for tackling these challenges. It includes the values that will shape how we work together, and it identifies key organisations that will play important roles in creating our shared future.

The plan reflects knowledge and experience gained since the first Auckland Plan was released. It also uses the latest available statistical information and research to inform us of the realities of life in Auckland.

Outcomes

Our research and engagement has identified six important areas in which we must make significant progress, so that Auckland can continue to be a place where people want to live, work and visit.

For each area the plan describes the desired outcome, why it is important for Auckland's future and what we need to focus on to bring about change.

Belonging and Participation

All Aucklanders will be part of and contribute to society, access opportunities, and have the chance to develop to their full potential.

Māori Identity and Wellbeing

A thriving Māori identity is Auckland's point of difference in the world – it advances prosperity for Māori and benefits all Aucklanders.

Homes and Places

Aucklanders live in secure, healthy, and affordable homes, and have access to a range of inclusive public places.

Transport and Access

Aucklanders will be able to get where they want to go more easily, safely and sustainably.

Environment and Cultural Heritage

Aucklanders preserve, protect and care for the natural environment as our shared cultural heritage, for its intrinsic value and for the benefit of present and future generations.

Opportunity and Prosperity

Auckland is prosperous with many opportunities and delivers a better standard of living for everyone.

Development Strategy

The Development Strategy shows how Auckland will physically grow and change over the next 30 years. It takes account of the outcomes we want to achieve, as well as population growth projections and planning rules in the Auckland Unitary Plan.

It provides:

- a pathway for Auckland's future physical development
- a framework to prioritise and coordinate the required supporting infrastructure.

Outcomes
What the plan aims to achieve

Belonging and Participation

Māori Identity and Wellbeing

Homes and Places

Transport and Access

Environment and Cultural Heritage

Opportunity and Prosperity

Development Strategy
How Auckland will grow and change over the next 30 years, including sequencing of growth and development

20 Directions
How to achieve the outcomes

37 Focus areas
How this can be done

Thinking about possible futures

The future is not certain and the further out we try to project or predict, the less certain it becomes. It is really important that we remain open to a range of possible technological, economic and social changes.

This series of short descriptions pose possible futures for Auckland.

They are not predictions they are merely ideas of what a future Auckland might be like.

The scenarios are:

- Living with nature
- Safe haven
- The people's network
- Whose food bowl?
- Two speed Auckland. This scenario is somewhat different from the others in that it describes a negative possible future if the outcomes and directions of the Auckland Plan 2050 are not achieved.

Implementation approach

The implementation section shows that the investment and actions of many people will be required to deliver the Auckland Plan 2050. It identifies the range of partners needed for successful implementation and their roles, and the methods that will be used to work together and align collaborative efforts.

Measuring progress

This section provides information on how we will monitor and measure progress.

All parts of the plan are inter-dependent. In order to make meaningful change we must make substantial progress towards achieving all outcomes.

We must also use the Development Strategy to coordinate and align land use with infrastructure planning and provision, to match Auckland's projected growth.

Glossary

Some terms used may not be familiar to all readers so we have provided a glossary of definitions.

About Auckland

Auckland is a special place for its environment, its people and the lifestyles it offers.

What makes Auckland special

Tāmaki Makaurau, the Māori name for Auckland, means Tāmaki desired by many.

This name refers to the abundance of natural resources, strategic vantage points, portage routes, and mahinga kai which first attracted Māori, and then other settlers.

The spiritual and cultural connection Māori have to Tāmaki Makaurau is tied to their relationship with the land, maunga, harbours and waters.

Quality of life

Auckland has a world-wide reputation for its quality of life (as reported on the Mercer website[2]). In large part this is because of its outstandingly beautiful natural environment and the lifestyle opportunities it offers.

Auckland's beaches, harbours, rainforest-covered ranges, maunga, productive rural areas and gulf islands are all within relatively easy proximity for residents and visitors to enjoy.

This stunning natural environment is blended with world-class universities, major arts, cultural and sporting events, museums, theatres, galleries, and history-rich urban villages.

Auckland is increasingly displaying unique characteristics as a dynamic Asia-Pacific hub.

Population diversity

There has been sustained population growth in Auckland because it is a place of opportunity. People want to raise a family and pursue personal, business and career aspirations here.

Auckland is ethnically and culturally diverse. It is home to people from over 120 different ethnicities.

Diverse Auckland

Most Aucklanders consider that growing cultural and lifestyle diversity has made Auckland a better place to live.

The Auckland Plan 2050 acknowledges the special place of Māori as the tangata whenua of Aotearoa New Zealand.

The Crown has specific obligations to Māori under the nation's founding document, te Tiriti o Waitangi/the Treaty of Waitangi.

Legislation places obligations and decision making requirements on local government that are specific to Māori.

How Auckland has changed since the first Auckland Plan

Since the first Auckland Plan was adopted in 2012 several important things have happened.

Auckland Unitary Plan

Auckland now has a Unitary Plan, which is our statutory rule book for planning. It is based on the strategic direction set by the 2012 Auckland Plan and:

- outlines what can be built where
- provides for a compact urban form
- describes how to maintain the rural and freshwater and marine environments.

The Auckland Unitary Plan[3] indicates where Auckland's population, commercial and industrial growth can be accommodated.

Independent Māori Statutory Board

The Independent Māori Statutory Board[4] has adopted the Māori Plan for Tāmaki Makaurau. This 30-year plan sets out Māori aspirations and outcomes, and it gives direction to the board to prioritise its Schedule of Issues of Significance and actions for Māori. It also enables Auckland Council to address actions for Māori outcomes and act in accordance with te Tiriti o Waitangi/the Treaty of Waitangi.

Housing

Auckland Council and central government collaborated to enact the Housing Accord and the Special Housing Areas Act 2013 so that housing could be fast-tracked while the Auckland Unitary Plan was being developed.

Transport

Central government and Auckland Council have worked together on transport planning for Auckland. Through the Auckland Transport Alignment Project,[5] they have agreed on the direction for the development of Auckland's transport system over the next 30 years.

Tūpuna Maunga o Tāmaki Makaurau Authority

The Tūpuna Maunga o Tāmaki Makaurau Authority[6] was established in 2014 to co-govern 14 tūpuna maunga. The establishment of this statutory authority was an historic achievement. It reflected the role of mana whenua in Auckland and signalled a transformation in the way that mana whenua and Auckland Council partner in decision-making.

Infrastructure

Significant infrastructure developments since 2012 include:

- completion of the Waterview Tunnel
- electrification of the urban rail network
- commencement of the City Rail Link
- progress on the cycle network.

Auckland's role in New Zealand

The economy

Auckland is the largest commercial centre in New Zealand, is home to around a third of the population and contributes almost 40 per cent of the nation's gross domestic product.

Most migrants to New Zealand choose to settle in Auckland because of the wide range of employment and commercial opportunities.

Auckland is the main gateway in and out of New Zealand, with the largest and most active international airport, largest international sea port and a critical freight distribution function.

Its scale and commercial and industrial opportunities means it is able to develop infrastructure and attract highly specialised talent that drives economic development.

Its employment diversity, market size and business clustering enable it to attract high value economic activity and international investment other parts of New Zealand cannot.

Auckland's contribution to the economy lifts the standard of living for all New Zealanders. New Zealand needs Auckland to succeed, just as Auckland needs the rest of New Zealand.

The effect of Auckland's size

Auckland's large population size relative to the rest of New Zealand is likely to remain during the next 30 years.

By 2043 Stats NZ projects that Auckland's working age population (those aged 15 years and over) will grow by 773,000 compared with an additional 647,500 working age people in the rest of New Zealand.

Auckland's scale means it is able to support higher education and nurture highly specialised businesses across a range of industries, such as healthcare and research.

This has attracted young people from across New Zealand, and particularly the upper North Island, to migrate to Auckland for work and educational opportunities.

Auckland within the upper North Island

Auckland and the rest of the upper North Island are closely linked, and work together to achieve shared objectives.

Northland, Auckland, Waikato and the Bay of Plenty are home to over half of New Zealand's population and generate more than half of the national gross domestic product.

Many issues that arise across these regions demand cooperation if they are to be satisfactorily addressed.

The environment, for example, does not recognise administrative boundaries, particularly in regards to marine and terrestrial weeds and pests.

In the north, road and potential rail freight improvements between Auckland and Whangarei will increase the need to work collaboratively.

There are a number of opportunities for collaboration in the short, medium and long-term, including:

- integrated business case development for infrastructure
- combined land use planning
- agreeing on a common evidence base for the management of threats to biodiversity.

There are challenges as well, such as:

- current funding mechanisms
- institutional constraints
- political continuity.

Working together

The Upper North Island Strategic Alliance (UNISA)[7] was established in 2011 and renewed in 2017. Its purpose is to respond to and manage a range of common interests and issues.
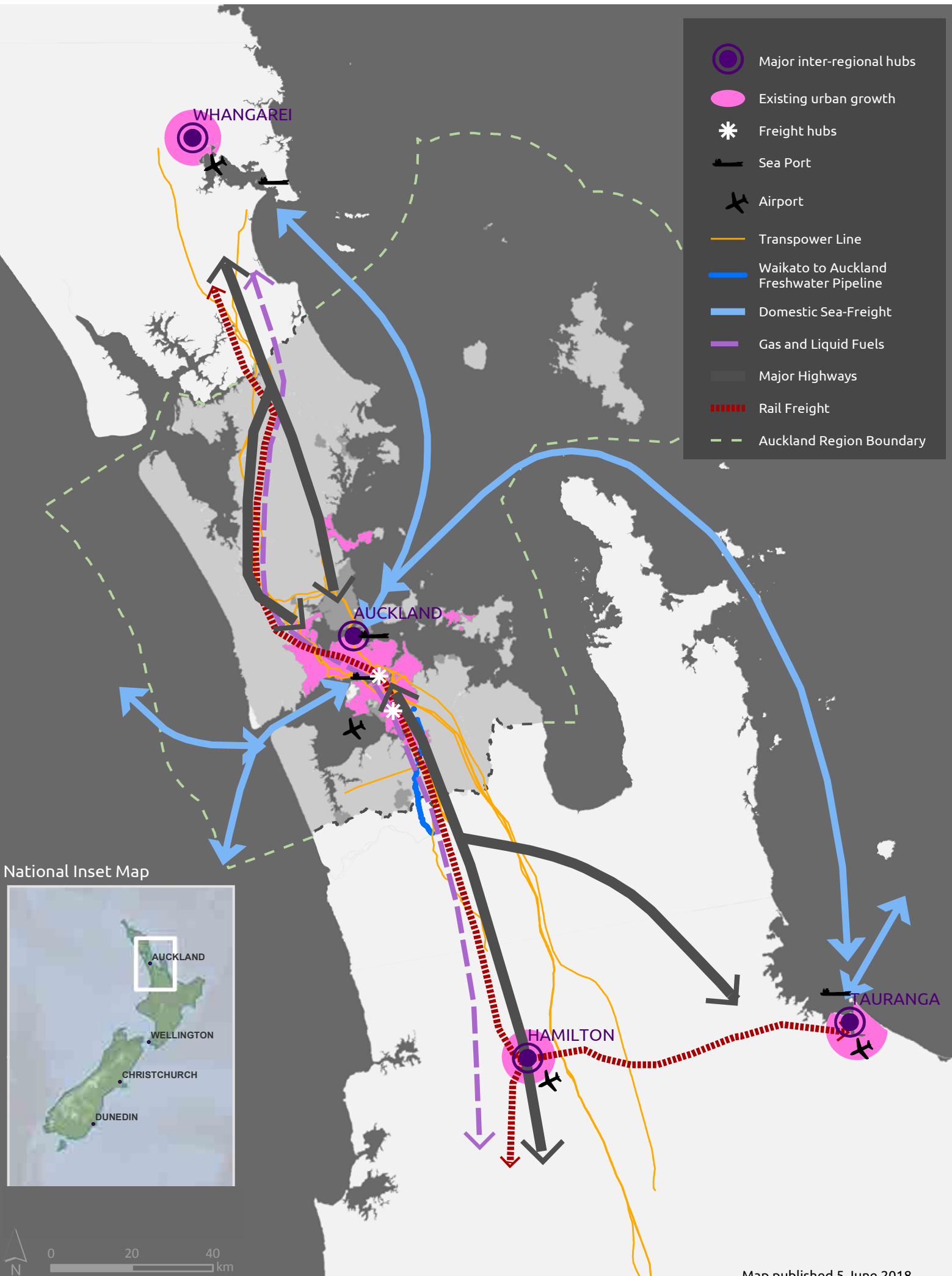
The members are:

- Northland, Waikato and Bay of Plenty regional councils
- Auckland Council
- Whangarei District Council
- Hamilton City Council
- Tauranga City Council.

The impact of Auckland's growth on its neighbours

Based on recent trends, Auckland is likely to continue to be an attractive place for settlement for migrants to New Zealand, and growth from internal migration and natural increase (the number of births over deaths) will continue.

Despite Auckland's high amenity and liveability, growth can have negative consequences: increased demand for housing, when unmatched by supply, can drive up the cost of housing; and poor travel choices leads to more congestion on the roads.

The rising cost of living in Auckland, particularly the cost of housing, has led to a 'halo' growth effect in neighbouring regions. Auckland-based investors and those relocating out of Auckland have escalated demand for property.

WHANGAREI

AUCKLAND

HAMILTON

TAURANGA

Legend

- Major inter-regional hubs
- Existing urban growth
- Freight hubs
- Sea Port
- Airport
- Transpower Line
- Waikato to Auckland Freshwater Pipeline
- Domestic Sea-Freight
- Gas and Liquid Fuels
- Major Highways
- Rail Freight
- Auckland Region Boundary

National Inset Map

AUCKLAND

WELLINGTON

CHRISTCHURCH

DUNEDIN

0   20   40
km

N

Map published 5 June 2018

This is particularly significant in northern Waikato given the extent and speed of current and projected future population growth and how close some settlements are to Auckland.

The challenge is to mitigate any less positive impacts and share the prosperity that arises from population growth.

Transport inter-connectedness

Transport links between Northland / Whangarei, Auckland, Hamilton and Tauranga are critical to the economic and social success of each area.

These linkages, whether by sea, road or rail, move significant freight volumes, particularly of imports and exports. These same transport links also serve the needs of New Zealand's tourism industry.

See Map 10 for Inter-regional connections.

Auckland Airport is New Zealand's main passenger access point. In recent years, the airport's passenger numbers and cargo volumes have increased sharply, as has commercial development around the airport, placing operational pressures on the airport and its main access routes.

Auckland's major sea port and the inland port at Wiri, along with Tauranga's Metroport at Te Papapa, receive significant quantities of freight that are distributed daily via the road and rail networks.

Along with the Port of Tauranga and Northport in Whangarei, these ports play a major role in the freight network and carry over half of all New Zealand freight.[8]

Ports benefit economies, with their freight, cruise ships, passengers and associated businesses.

Energy and resource interdependency

The majority of energy used in Auckland comes from a distance, with petrol, diesel and jet fuel from Northland via the Refinery Auckland Pipeline and electricity via Transpower's national network.

Auckland imports nearly one third of its metal aggregate needs from other parts of the upper North Island, particularly from Waikato and Northland. The demand for aggregates in Auckland is expected to increase to support growth and development unless more sustainable building methods are adopted. Until then, ensuring accessible supply is a matter of importance.

Increased water supply is needed to support Auckland's projected growth with an application lodged to take a further 200,000 cubic metres of water from the Waikato River.

Auckland's key challenges

To achieve the Auckland we want by 2050 we must address the three most important challenges of high population growth, ensuring prosperity is shared amongst all Aucklanders, and arresting and reversing environmental degradation.

Key Challenge 1: Population growth and its implications

More than 1.66 million people live in Auckland already. Over the next 30 years this could increase by another 720,000 people to reach 2.4 million. This could mean another 313,000 dwellings and 263,000 jobs are required over this period.

Auckland's population growth is driven by both natural growth, meaning more births than deaths, and migration from overseas and from other parts of New Zealand. Natural growth is more easily planned for over the long-term, while changes in immigration patterns often require a more immediate response.

The rate and speed of Auckland's population growth puts pressure on our communities, our environment, our housing and our roads. It means increasing demand for space, infrastructure and services.

We need a plan for where people will live and how they will move around Auckland.

The scale of investment required to respond to and support this growth is significant. While population growth results in a larger rating base, the amount of investment needed remains a challenge if we rely on traditional funding sources only.

The Development Strategy in this plan and 30-year Infrastructure Strategy[9] address the prioritisation, sequencing and funding of essential infrastructure. This includes requirements under the National Policy Statement on Urban Development Capacity to provide sufficient feasible development capacity in the medium and long term.

Key Challenge 2: Sharing prosperity with all Aucklanders

Auckland's success is dependent on how well Auckland's prosperity is shared.

Many Aucklanders are prosperous and have high living standards, yet there are significant levels of socio-economic deprivation, often in distinct geographic areas.

This is a major issue. Income, employment, health and education outcomes are different in various parts of Auckland, and there are distinct patterns across broad ethnic and age groups.

In part this is due to structural discrimination, meaning the intentional or unintentional practices and behaviours that prevent some people from succeeding or even participating in employment or society.

It is also due to unequal access to education and employment opportunities, along with high and often unaffordable housing costs.

Secure and healthy housing is associated with the accumulation of greater intergenerational wealth and other benefits not available to those living in short-term or unhealthy homes.

With the significant increase in the cost of housing in Auckland, decline in home ownership levels is resulting in fewer Aucklanders being able to fully prosper.

As Auckland continues to grow, we need to ensure that all Aucklanders can benefit from the social and economic prosperity that growth brings and can participate in and enjoy community and civic life.

Key challenge 3: Reducing environmental degradation

Much of Auckland's appeal is based on the natural environment.

Auckland's significant features include harbours, beaches, lakes, coastline, maunga, rain-forest clad ranges, and the Hauraki Gulf islands.

They are part of our cultural heritage and are an important part of Auckland's identity. But they are vulnerable to degradation from the impacts of human activities.

Despite regulation and considerable effort, Auckland's environment continues to be affected by past decisions and its rapid growth and development, as well as emerging threats such as climate change.

The latest report on the health of Auckland's natural environment[10] shows that air quality has improved significantly in the last few decades as a result of effective air quality management.

All other indicators, however, show a decline. Marine and freshwater environments, for example, have been polluted by sediments and contaminants arising from development, building and industrial activities.

Our lifestyles, and how we manage growth and development, will determine whether the natural environment endures and if future Aucklanders can enjoy the environmental benefits we cherish today.

Two specific issues will continue to have the biggest effect on our environment:

- urban development (for more information read the Development Strategy)
- the effects of climate change.

The effects of climate change

Auckland is exposed to a range of climate change impacts, such as sea level rise and more frequent extreme weather events. Global and local records for rainfall and temperature are already being surpassed on a regular basis.
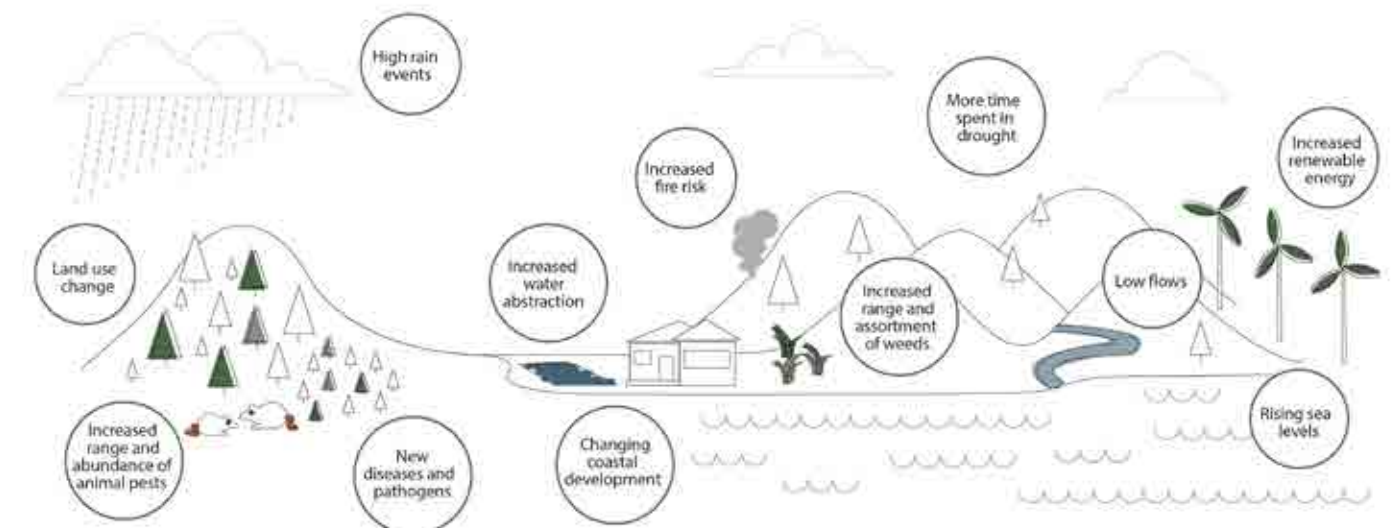
These impacts present challenges for Auckland, such as:

- damage to ecosystems and infrastructure as a result of changing climate conditions leading to issues such as sea level rise, and/or more frequent extreme weather events

- direct impacts on economic productivity, and changes in market demand for some goods and services

- unequal distribution of impacts on Aucklanders, with those such as the elderly, the very young, those living in poverty or with chronic health issues more likely to be negatively affected.

There are things we can do to reduce the impacts and costs of climate change, including:

- moving to a low carbon economy and embedding long-term, adaptive and more resilient climate change considerations into planning decisions. This will reduce the need for major retrofitting or land use changes as impacts become more frequent and severe

- increasing green infrastructure across Auckland. This will support the reduction of greenhouse gas emissions, improve water management, reduce flood risk and deliver spaces that people want to visit and connect to.

However, there are difficult decisions to be made and we will all need to work together to deal with or lessen the impacts of climate change.

Today's actions and decisions are creating the legacy that we will leave for future Aucklanders. Each delay in making sustainable decisions means fewer and fewer opportunities to halt the decline in our already stressed environment.

Auckland's population

Auckland's population is growing and changing, both from natural increase and immigration. Proportions of younger to older are also changing, and our planning and services need to respond to all these changes.

More than one third of New Zealand's population (35 per cent) lives in Auckland.

This proportion is projected to increase to 39 per cent by 2043.

While the growth is expected to continue, the pace of growth is projected to slow.

Ethnic diversity

Auckland is home to people from many places, cultures and traditions. This rich diversity will continue to increase.

In the next few decades, Auckland will be home to even greater numbers of people in the broad Asian and Pacific groupings in particular.

These communities have already grown substantially over the last few decades.

In the latest data available (Census 2013) almost a quarter (23 per cent) of Auckland residents identified with an Asian ethnicity, and Auckland was home to two thirds (65 per cent) of all Asian peoples in New Zealand. The broad Asian ethnic group is projected to increase significantly in Auckland, from both immigration and natural increase.

Pacific people will continue to play a significant role in Auckland's growth and change. Stats NZ ethnic population projections (medium series) suggest that the number of Pacific people could increase from 15 per cent of Auckland's population in 2013 to 17 per cent by 2038.

Today's Pacific population is mostly New Zealand-born, predominantly young, and highly urbanised.

For the first time, between 2006 and 2013, growth of the Pacific population in New Zealand and, by implication, in Auckland, was through natural increase rather than migration from the Pacific.

Auckland's Māori population is increasing and will continue to grow.

Read more about Auckland's Asian, Pacific and Māori populations later in this section.

Increased numbers and proportion of older residents

The number of older Aucklanders[11] (those aged 65 and over) is expected to more than double in the two decades from 2013, reaching a total of 353,600 people by 2033.

Such rapid growth is not predicted in any other age group, and will have direct impacts on our health, support, and transport services.

Furthermore, older Aucklanders will make up a greater proportion of the population. This is unprecedented in New Zealand, but is consistent with international trends.

Children and young people

At the time of the 2013 Census, a third of all children and young people in New Zealand (those aged under 25 years) lived in Auckland. In turn, children and young people made up over a third of the Auckland population.

The combined demographic forces of population growth and structural ageing means that while there will be more children and young people living in Auckland in the next few decades, the proportion of Aucklanders who are children and young people will decrease.

Rate of population growth slowing

Across all population projections, Auckland's rate of growth is anticipated to slow slightly from that experienced in recent years. Even so, this growth creates challenges for Auckland which are explored further in the challenges section.

The Auckland Plan 2050 Evidence Report: Demographic trending for Auckland - Data sources and findings - July 2018 provides futher informaiton about demographic trends for Auckland.

Possible futures

These are uncertain times. In developing the Auckland Plan we focused on the things most likely to bring about a great future for Aucklanders. Working together we can achieve a great deal.

There are, however, other possible futures for Auckland. Especially if we ignore how complex the world is becoming and how fast the landscape is changing.

A plan for Auckland which looks out 30 years will have some definite answers to some issues, but other areas will be far from certain.

This section of the Auckland Plan explores a small number of plausible futures for Auckland. These are not predictions, forecasts, or preferences. They are simply an initial exploration of what could be.

Alongside positive global achievements such as the Paris Agreement on Climate Change, there are a number of possible situations that are less positive.

Nations and cities are becoming more unequal. Enduring poverty remains. The dislocation of people across borders is unprecedented. Climate events dislodge many more people from their homes. Water and food shortages are more widespread. Trade protectionism and 'wall building' is in a new phase. An era of work dominated by artificial intelligence and automation has arrived. Many people feel isolated.

Whilst Auckland may be remote, we are still affected in this increasingly interconnected world. In developing this Auckland Plan, Aucklanders have expressed uncertainty as they see it in various ways.

They have talked about:

- a two-step Auckland of haves and have nots
- the effects of Auckland's rapidly growing and increasingly diverse population
- Auckland's perception as a global 'safe haven'
- the effects and opportunities of innovative and accessible technology
- the move to better reconnect people and place
- the importance of living with nature and climate change.

While global trends are shared, so also is a desire for a more inclusive agenda. One that creates better jobs or lifestyles, addresses inequality, reduces poverty, and begins to mend land and waterways – and neighbourhoods and communities, where solutions are often found.

Deeper and more systematic processes for exploring scenarios are being developed and practiced across New Zealand. The dairy and transport sectors are two local sectors doing this well.

A wide base of wisdom and knowledge is needed to help Auckland citizens and leaders explore:

- what they want to avoid
- the trends they want to follow and encourage.
- alternative ways of influencing the future, through a thorough process of scenario testing and discussion.

This will be one way the Auckland Plan continues to develop and refine its response to complex issues, and fast-paced change.

Living with nature

What might be happening?

Extreme weather events cause significant disruption to domestic and export food production. This has gone beyond late potatoes and tomatoes, and now limits our fishing exports. Water scarcity in the Waikato means Aucklanders have had to find alternative sources of drinking water.

Sea level rise has reclaimed areas earlier than forecast – Devonport and other new islands have formed in the Gulf.

Tamaki Drive and a number of east coast suburbs are set back to their original solid ground prior to landfilling.

Helensville has reverted to its former estuarine nature – meaning a re-routing of the Main Trunk line northwards.

Storm surges have removed many coastal manmade structures: boat ramps, seawalls, bridges and culverts. Unstable cliffs and shorelines are being fenced off. Havoc on exposed roads is more frequent. Flooding is common, regularly overwhelming waste water and stormwater systems and dumping silt everywhere as riverbank vegetation has been swept away.

What does Auckland look and feel like?

We are blue-green, lush and more tropical. More Pacific in nature, with a city woven with water. Areas are revegetated to help manage our more variable rainfall patterns, cool our houses and stabilise watercourses.

Auckland has been redrawn. The west coast is now more popular than the eastern beaches due to sea level rise. There are more new homes along Auckland's north-south spine, and in the west away from the coast. Properties in the south have become particularly appealing. Wellsford's position on higher ground means it is fast becoming a boom town.

The Manukau and the Firth of Thames have become much larger bodies of water. Marine farming is becoming a viable replacement for protein lost from the flooded dairy industry.

Businesses have redistributed themselves physically and digitally. Ensuring business continuity means many people work from home or in smaller footprint buildings away from the coast. This has unexpectedly strengthened local centres and neighbourhoods.

How might we be living?

We've decided not to fight the sea and to live with nature. We've become experts in redesigning infrastructure, bringing our rivers out from underground pipes and rejigging systems into smaller units so that disruption is more contained, and it is faster and less expensive to fix damage.

Some areas have become highly desirable island communities. Ferry and other visitor services are the norm across the Waitematā and the new islands of the Gulf, especially Devonport. More water space has reinvigorated tourism in the City of Sails.

People have adopted solar energy, others have made roof gardens so they are self-sufficient when the power goes down, and to capture rainwater – much as we did in the 1950s. More regular power and waste outages have made us rethink self-reliance, household by household. We're gardening more than we used to.

There has been a big shift in the way we look at home ownership. Long-term leases for homes have become the norm as security of tenure for land vulnerable to flooding and climate impacts has disrupted home insurance and mortgage practices.

Safe haven

What might be happening?

In this future, Auckland is one of the world's safest places, growing rapidly upwards of 3.5 million. About half of the arrivals are citizens coming home. We have welcomed others escaping global tensions and climate change. Auckland is open.

Auckland decided how to grow, what its air and water could support – infrastructure supported rather than dictated growth. We recruited offshore experience and matched it with Kiwis to unblock the infrastructure backlog. To a point.

What does Auckland look and feel like?

More people mean we live more intensively within Auckland. People coming from other places have reshaped areas into more dense, cosmopolitan neighbourhoods. New Aucklanders use public transport because they are used to it, and have brought new foods and music to the city.

Many people, not just older folk, live in more communal developments, they are not gated: we mix. Vertical living in multifunctional high-rise buildings is widely accepted and expected. More developments like Orākei papakāinga reflect New Zealand's bicultural base and are new models for urban living. Pacific families model communal inter-generational housing developments.

At the same time, people have moved to revitalise surrounding towns in Waikato: its schools are growing, its housing is fully used, its roads have more traffic, there's a wider range of jobs there.

How might we be living? Who are we?

We are the first city of the Pacific, the greatest number of Pacific residents on the planet. Many relocated here to be with their families, others were forced to move by climate change. New Zealand citizens in the Cook Islands, Niue and the Tokelau Islands are free to settle here, and they have.

We are also more Asian, absorbing the population growth from the north. We remain founded on the Treaty of Waitangi while open to the world. Māori still make the first welcome.

Auckland's people are now 50/50 born here/born there. Aucklanders epitomise super-diversity. We are more multi-lingual meaning we are more flexible and better problem solvers. We look at things from different angles, our minds are agile.

We've rebuilt the labour market by recruiting people on working holidays and visas, and student visas. In particular, the construction industry is no longer skill starved; housing and infrastructure deficits are being rebalanced. Shortages of teachers, health professionals and engineers have also been addressed. Modularised home building has helped to rapidly accommodate these new workers and they are now used as social housing.

Auckland lifts productivity and revenue through entrepreneurship and migrant-fuelled start-ups. More money is available for spending on homes and amenities. We followed the United States trend: half of start-ups are founded by migrants. Newcomers have joined the sunrise tech companies owned by Māori, many of which are leading the New Zealand Tech Awards.

Two speed Auckland

What might be happening?

Disparity has stubbornly remained. The equality of the 1970s is a distant memory that shows no sign of returning. There is an obvious divide between those with homes and work, and those without.

The gap between the top and lower earners hasn't shifted, but the middle income white collar workers, unprepared for the massive technology disruption of the early 2020s, have been hit hardest.

Joblessness has doubled to 1980 levels. This time, the new era dominated by artificial intelligence, augmented reality, driverless vehicles, and 3D printing has hollowed out whole sectors: tourism, legal services, insurance, teaching…

Inequality shows up in all areas, between incomes and work, in housing, in schools and achievement. Areas known for poor health and overcrowding are worse; middle income areas are following this pattern. High income earners remain untouched.

How might we be living?

Schools are far less mixed. There is an edge of intolerance and resentment in the classroom. Hope that the next generation will bridge the divide is muted.

The new joblessness amongst middle income families is eroding mental health and self-esteem, just as it did for others during the big manufacturing losses. Talk of a universal basic income to replace lost earnings has been too slow to deliver relief.

Aucklanders report feeling unsafe during the day. Attacks on cyclists and people working late at night steadily rise. Parks are often no-go areas.

The social distance between people has increased. We have lost trust and cohesion as a people. Community activities which used to help us support each other – including sports, arts and hobby groups – are dwindling as volunteers withdraw. Services like St John Ambulance and Youthline have also ceased due to a lack of funds and supporters.

What does Auckland look and feel like?

The north-south motorway has become the divide between rich and poor. Signs of prosperity in Albany and Glenfield have been lost with the decline of small businesses. All the way around the Manukau Harbour there is a swathe of deprivation. The previous gains of gentrification from Avondale through to Onehunga and Manurewa have faded.

Auckland's new employment centres are smaller, more dispersed, more isolated, uglier. There's less vibrancy, less after-hours connection for those left in the world of work. Penrose, Henderson and the Wairau Valley are empty, in step with the adjacent residential neighbourhoods. Their accessible location lost its relevance with automation and 3D printing.

The city centre, Newmarket, Manukau and New Lynn have shrunk with less consumer spend. Smaller town centres such as Three Kings, Mt Albert and Birkenhead are blighted: the roller doors are down, so people travel further to shop in malls where security is higher.

Poorer and middle income communities have been forced to the edges of the city, spending much of their time and income commuting. Most of the more affluent suburbs have gated housing as people think this will make them more secure. Violence, burglaries and crime have risen again.

The people's network

What might be happening?

A bottom-up, community based mobility and connection concept emerged from public road safety campaigns around our schools. It's a green network with an 'off road' status. It's something local people on the Auckland isthmus took on and developed. At its heart was a 50km greenway that circled the isthmus, and other areas across Auckland have followed suit.

It's a natural by-way with few concrete barriers and little white paint. It's a deregulated space – for the people.

Permits aren't required for street parties or small neighbourhood festivals on the People's Network as long as others can get through or are welcome to stop and enjoy.

Any kind of mobility contraption can use the people's route. With electric 'vehicles' of all sorts now freely available for all ages and levels of ability on wheels, the People's Network is not just for bicycles.

How might we be living?

Any prototype mobility aids are free to roam on the network once they have been tested for safety toward others. This means new mobility modes are being tested as personal prototypes before going into production. Innovation has soared.

Cycle pods and repair hubs at nodes along the way spawned new businesses, including guided tours for visitors

We traverse different localities under our own steam where before we didn't get out of our own neighbourhoods.

We have brought forward a kind of neighbourhood development where people can take charge of a space for leisure of many sorts as well as a place of mobility.

We are more fit, and better connected as Aucklanders. Our visitors enjoy the experience of moving alongside local people.

What does Auckland look and feel like?

The People's Network connects many diverse suburbs and different communities, celebrating the neighbourhoods we pass and wouldn't normally visit. It's breaking down barriers many people feared would deepen.

We criss-cross Auckland freely and in comparative safety. We are contributing to less congestion, fresher air, and a stronger sense of connectedness. Aucklanders feel safer.

Auckland's form as a city of maunga becomes more visible to the network users who travel at a slower pace. Both harbours are connected.

A secondary less formal radial network complements the motorways, busways and streets built to move people between suburbs and the city centre.

We circulate around the isthmus rather than following the main arterial roads from local centre to local centre. The city centre is part of the whole, but not dominant.

We are breaking down a degree of segregation, one neighbourhood from another.

Whose food bowl?

What might be happening?

Auckland is determined to be part of the solution to Asia's food security problem, working with New Zealand's reputation for safe food. Auckland's self-sufficiency in food is used as part of its branding.

Auckland's primary industries sector has become the one to watch. Land is being opened up for food production at a higher value than for houses.

The biotech industry in Auckland grew revenue compounding year on year by 30 per cent fuelled by entrepreneurs disrupting the food industry with meatless meat, synthetic milk and techniques to grow food indoors under LED lights.

Auckland is supplying more protein to Asia through the long standing Free Trade Agreement with China, supplying cheese, and fish and aquaculture farmed in the warm, clean waters of the Hauraki Gulf.

How might we be living?

We treat rainfall and re-used water as a natural advantage; it is vital for our role in the New Zealand food supply story. Alongside natural rainfall it proves a competitive advantage over other producers like Australia.

Auckland chefs and food producers revolutionised eating local and indigenous produce, reversing imports of offshore crops – except for bananas. These are being grown commercially in Northland, taking advantage of rising temperatures.

Visiting cruise ships now stock food produced in New Zealand from the outset of a cruise, generating more revenue at our ports.

More Aucklanders are employed in the hi-tech end of the primary industries sector; food production, marketing and science have merged in our school and tertiary curriculum.

Increases in Aucklanders' maturity regarding food has also had knock on effects in health and healthy eating. Diabetes, heart disease and other food related diseases are in decline, so we are living longer.

What does Auckland look and feel like?

We are farmers. We grow on good soils again, but we also farm vertically in redundant inner city structures like on-ramps, waterfront silos and car park buildings. Microgreens thrive under LED lights and with hydroponics; we farm on kerbsides, in pocket parks, and backyards.

Flat roofs and old industrial buildings in Penrose are completely transformed into soil free gardens – we compete with cities like Bologna in Italy, which provides 77 per cent of the vegetables its people consume.

Tourists visit New Zealand's primary area for fish spawning and extensive mussel reefs as part of food tourism across the three Auckland harbours. The clean-up in water quality and water re-cycling has been driven by the need to feed ourselves.

Auckland Plan values

Values inform our thoughts, words and actions. They shape and drive our behaviours and the decisions we make. Values are important because they help us create the future we want.

The Auckland Plan 2050 outlines a future that all Aucklanders can aspire to. It is a prosperous future with many opportunities and a better standard of living for everyone.

The values of the Auckland Plan 2050 help us to understand what is important in that future:

- Atawhai | Kindness, generosity
- Kotahi | Strength in diversity
- Auaha | Creativity, innovation
- Pono | Integrity
- Taonga tuku iho | Future generations

The values also help us to understand how we will get there. Achieving the future set out in the Auckland Plan 2050 requires every Aucklander and many organisations to work together.

A shared set of values makes this possible. It helps us have confidence that the decisions we all make are the right ones for today and for future generations.

The Auckland Plan 2050 values are what we believe are important. They connect us with each other and with this place we call Tāmaki Makaurau Auckland.

Atawhai
kindness . generosity

Kotahi
strength in diversity

Auaha
creativity . innovation

Pono
integrity

Taonga tuku iho
future generations

Auckland and te Tiriti o Waitangi/the Treaty of Waitangi

Giving life to te Tiriti o Waitangi in the Auckland Plan contributes to a more equitable future for Aucklanders and generations to come.

What is te Tiriti o Waitangi/the Treaty of Waitangi

The Treaty of Waitangi is New Zealand's founding document. It laid the basis for an ongoing partnership between Māori and the Crown, and recognises the unique and special place of Māori as tangata whenua.

The Treaty is an exchange of promises. Rangatira (chiefs) and the Governor (on behalf of the British Crown) agreed to a relationship where they would share power and authority within different spheres of influence. The Crown promised that Māori would enjoy equal citizenship and retain rangatiratanga over their iwi and hapū, territories, resources and taonga.

The Treaty is now articulated in law through an evolving set of principles. The principles allow the Treaty to be adapted to contemporary and future circumstances. They are the core concepts that underpin the Māori and English language texts of the Treaty and bridge differences between the texts.

There are statutory obligations requiring Auckland Council to consider Treaty principles and enable Māori participation in decision-making.

Auckland has the largest Māori population in New Zealand. Nineteen mana whenua groups (discussed futher in the supporting information section) hold customary interests across Auckland and many mataawaka call Auckland home.

Throughout Auckland, Māori and the Crown are settling historical Treaty of Waitangi claims. These claims arise from past breaches of the Treaty by the Crown. Some Treaty settlements include co-governance arrangements, which promote the Treaty principle of partnership, and affirm Maori values and tikanga unique to Auckland.

Looking ahead to 2050, historic Treaty claims will be settled. There will be increased capacity for iwi organisations to engage politically, for example, through co-governance. Auckland's Māori economy will play a growing and critical part of Auckland's future economic success through a long-term investment ethos, and commercial innovation and acumen.

In the Auckland Plan 2050, we use the following terms interchangeably to refer to both the English and Māori texts of te Tiriti o Waitangi/the Treaty of Waitangi:

- 'te Tiriti'
- 'the Treaty'
- 'te Tiriti / the Treaty.

Supporting information

Te Tiriti o Waitangi/The Treaty of Waitangi and Auckland local government

Māori in Tāmaki Makaurau

Pacific Auckland

Auckland's Asian population

Ports of Auckland

Te Tiriti o Waitangi/The Treaty of Waitangi and Auckland local government

The Auckland Plan 2050 recognises te Tiriti o Waitangi/ the Treaty of Waitangi in Auckland's past, present, and future. It is the foundation on which local government in Auckland works to deliver Māori aspirations.

Te Tiriti/the Treaty is New Zealand's founding document. Signed in 1840, it is an enduring, living document, its principles recognised in legislation and interpreted by the courts. It is part of the fabric of New Zealand society.

If you would like to find out more about the Treaty visit the New Zealand History website.[12]

Auckland Council is a delegate of the Crown exercising powers of local government in Auckland. It has statutory obligations to Māori in order to recognise and respect the Crown's responsibility to take appropriate account of the principles of the Treaty.

Treaty principles

The Treaty is articulated in law through an evolving set of principles.

Treaty principles have been expressed and recognised through a range of courts and the Waitangi Tribunal. They are not exhaustive, and it is recognised that other principles may be developed with time.

They must be considered as a whole rather than separately due to the overlaps and synergies between them.

Figure 1 - Auckland Council and Crown relationship with the Treaty of Waitangi

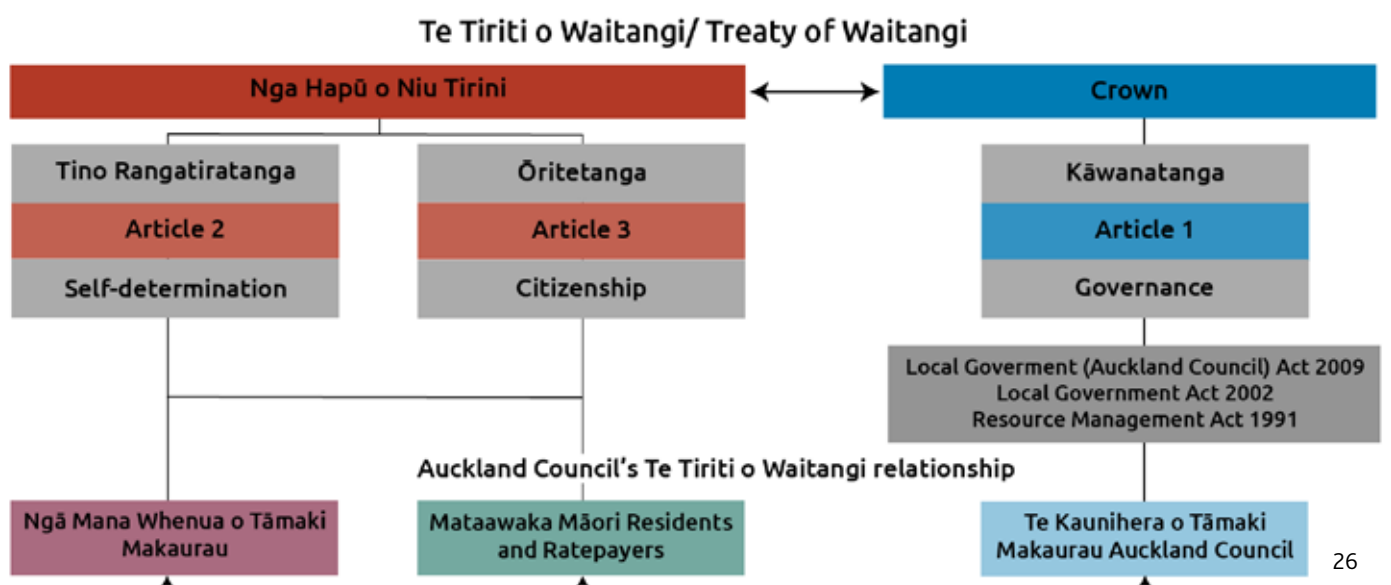The following principles are relevant to local government.

- partnership
- active protection
- rangatiratanga
- reciprocity
- mutual benefit
- options
- right of development
- redress
- informed decision making

Te Tiriti/the Treaty is a guide for how Auckland Council fosters more positive and productive relationships with Auckland's Māori.

Whiria Te Muka Tangata is Auckland Council's Māori Responsiveness Framework. It brings together the council's commitments and obligations to Māori. This enables Auckland Council to ensure that it considers how its policies and actions recognise and protect Māori rights and interests, and contribute to Māori needs and aspirations.

The Independent Māori Statutory Board[13] was established in Auckland to help the council make decisions, and to carry out its role in relation to Māori.

It does so by promoting economic, environmental, cultural and social issues of significance to Māori in Tāmaki Makaurau, and by ensuring the council complies with statutory provisions referring to the Treaty of Waitangi.

Te Tiriti o Waitangi/ Treaty of Waitangi

Nga Hapū o Niu Tirini — Crown

Tino Rangatiratanga / Article 2 / Self-determination

Ōritetanga / Article 3 / Citizenship

Kāwanatanga / Article 1 / Governance

Local Goverment (Auckland Council) Act 2009
Local Government Act 2002
Resource Management Act 1991

Auckland Council's Te Tiriti o Waitangi relationship

Ngā Mana Whenua o Tāmaki Makaurau

Mataawaka Māori Residents and Ratepayers

Te Kaunihera o Tāmaki Makaurau Auckland Council

Māori in Tāmaki Makaurau

Māori living in Tāmaki Makaurau are mana whenua or mataawaka.

Mana whenua are represented by the 19 iwi (tribes) or hapū (sub-tribes) with territorial affiliations to the Tāmaki Makaurau area that are recognised by Auckland Council.

Ngāti Wai	Ngāti Whātua Ōrākei	Te Ahiwaru Waiohua
Ngāti Manuhiri	Te Kawerau ā Maki	Waikato-Tainui
Ngāti Rehua Ngāti Wai ki Aotea	Ngāti Tamaoho	Ngāti Paoa
Te Rūnanga o Ngāti Whātua	Te Ākitai Waiohua	Ngāti Whanaunga
Te Uri o Hau	Ngāi Tai ki Tāmaki	Ngāti Maru
Ngāti Whātua o Kaipara	Ngāti Te Ata Waiohua	Ngāti Tamaterā
Te Patukirikiri		

These groups have specific rights and responsibilities in relation to natural resources within Tāmaki Makaurau.

In addition there are Māori from other tribes and their descendants who migrated to Tāmaki Makaurau from other parts of the country, and Māori who have no connection to their hapū and iwi referred to as mataawaka.

The migration of Māori populations to urban centres increased after World War II because government policies encouraged Māori to join the urban labour force to contribute to industry.[14]

Māori population numbers

More Māori live in Tāmaki Makaurau than in any other region in Aotearoa.

At the 2013 Census:

- 163,920 people in Tāmaki Makaurau identified as being of Māori descent. This is 25 per cent of all Māori in Aotearoa, or 12 per cent of the population of Tāmaki Makaurau.
- 142,770 identified as being of Māori ethnicity. This is 24 per cent of all Māori in Aotearoa, or 11 per cent of the population of Tāmaki Makaurau.
- 81.6 per cent of Māori in Tāmaki Makaurau affiliated to at least one iwi in Aotearoa, as shown in the following table.

Between 2006 and 2013, the number of people of Māori descent living in Tāmaki Makaurau increased by 4092, or 3 per cent.

However, this growth was not as great as in the five years from 2001 to 2006, where the group increased by 10,635 or 7 per cent.

This follows the national pattern of slowing growth for the Māori population.

See Figure 2 - Number of people of Maori descent in Tamaki Makaurau and the rest of Aotearoa.

The Māori descent population in Tāmaki Makaurau is youthful. In 2013, over half of the population (51 per cent) was younger than 25, and a third (33 per cent) were children under 15 years of age.

Less than 5 per cent of the population were aged 65 years or older.

The median age of Māori in Tāmaki Makaurau increased from 22.3 years in 2001 to 23.5 years in 2013.

This compares to the Tāmaki Makaurau population overall which increased from 33.3 years to 35.1 years respectively.

Where Māori live in Tāmaki Makaurau

Māori live in all parts of Tāmaki Makaurau, with higher concentrations in the southern and western areas.

At the 2013 Census, the largest proportion of those of Māori descent lived in Manurewa Local Board area (12 per cent of Māori in Tāmaki Makaurau) followed by the Henderson-Massey Local Board area (11 per cent).

See Figure 3 - Māori population in Tāmaki Makaurau by local board area 2013

Selected iwi affiliation counts and proportions for Tāmaki Makaurau and Aotearoa, 2013[1]

	Tāmaki Makaurau	Aotearoa	Tāmaki Makaurau as percentage of Total Aotearoa (%)
Tāmaki Makaurau iwi			
Ngāti Maru (Marutūahu)	1,227	3,768	32.6
Ngāti Paoa	1,440	3,456	41.7
Ngāi Tai (Hauraki)	312	498	62.7
Ngāti Tamaterā	618	2,577	24.0
Ngāti Wai	1,902	5,667	33.6
Ngāti Whanaunga	294	624	47.1
Ngāti Whātua	7,353	14,784	49.7
Patukirikiri	9	45	20.0
Te Kawerau	93	150	62.0
Te Uri-o-Hau	462	1,257	36.8
Waikato	13,011	40,083	32.5
Tāmaki Makaurau (top ten other iwi affiliations)[2]			
Ngāpuhi	50,577	125,601	40.3
Ngāti Kahungunu[3]	7,812	61,629	12.7
Ngāti Maniapoto	8,346	35,358	23.6
Ngāti Porou	13,161	71,049	18.5
Ngāi Tahu / Kāi Tahu	6,600	54,819	12.0
Ngāti Tūwharetoa	5,991	35,874	16.7
Te Arawa[4]	8,739	43,374	20.1
Te Hiku[5]	6,336	14,562	43.5
Te Rarawa	7,224	16,512	43.8
Tūhoe	6,231	34,887	17.9
Don't know	29,226	110,928	26.3
Total people	163,920	668,724	24.5

Data source: Adapted from The Māori Report for Tāmaki Makaurau 2016 prepared by the Independent Māori Statutory Board (original data Statistics New Zealand, 2013 Census of Population and Dwellings)

Notes on the table above:

[1] The Tāmaki Makaurau iwi included in this table are those that are identified by Auckland Council and for which Census data currently exists.

[2] Listed according to geographic location from north to south.

[3] Consists of Te Aupōuri, Ngāti Kurī, Ngāti Takoto

[4] Consists of Ngāti Pikiao (Te Arawa), Ngāti Rangiteaorere (Te Arawa), Ngāti Rangitihi (Te Arawa), Ngāti Rangiwewehi (Te Arawa), Tapuika (Te Arawa), Tarāwhai (Te Arawa), Tūhourangi (Te Arawa), Uenuku-Kōpako (Te Arawa), Waitaha (Te Arawa), Ngāti Whakaue (Te Arawa), Ngāti Tahu-Ngāti Whaoa (Te Arawa), and Te Arawa.

[5] Consists of Ngāti Kahungunu ki Te Wairoa, Ngāti Kahungunu ki Heretaunga, Ngāti Kahungunu ki Wairarapa, Ngāti Kahungunu region unspecified, Ngāti Kahungunu ki Whanganui-a-Orotu, Ngāti Kahungunu ki Tamatea, Ngāti Kahungunu ki Tamakinui a Rua, Ngāti Pāhauwera, and Ngāti Rākaipaaka.

Number of people of Māori descent

Tāmaki Makaurau and Aotearoa
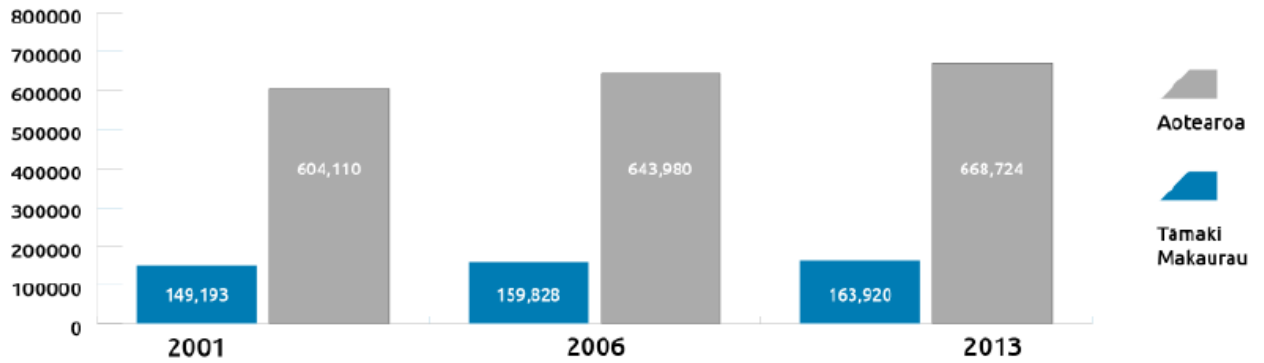
Māori Descent
by Local Board, 2013 Census

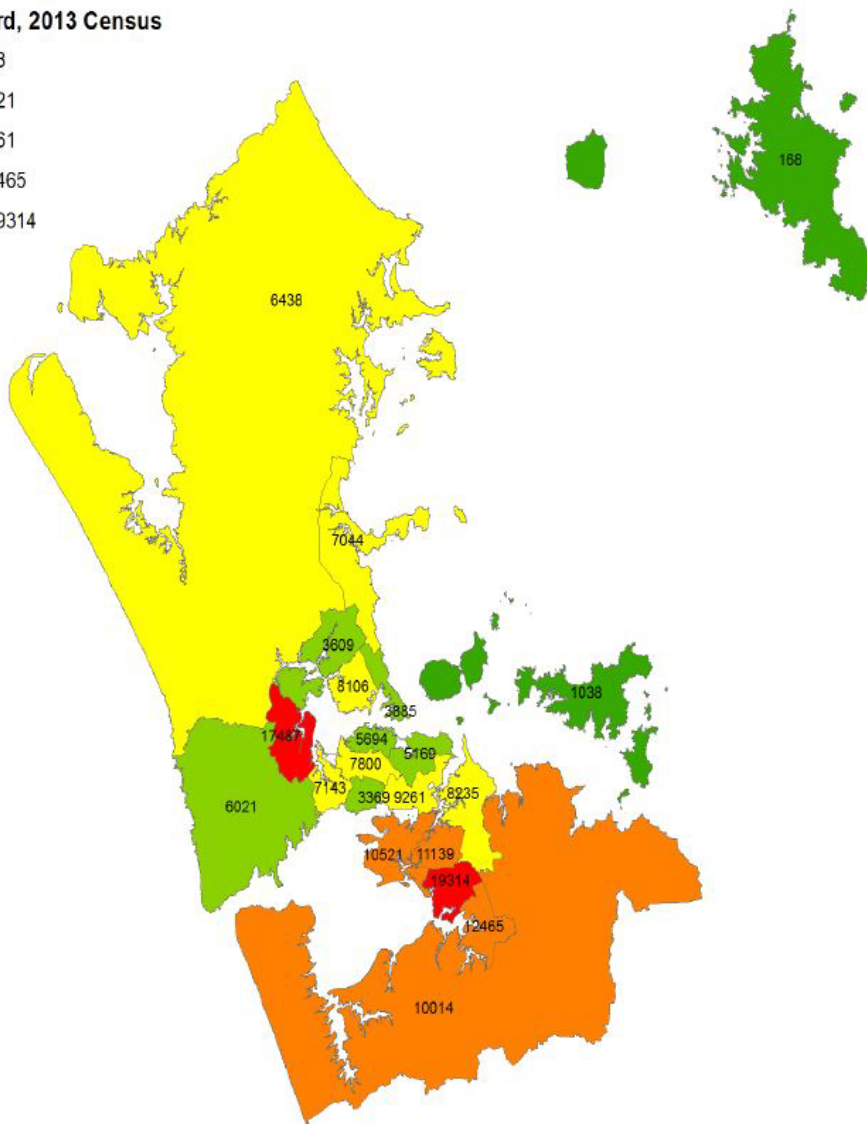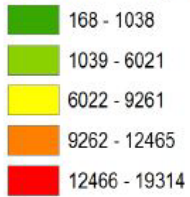|	
	168 - 1038
	1039 - 6021
	6022 - 9261
	9262 - 12465
	12466 - 19314

Figure 3 - Māori population in Tāmaki Makaurau by local board area 2013

Socio-economic situation

Socio-economic indicators reveal that there have been some improvements for Māori.

See Figure 4 - Socio-economic indicatoes for Maori by ehnicity aged 15 years and over in Tamaki Makaurau.

However, the number of Māori in skilled occupations decreased by 6 per cent from 2014 to 2015. This aligns with the overall decline in Māori employment in the region.

There were also proportionately more Māori working in goods-producing industries and fewer in the service industries, in comparison to other ethnic groups.

The median income for Māori in 2013 ($24,500) was lower than the median income for Aucklanders as a whole ($29,600), and $12,000 less than the median income among the European ethnic group.

Despite this lower median income, of the four main ethnic groups (European, Māori, Pacific and Asian), Māori had the second highest proportion of adults earning $50,000 or more per annum at 22 per cent (behind European at 37 per cent).

Among those of Māori descent, about 29,820 (or 27 per cent) in Tāmaki Makaurau own or partly own their place of usual residence.

How the Māori population is expected to grow

Māori play an important role in the social and economic landscape of Tāmaki Makaurau and will continue to do so. The Māori population is increasing and will continue to grow.

Stats NZ's latest ethnic population projections (medium series) suggest the Māori population:

- is likely to grow at a rate of 1.7 per cent per annum over the next 25 years
- will make up 11.6 per cent of the Tāmaki Makaurau population by 2038.

See Figure 5 - Projected growth in ethnic groups in Auckland, 2013 to 2038.

While lower than the projected rate of growth for the Asian population (3.3 per cent per annum), the Māori population growth rate at 1.7 per cent is anticipated to be higher than for European or Other (0.7 per cent). These growth rates compare with rates of 1.9 per cent for Pacific people and 1.6 per cent for Tāmaki Makaurau overall.

The Māori population will continue to age, but will also continue to have a youthful population structure for some time.

In the Treaty of Waitangi post-settlement era, the contribution of Māori to the economy of Tāmaki Makaurau has also become significant.

Tenure, highest educational qualification and personal income, adult population (aged 15 and over) in the 10 largest iwi populations (Māori descent) living in Tāmaki Makaurau, 2013

	Own or partly own usual residence (%)	Degree or higher qualification (%)	Personal income $50,001 or more (%)
Ngāpuhi	23	10	20
Ngāti Porou	24	15	25
Waikato	21	11	18
Ngāti Maniapoto	23	12	22
Ngāti Whātua	23	11	21
Te Rarawa	26	15	23
Ngāi Tahu/Kāi Tahu	39	26	35
Tūhoe	16	12	19
Ngāti Tūwharetoa	21	13	24
Te Arawa (iwi not named)	22	14	22
Iwi total (Tāmaki Makaurau)	27	13	24

Source: Stats NZ, Census of Population and Dwellings (2013)

There is already evidence that iwi in Tāmaki Makaurau are building solid economies that will not only benefit whānau but will also have substantial positive consequences for the wider Tāmaki Makaurau economy.[15]

Figure 4 - Socio-economic indicates for Maori by ethnicity aged 15 years and over in Tamaki Makaurau. Source: Stats NZ, Census of Population and Dwellings (2006 and 2013) by ethnicity and Household Labour Force Survey (December 2014 and December 2015)

Note: Data on qualifications and personal income is taken from the 2006 and 2013 Census results. Data on unemployment and Not in Education, Employment or Training (NEET) rate is from the Household Labour Force Survey (HLFS) for year ending December 2014 and December 2015.

Socio-economic indicators

for Māori aged 15 and over in Tāmaki Makaurau
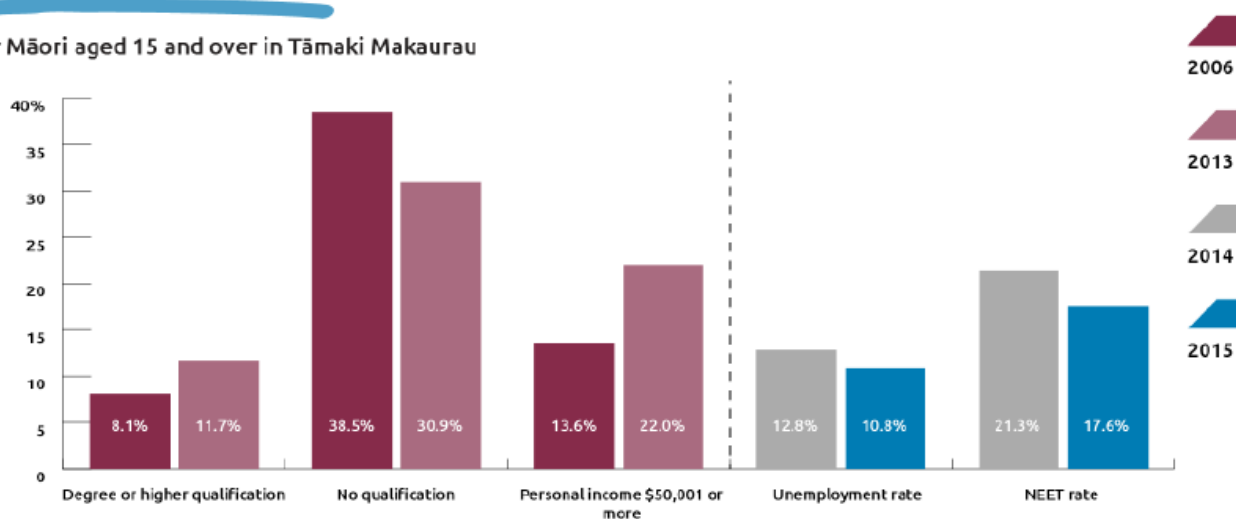
	Degree or higher qualification	No qualification	Personal income $50,001 or more	Unemployment rate	NEET rate
2006 / 2013	8.1% / 11.7%	38.5% / 30.9%	13.6% / 22.0%		
2014 / 2015				12.8% / 10.8%	21.3% / 17.6%

Figure 5 - Projected growth in ethnic groups in Auckland, 2013 to 2038. Source: Stats NZ, Subnational ethnic population projections (released 2017)

Ethnic groups in Tāmaki Makaurau

in 2013 and projections to 2038

	European or Other	Māori	Asian	Pacific
Projection to 2038	120,100	101,100	380,100	146,100
Population in 2013	886,400	169,800	348,900	227,000
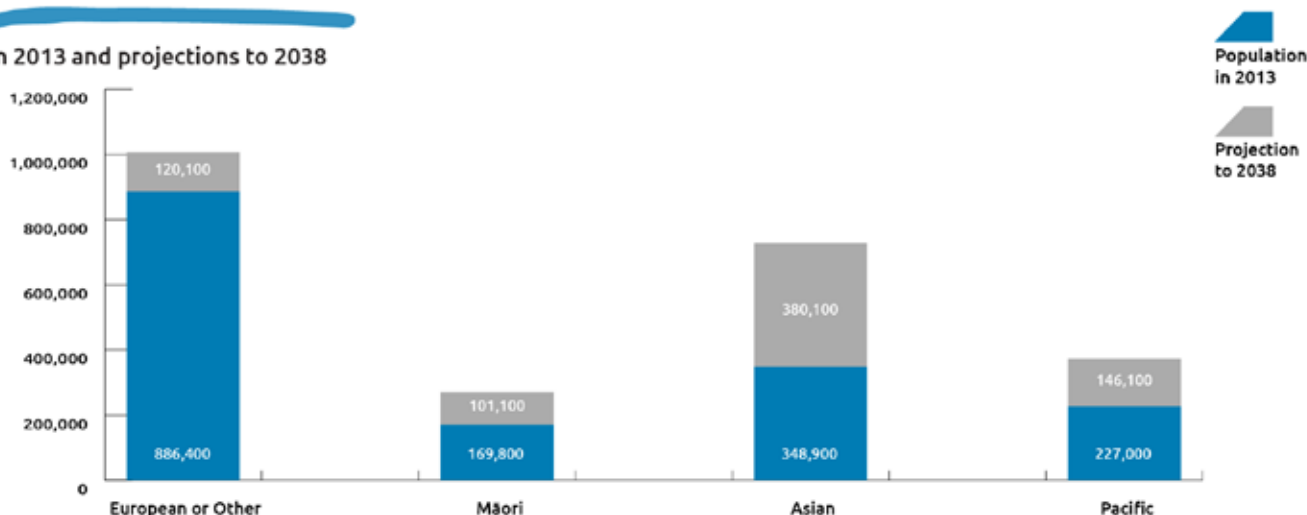
The hapū and iwi of Tāmaki Makaurau

Māori hold a special place in the identity and life of New Zealand through a partnership between Māori and the Crown under te Tiriti o Waitangi/the Treaty of Waitangi (te Tiriti).[16]

Auckland Council recognises 19 iwi authorities.

These are:

Ngāti Wai

Ngāti Manuhiri

Ngāti Rehua Ngāti Wai ki Aotea

Te Rūnanga o Ngāti Whātua

Te Uri o Hau

Ngāti Whātua o Kaipara

Te Patukirikiri

Ngāti Whātua Ōrākei

Te Kawerau ā Maki

Ngāti Tamaoho

Te Ākitai Waiohua

Ngāi Tai ki Tāmaki

Ngāti Te Ata Waiohua

Te Ahiwaru Waiohua

Waikato-Tainui

Ngāti Paoa

Ngāti Whanaunga

Ngāti Maru

Ngāti Tamaterā
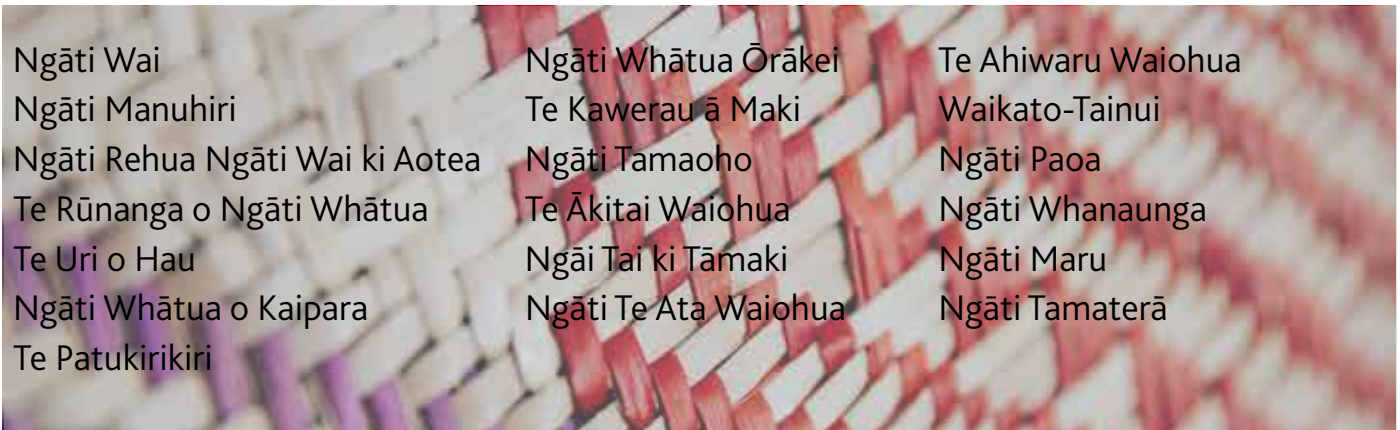
The place of Māori in Auckland gives Auckland its point of difference from the rest of the world.

The Crown has settled or is currently negotiating settlement for historical te Tiriti claims throughout Auckland.

The process provides for historical, cultural and commercial redress to individual mana whenua groups, and collective co-governance arrangements over certain natural resources.

Settlement will give opportunities for the mana whenua of Auckland but will also give opportunities for iwi outside of Auckland to invest in the region.

See Map 4 for more information - an interactive version of the map is available at aucklandplan.govt.nz

Political structures will evolve within Auckland as the model of co-governance is refined and te Tiriti settlements call for new arrangements.

Whanaungatanga, or building relationships through sharing experiences and working together, provides a strong basis for a intercultural Auckland.

Pacific Auckland

Who are Pacific people?

'Pacific people' is a term used to describe a dynamic and diverse group of people living in New Zealand who migrated from the Pacific islands or who identify with the Pacific islands because of ancestry or heritage.

These island countries and territories have distinct populations with diverse political structures, history, socio-economic status, language and culture.

Even within each island group there is great variation in terms of:

- demographic characteristics
- migratory experiences
- socio-cultural belief systems and practices.[17]

The 2013 Census recorded a total of 295,941 people from over thirty distinct Pacific groups living in New Zealand. The majority (194,958 people or 66 per cent) lived in Auckland.

Pacific people in Auckland and New Zealand are a rapidly growing and changing population. From a small immigrant community, the Pacific population has grown, through migration and natural increase, into a population of considerable size and social significance.

Pacific migration to Auckland

People of Pacific ethnicities have a long history of settlement in New Zealand, with migration from various parts of the Pacific throughout the last 150 years.

Close family linkages, employment opportunities and population pressure on some islands led many Pacific people to migrate here.

Many also migrated out of necessity and duty to families at home, whom they either supported with remittances or funded to join them in New Zealand.

Pacific people, like many immigrants, faced the challenges of adapting to and establishing themselves in a new country, a new language and a new social and economic environment.

The first Pacific groups to settle in Auckland were mainly from Polynesian islands that have strong historical links with New Zealand, such as Samoa, Tonga, Cook Islands and Niue.

More recently there has been an increasing tendency for people from Micronesia and Melanesia to migrate to Auckland for work and study.

Some island countries now have more people living in Auckland and New Zealand than in the island countries themselves.

See Figure 6 - Number and proportion of Pacific people in Auckland and New Zealand, 1961 to 2013 (Census), 2038 (projections). Data source: Stats NZ census, ethnic population projections (2017)

Pacific groups	Population in Auckland 2013	Population in rest of New Zealand 2013	Population in the islands
Samoa	95,916	48,222	190,757
Tongan	46,971	13,365	105,328
Cook Island Māori	36,546	24,531	17,767
Niuean	18,555	5325	1623
Fijian	8493	5952	879,715
Tokelauan	1959	5217	1187
Other Pacific Islands	6243	5685	n/a
Pacific people	194,958	100,983	n/a

Note: Auckland and New Zealand Pacific populations from 2013 Census and Pacific islands populations accessed (22/09/2017). For more information see Worldometers website.[18]

Waves of immigration from the Pacific islands

There have been two significant waves of migration from the Pacific islands to Auckland.

The first was in the 1960s in response to the demand for labour.[19, 20] Young men predominantly came here as agricultural and forestry workers, and young women as domestic workers.

In addition there were also push factors such as the tropical cyclones which damaged Tokelau and Niue in the 1960s.

The second wave of migration met the acute labour shortage in the manufacturing industry in the early 1970s[21].

However, the oil crisis and economic recession of the 1970s resulted in the loss of many manufacturing jobs and Pacific people who had overstayed the time allowed by their visas were targeted for removal from New Zealand.

The first Pacific Auckland

Most early Pacific migrants to New Zealand settled in Auckland, where the job opportunities were and where Pacific communities were starting to form.

Auckland's first Pacific community was in the inner city suburbs of Ponsonby, Newton and Grey Lynn, as well as Freemans Bay and Parnell.

By 2013, Pacific people had settled throughout Auckland with high concentrations particularly in the south and in some areas in west and central Auckland.

The largest Pacific populations at the 2013 Census lived in the local board areas of Māngere-Ōtāhuhu (39,045 persons) followed by Ōtara-Papatoetoe (31,671 people) and Manurewa (25,020 persons).

Figure 7 - Pacific populations across Auckland, 1971 and 2013.

Today's Pacific Auckland

Today's Pacific Auckland population is mostly New Zealand-born, predominantly young, and highly urbanised. Pacific people are now the third largest ethnic group, making up 15 per cent of the Auckland population in 2013.

Migration from the Pacific now contributes less to the growth of the Pacific population in New Zealand than growth through natural increase.[22]

Although many Pacific people still have strong and proud connections to the islands, for many others New Zealand is where they were born and what they call home.

The Pacific population is youthful and younger than all of the other main ethnic groups, with a median age of 22.6 years. In 2013, about one in four children in Auckland (24 per cent) had at least one Pacific ethnic identity.

Figure 6 - Number and proportion of Pacific people in Auckland and New Zealand, 1961 to 2013 (Census), 2038 (projections). Data source: Stats NZ census, ethnic population projections (2017)

Number and proportion of Pacific people in Auckland and New Zealand

from 1961 to 2013 and 2038 projections
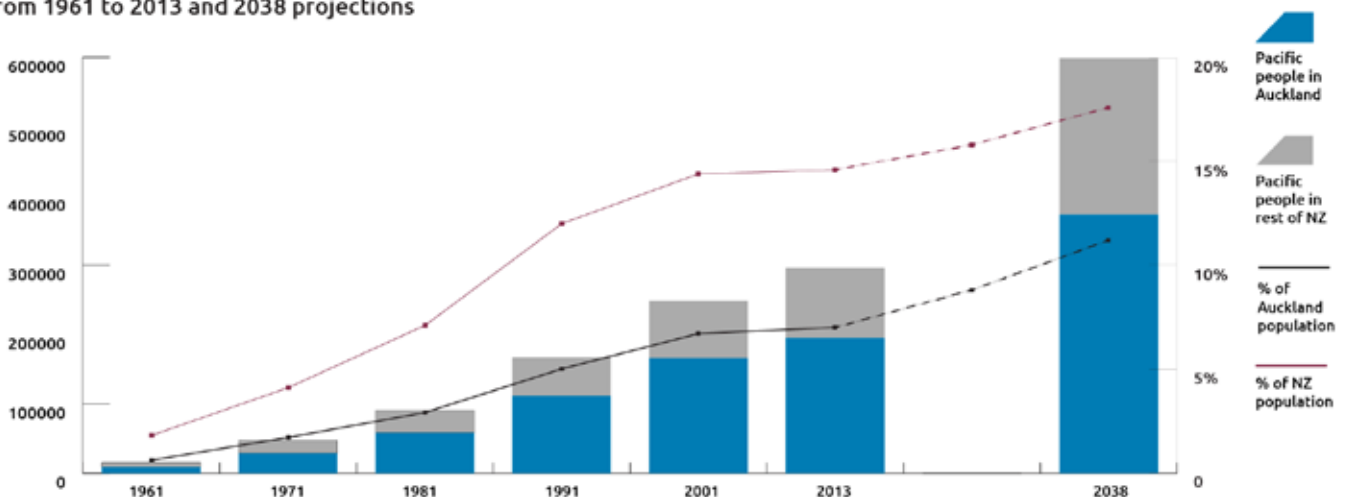
Note: The 1961, 1971 and 1981 censuses identified Polynesians, Fijians, Melanesians and Micronesians separately. These groups are combined in the graph to make up Pacific people. The Auckland area may also differ in the earlier Census

The younger age structure of the Pacific population provides momentum for future growth. Other components of population change such as death rates, migration patterns and changes in ethnic identity will play a smaller role in population changes.

Auckland's Pacific population is predominantly made up of people who identify as Samoan (one in two), Tongan (one in four), Cook Island Māori (two in ten) and Niuean (one in ten).

These groups are not necessarily exclusive, as people may have identified with more than one ethnicity. At the 2013 Census, 75 per cent of Auckland's Pacific people identified as Pacific only.[23]

Socio-economic issues

Pacific people are over represented among the unemployed, lower-skilled workers and low-income earners.

In 2013, the reported personal incomes of Pacific peoples in Auckland were generally lower than for the rest of Auckland ($18,900 median personal income compared with $29,600 for Auckland).

Pacific peoples were also more likely to rent than to own their own home. In 2013, 68 per cent did not own their usual place of residence.

Some improvement has been recorded in some of these indicators in recent years. Further improvements in education and skill levels will be required if disparities in employment, income and living standards are to be reduced.

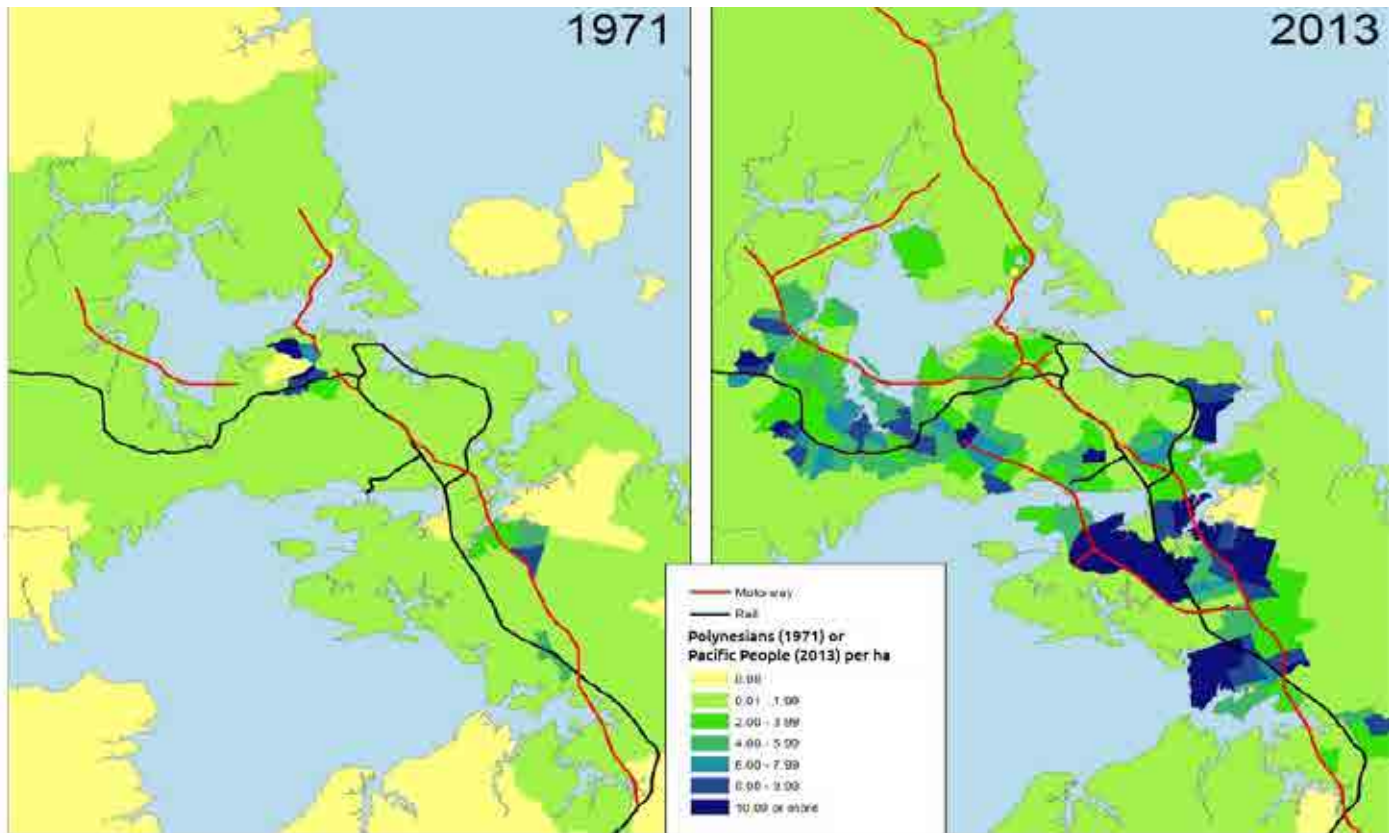Read more in the Opportunity and Prosperity section later in this plan.

See *Figure 8 - Socio-economic indicators for Pacific people aged 15 years and over in Auckland, 2006 to 2013 (Census) and 2014 to 2015 (Household Labour Force Survey).*

Conclusion

The Pacific population within Auckland is anticipated to continue to grow through migration and natural increase, and to blend with the wider New Zealand population.

This will result in shifts and changes to traditional ethnic and cultural identity among Pacific groups.

Medium ethnic projections by Stats NZ indicate that people of Pacific ethnicities could make up 17 per cent of the Auckland population by 2038.

The future impact of climate change on Pacific nations is not fully known. Depending on the severity of these impacts, and how New Zealand approaches this issue, migration may exceed current projections.

Pacific people play an important role in the social and economic landscape of Auckland and will continue to do so.

Figure 7 - Pacific populations across Auckland, 1971 and 2013. Data source: Stats NZ, Census

Figure 8 - Socio-economic indicators for Pacific people aged 15 years and over in Auckland, 2006 to 2013 (Census) and 2014 to 2015 (Household Labour Force Survey). Source: Stats NZ, Census and Household Labour Force Survey (HLFS)
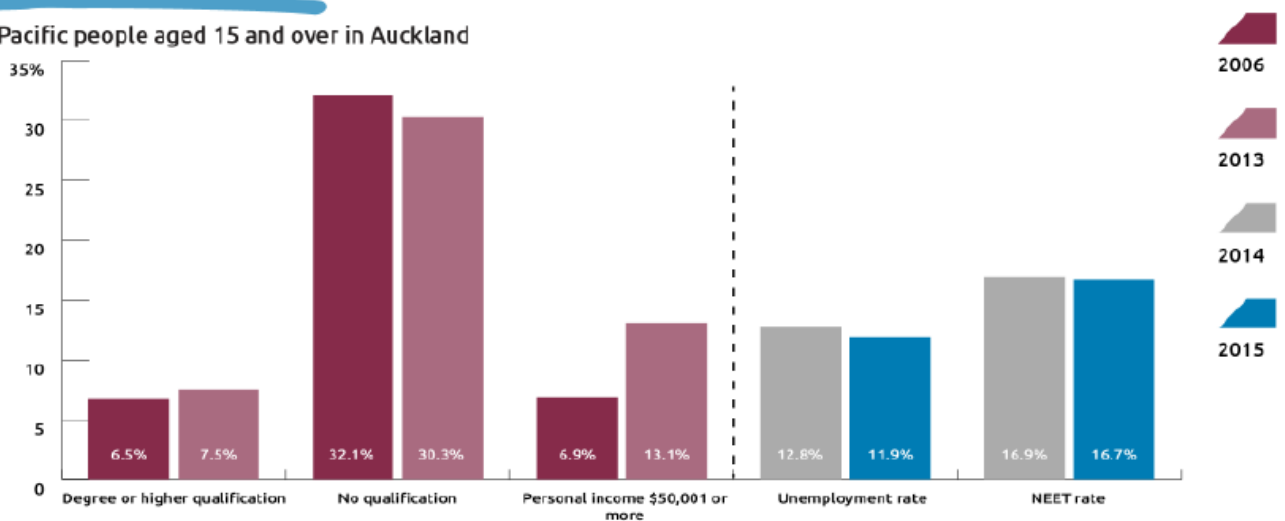
Auckland's Asian population

Auckland has always been an ethnically diverse society. In the last 20 years changes in migration patterns have contributed to a substantial increase in the numbers of Asian people living in Auckland.

At the 2013 Census, almost a quarter (23 per cent) of Auckland residents identified with an Asian ethnicity, a much higher proportion than for New Zealand as a whole at 12 per cent, and higher than recorded at the previous Census (19 per cent in 2006).

The largest sub-group were those who identified as Chinese, followed by those who identified as Indian. This group includes people who have migrated from overseas as well as those born in New Zealand.

The term 'Asian people' is a very broad category. It includes a range of national origins and ethnic identities.

There is no singular definition of the countries that make up 'Asia'. Stats NZ includes a wide range of countries from Georgia in the west to Japan in the east.

Compared to Auckland as a whole, Asian people:

- are younger
- have a higher percentage of people with higher level of education qualifications
- have a lower participation rate in the labour force and slightly higher unemployment rate.

Significant growth in Auckland's Asian population

Over the last two decades, Auckland's Asian population has experienced rapid growth.

In 1991, only 5 per cent of Auckland's residents identified with an Asian ethnicity. This proportion increased to almost a quarter (23 per cent) in 2013.

This growth was mainly driven by a rapid increase in immigration, especially in the mid-1990s and then again since 2001.

Auckland's Asian population increased by approximately 73,000 in the period between 2006 (234,279 people) and 2013 (307,233 people).

The table below shows the changes in Auckland's Asian population between 2006 and 2013, by the five largest Asian ethnic groups in Auckland.

While those identifying as Chinese (9 per cent of Auckland's population) and Indian (8 per cent of Auckland's population) remained the largest two Asian sub-groups in 2013, the Filipino group increased significantly between 2006 and 2013 – by 109 per cent to reach 20,499.

There was a modest increase of 3 per cent in the number of Auckland residents who identified as Korean (from 21,351 in 2006 to 21,981 in 2013).

Changes in five largest Asian groups, Auckland and New Zealand (2006 and 2013)

| | Auckland | | | New Zealand | | |
	2006	2013	Change 2006 to 2013 (%)	2006	2013	Change 2006 to 2013 (%)
Chinese	98,418	118,230	20	147,570	171,411	14
Indian	74,460	106,329	43	104,580	155,178	33
Korean	21,351	21,981	3	30,792	30,171	-2
Filipino	9,825	20,499	109	16,938	40,350	58
Sri Lankan	5,049	6,906	37	8,310	11,274	26
Asian people total	234,279	307,233	31	354,552	471,708	33
Total people specifying ethnicity	1,239,051	1,331,427	7	3,860,163	4,011,402	4

Data source: Stats NZ Census of Population and Dwellings

This table shows the five largest Asian groups at Level 3 classification in Auckland as at 2013. People could choose more than one ethnicity and groups are not exclusive. Percentages will add to more than 100.

Overseas born Asian Aucklanders

Over the last two decades there has been a relatively rapid and sizeable increase in the numbers of Auckland residents born overseas.

As shown in the graph, between 2001 and 2013 the number of Auckland residents born in the United Kingdom and the rest of Europe increased at a steady rate, while the number of Asian-born residents increased rapidly.

See Figure 9 - Number of overseas born by area of birth, Auckland residents, 2001, 2006, 2013.

The number of people born in southern Asian countries (e.g. India, Sri Lanka) in 2013 (52,521) was more than double that in 2001 (18,867).

This was followed by an increase of 66.9 per cent in migrants born in north-east Asian countries (60,627 in 2001 compared to 101,208 in 2013).

A further breakdown of Auckland's Asian-born population by country of birth shows that the largest number was born in China (65,385 in 2013). The second largest group were those born in India (43,407 in 2013).

As suggested by the rapid growth in the number of people identifying as Filipino in the table above, the number of Auckland residents who were born in the Philippines increased by 105 per cent between 2006 and 2013 (18,621 in 2013).

See Figure 10 - Number of overseas born by top 10 Asian countries of birth, Auckland residents 2006-2013.

Projected increase in Asian population

Auckland will experience increasing ethnic diversity in the next few decades.

Stats NZ's ethnic population projections suggest that much of this will come from substantial growth in the Asian population, compared to the other main ethnic groups.

The number of people in the broad Asian category is projected to increase by 439,900 between 2013 and 2038 to reach 788,800.

See Figure 11 - Projected growth in ethnic groups in Auckland, 2013 to 2038.

Geographic distribution of Asian peoples

The Howick and Albert-Eden local boards were home to the largest numbers of those of Asian ethnicity at the 2013 Census, with 47,511 and 25,275 residents respectively.

Areas in the southeast, Auckland's city centre, parts of the Auckland isthmus and central parts of the North Shore also had over half of the local population identifying as Asian.

See Figure 12 - Asian population density - map for Auckland's urban core.

Figure 9 - Number of overseas born by area of birth, Auckland residents, 2001, 2006, 2013. Data source: Stats NZ censuses 2001-2013[24]

Figure 10 - Number of overseas born by top 10 Asian countries of birth, Auckland residents 2006-2013. Source: Stats NZ censuses 2006-2013

Number of overseas born by top 10 Asian countries of birth
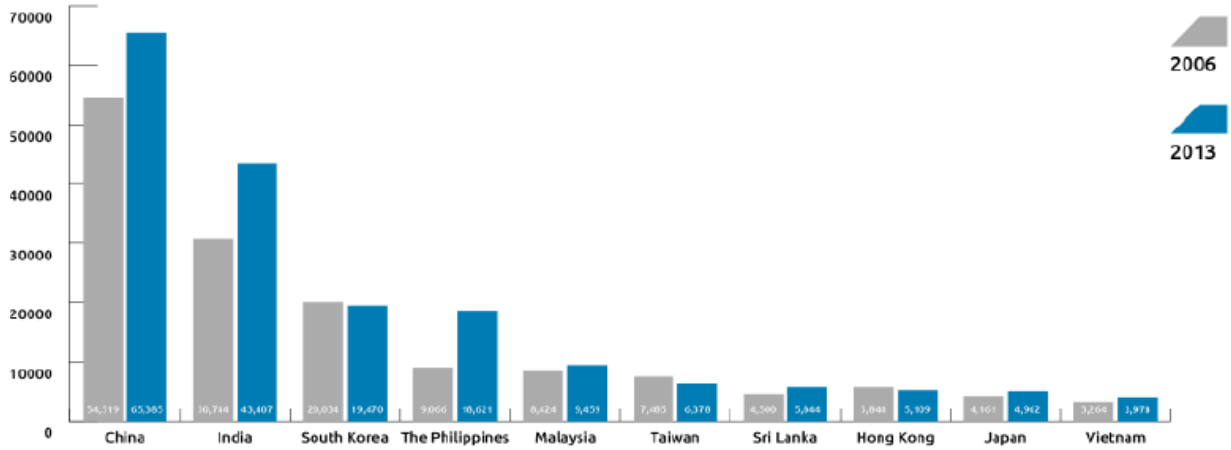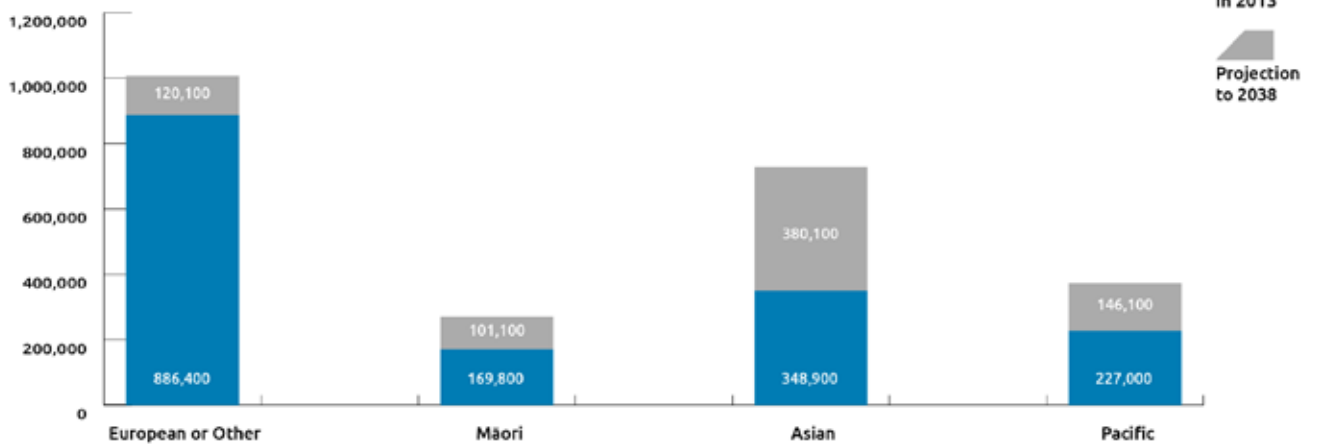
Auckland residents from 2006 to 2013

Figure 11 - Projected growth in ethnic groups in Auckland, 2013 to 2038. Source: Stats NZ, subnational ethnic population projections. People can identify with more than one ethnicity and the four groups are not mutually exclusive.

Ethnic groups in Tāmaki Makaurau

in 2013 and projections to 2038
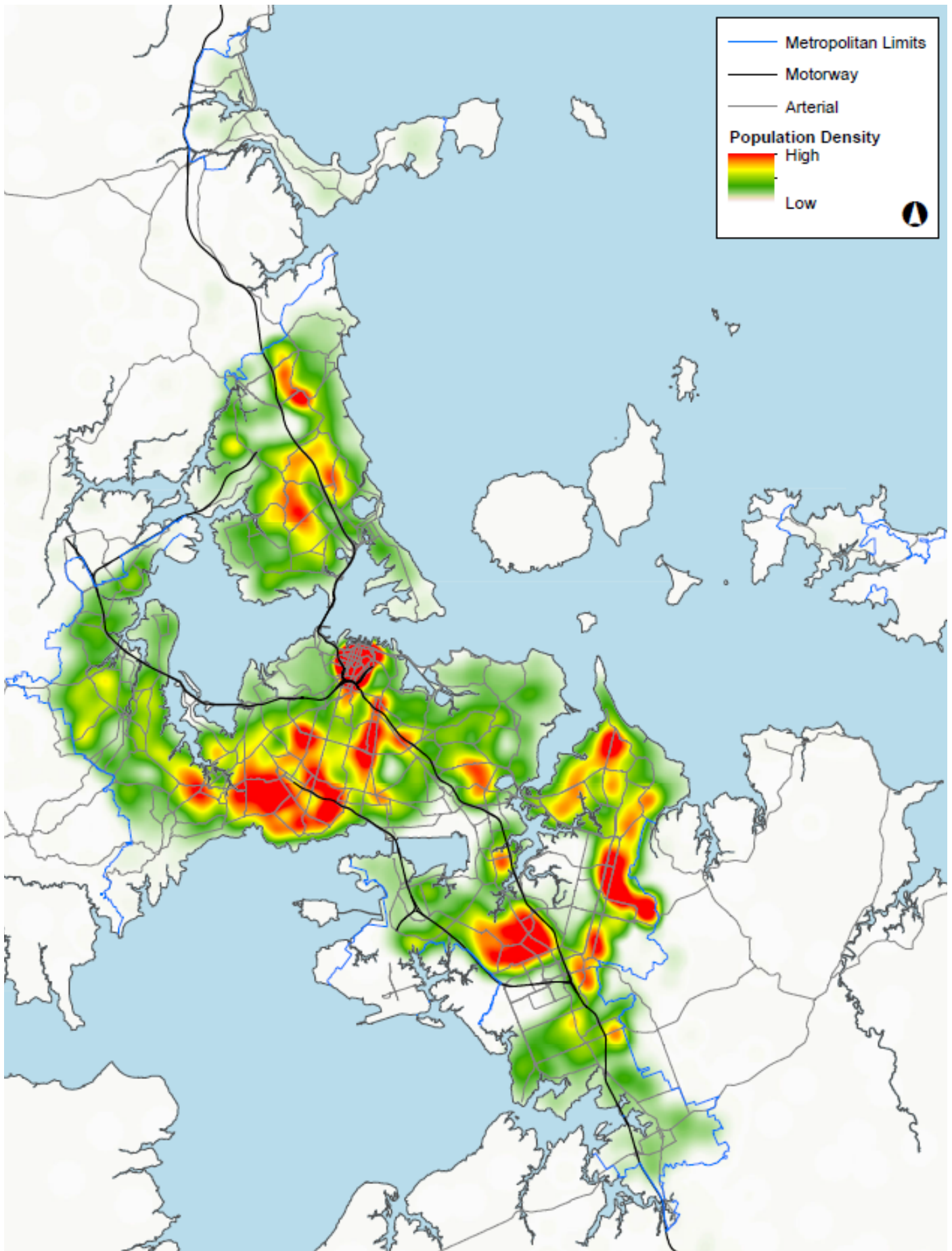
Figure 12 - Asian population density - map for Auckland's urban core. Source: Auckland Council; density calculations based on the 2013 Census from Stats NZ

Demographic structure of Auckland's Asian population

The Asian population is youthful, and younger compared to Auckland's total population.

In 2013, the median age among those who identified with an Asian ethnicity was 31 years, compared to 35.1 years for Auckland as a whole.

At the 2013 Census, relatively large proportions of Asian males (18.7 per cent) and females (18.9 per cent) in Auckland were between the ages of 15 and 34. This reflects the significant numbers of international students and people with work visas coming from Asia, as well as those who obtained work permits or permanent residency after completing their tertiary studies.

Education and employment of Asian people

Asian people are over-represented among those with overseas secondary school qualifications and higher level of formal qualifications overall.

The graph below shows that, at the time of the 2013 Census, 23 per cent of Auckland's Asian population stated that their highest education qualification was an overseas secondary school qualification. A third (33 per cent) had Bachelor's degrees or higher (compared to 25 per cent for Auckland as a whole).

The educational attainment of the Asian population also reflects the large inflows of international students from Asia undertaking tertiary studies in Auckland and those settling in Auckland afterwards.

See Figure 13 - Highest education qualification among Asian people aged 15 to 65 in Auckland (%), 2006 and 2013

However, at the 2013 Census Asian people were found to have a lower participation rate in the labour force (63 per cent) and a higher unemployment rate (9 per cent), compared to 67 per cent for labour force participation and 8 per cent for unemployment in Auckland overall at that time.

How the Asian population is expected to grow

People in the broad Asian population are the second largest ethnic group in Auckland.

Auckland has experienced rapid growth in its Asian population over the last two decades, mainly though immigration. This is anticipated to continue, driven by migration as well as increase in the numbers of locally-born.

Medium ethnic population projections by Statistics New Zealand indicate that the number of Asian peoples in Auckland will be substantial. By 2038, Asian peoples may constitute 35 per cent of Auckland's total population.

Such rapid growth will continue to bring vibrancy and diversity to Auckland.

Figure 13 - Highest education qualification among Asian people aged 15 to 65 in Auckland (%), 2006 and 2013

Source: Stats NZ, Census of Population and Dwellings [25]

Highest qualifications
for 15 years and older

2006

	%
Post graduate	8%
Degree	22%
Level 5 and level 6	8%
Overseas secondary school qualification	25%
Level 3 and level 4	15%
Level 1 and level 2	10%
No qualification	15%

2013

	%
Post graduate	9%
Degree	24%
Level 5 and level 6	9%
Overseas secondary school qualification	23%
Level 3 and level 4	15%
Level 1 and level 2	8%
No qualification	12%

Ports of Auckland

The Port, the waterfront and Tāmaki Makaurau

Auckland's waterfront has always been a focus for people and trade.

Māori first landed in Aotearoa New Zealand around 1000 years ago. From that time, tribal occupation of Auckland's isthmus was fluid and transitory.

At the northern edge of the isthmus, where the land meets the Waitematā harbour, the most recent rights of ahi kā are held by Ngati Whātua.

In 1840 Apihai Te Kawau of Ngati Whātua made 3000 acres (12 square kilometres) available to Governor Hobson in order to strengthen ties between the government and his people following the signing of te Tiriti o Waitangi / the Treaty of Waitangi.

See Figure 14 - Diagram shows the shoreline of the Waitematā from the city centre with the present day footprint of wharves shown in a dotted line.

Upon securing a new location for his capital, Governor Hobson immediately began development of the waterfront. The first elements of Auckland's port as we see it today were established in the mid-to-late 1800s.

Throughout the latter half of the 19th century, the city of Auckland grew around the early wharves in Commercial Bay and along the waterfront land reclaimed from the Waitematā.

The close proximity of the port to the city centre was important when the city was small and freight mobility was limited.

However, as Auckland has grown, and transport connections have improved, the link between city centre and port has become less critical.

Competing land uses

In recent decades the city centre has transformed dramatically and the area around the port has become an important commercial and residential centre in its own right.

There are differing stakeholder aspirations for the area leading to tensions between the growth in freight volumes on the one hand, and increasing residential and recreational use of the waterfront on the other.

Between 1989 and 2013, 72 hectares of waterfront land was released for non-port related redevelopment.

Present day port operations now occupy approximately half the land area of the central waterfront.

This downsizing was partly a result of the efficiency gains brought by increased containerisation, as well

Figure 14 - Diagram shows the shoreline of the Waitematā from the city centre with the present day footprint of wharves shown in a dotted line.
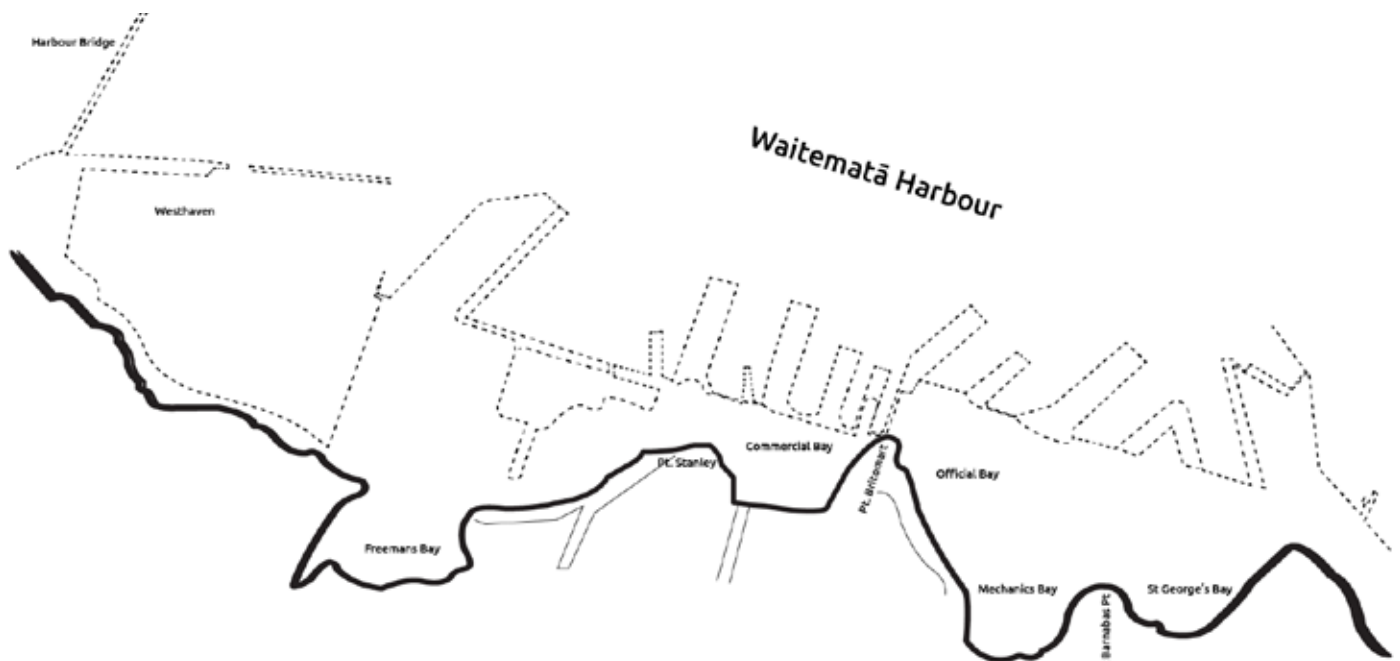
as increased pressure from competing commercial, residential and recreational land uses.

See Figure 15 - Sketch of the port and harbour

The promise of economic stimulus from hosting international events, such as the America's Cup, also played a role in the release of port land for alternative uses.

A productive port is critical to Auckland's economy. Balancing the need to support the port's functions with the aspirations of Aucklanders to reclaim more of their waterfront for commercial, cultural, residential or recreational purposes, will be a key consideration over the next 30 years.

Resolving this tension is vital to the future of the Ports of Auckland. It hinges around three key issues:

1. Capacity constraints in the port's current location

The port will always face physical capacity constraints at its current location in terms of land use, berthing requirements and the surrounding transport network. Understanding the potential impacts of these constraints on its ability to meet growing freight and cruise ship demand, and the consequential impact this may have on Auckland's long-term economic growth, is critical to any consideration of the port's future.

2. Growth of Auckland's city centre

The port is located on the fringe of the city centre. Growing residential and commercial activity has underpinned the revival of the city centre over the last 20 years. Inevitably, this will lead to increased competition for limited waterfront land. We need to better understand the trade-offs involved, including the opportunity cost of the underlying port land, if we are to maximise the contribution of both city centre and the port to Auckland's future prosperity.

3. Environmental, economic and cultural impacts of the port

The port is a major link in the production supply chain. It supports the economic development of Auckland and New Zealand. Port activities have environmental impacts including noise, light, and other pollution. The port impacts considerably on the marine environment of the Waitematā Harbour, a nationally significant resource of particular value to Māori and mana whenua hapū / iwi. Understanding all of the port's economic, cultural and environmental impacts, and any necessary trade-offs between them, is essential to resolving its future.

Figure 15 - Sketch of the port and harbour
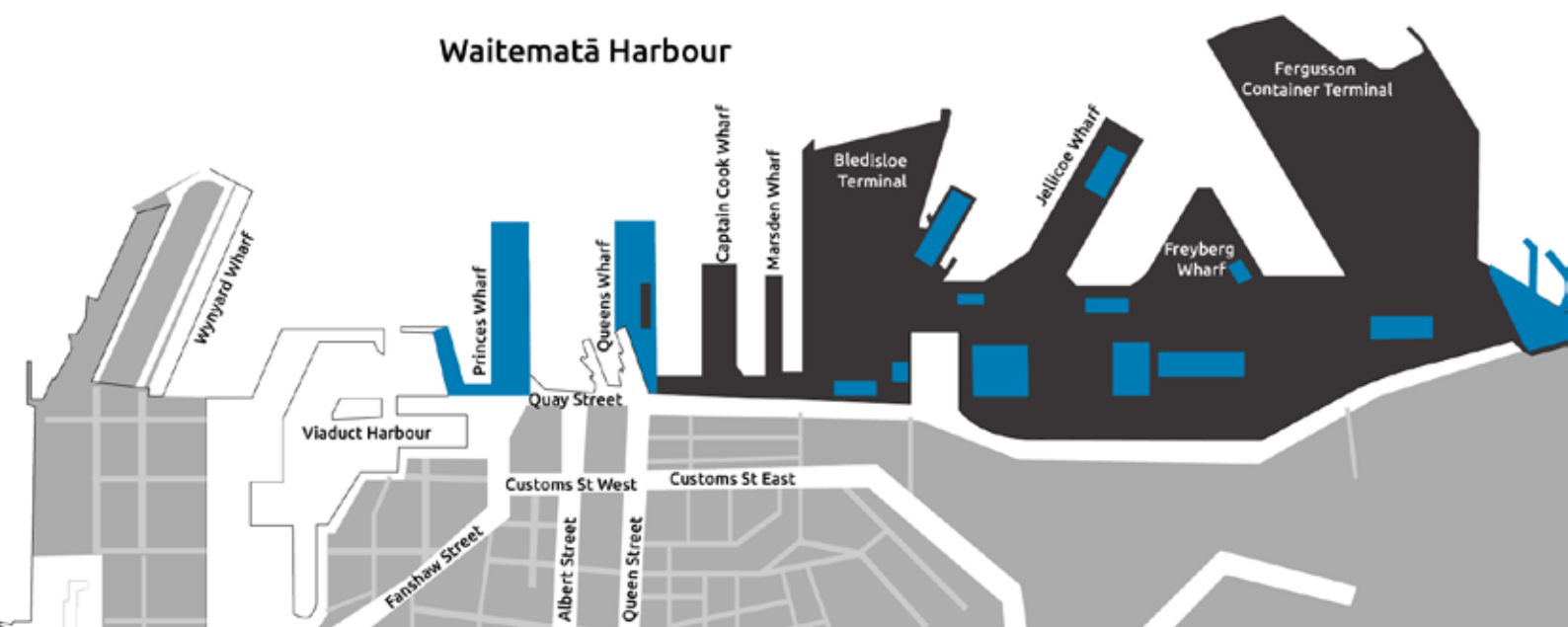
Port Future Study

A major Auckland Council-commissioned study on the long-term options for meeting Auckland's need for a working port was completed in July 2016.

The Port Future Study[26] was undertaken by representatives from mana whenua, business, industry and community groups, marine, recreation and heritage associations, environmental organisations, special interest groups and the Ports of Auckland.

The study concluded that the existing port will not be able to accommodate all of Auckland's long-term freight and cruise ship demand on its current footprint.

Its findings and recommendations for a long-term (50 years or longer) strategy for the port included:

- long-term relocation of the port's freight functions – cruise ships should continue to be accommodated near the city centre however
- identification of the Manukau Harbour and the Firth of Thames as potential options for the port's new location, subject to more detailed investigation
- regular monitoring to identify the time at which the port relocation option should be exercised
- no expansion of the port beyond its current footprint - subject to confirmed and credible commitment to establishing a port relocation option, and to establishing sufficient additional berth length to accommodate expected growth in large cruise and multi-cargo vessels.

Auckland Plan 2050 and the port

Around the world, ports in city centre locations have dealt with similar issues to those we are facing in Auckland today – increased competition from other land uses, growing pressure to relocate and subsequent redevelopment of former port land.

This is played out against a backdrop of growing freight volumes on the one hand versus increased land use efficiency arising from containerisation on the other.

The long term future of the upper North Island ports and the supply chains associated with these ports is a subject of central government investigation.

The future of Auckland's port in terms of location is not yet known, and a definitive answer is likely to be some years away.

Should a decision be made that the port needs to relocate in the future, it will still continue to operate from its current location for at least another 25 to 30 years.

This is the timeframe required for planning, consenting, and construction of both the port facilities and supporting infrastructure, regardless of where the location may be.

A potential relocation in 25 to 30 years would not have an immediate impact on the direction set in the Auckland Plan 2050 in that:

- the city centre will remain the main business and commercial centre of Auckland
- it would not change the multi-nodal approach to growth. Depending on location it may actually strengthen this approach
- it will have transport-related implications, possibly requiring major new transport infrastructure, but it will not completely change Auckland's transport networks.

For these reasons the Auckland Plan 2050 does not attempt to predict a future outcome for the port or implications for the waterfront and city centre.

When there is more clarity, updates will be made to the Auckland Plan 2050 as required.

Supporting strategies, such as the Waterfront and City Centre masterplans and the Regional Land Transport Plan of the time, will also be updated and will include the detail appropriate for strategies at that level.

Belonging and Participation

All Aucklanders will be part of and contribute to society, access opportunities, and have the chance to develop to their full potential.

DIRECTION	FOCUS AREA
Direction 1 Foster an inclusive Auckland where everyone belongs	**Focus Area 1** Create safe opportunities for people to meet, connect, participate in and enjoy community and civic life
Direction 2 Improve health and wellbeing for all Aucklanders by reducing harm and disparities in opportunities	**Focus Area 2** Provide accessible services and social and cultural infrastructure that are responsive in meeting people's evolving needs
	Focus Area 3 Support and work with communities to develop the resilience to thrive in a changing world
	Focus Area 4 Value and provide for te Tīriti o Waitangi / the Treaty of Waitangi as the bicultural foundation for an intercultural Auckland
	Focus Area 5 Recognise, value and celebrate Aucklanders' differences as a strength
	Focus Area 6 Focus investment to address disparities and serve communities of greatest need
	Focus Area 7 Recognise the value of arts, culture, sport and recreation to quality of life

Belonging and Participation explained

Auckland is experiencing rapid growth and social change – and this will continue.

We have a diverse population in terms of:

- ethnicity and national origin
- culture, religion and lived experience
- socio-economic status
- gender
- gender identity
- sexual orientation
- disability
- age
- rural, island or urban location.

This diversity brings many differences in values and lifestyles, demands for goods and services, and expectations of civic engagement and democracy.

New Zealand legislation incorporates the principles of inclusion, anti-discrimination and human rights. However, discriminatory practices and prejudicial attitudes towards people continue to play out in every-day life and impact on emotional and mental health.   Addressing racism and discrimination involves raising awareness. It is the responsibility of all Aucklanders to challenge prejudice and intolerance through our everyday actions.

We need to be proactive to ensure a sense of belonging and positive life experiences for all Aucklanders. We need to be open to learning about and valuing differences, and to understanding our shared and different histories.

This will lead to living together with greater acceptance, trust and mutual respect, and people working together to create a shared future.

Auckland will not be successful unless all Aucklanders feel they belong and can participate in society.

We can achieve this in a number of ways:

Celebrate Auckland's Māori identity

Te Tīriti o Waitangi/the Treaty of Waitangi is the foundation of a intercultural Auckland and recognises the special place of Māori.

The history and culture of mana whenua helped shape and define today's Auckland and is an important part of what it means to belong in Auckland.

Continuing to build on and celebrate Auckland's Māori identity recognises our history and underpins how we welcome people from diverse backgrounds and cultures.

Providing opportunities for mana whenua to develop and express Auckland's Māori identity and to share this with the people of Auckland, ensures mana whenua continue to have a strong presence in Tāmaki Makaurau. It also promotes wider understanding and strengthens our sense of belonging.

Recognise, value and celebrate our social and cultural differences

Auckland's identity continues to evolve. It is important that people are supported to maintain their cultural identities and traditions, and are provided with opportunities for cultural expression, in all their forms.

New Zealand has long-standing cultural, economic and political ties with South Pacific nations. Auckland's Pasifika population, Pacific languages and cultural

Figure 16 - Cultural diversity. Source: Ministry of Business, Innovation and Employment (MBIE) Community Perception of Migration and Immigration (Wellington: New Zealand Government 2016)[27]

74%

agree it is good for society to be made up of people from different races, religions and cultures

practices and customs also contribute to making Auckland distinctive. Many other population groups make valuable contributions to life in Auckland.

Rapidly growing populations can strengthen social cohesion or undermine it, simply because of the pace of change.

Most New Zealanders (74 per cent)[27] agree it is good for society to be made up of people from different races, religions, and cultures. The majority recognise that migrants make an important contribution to New Zealand's culture, society and the economy.

Social and cultural differences can:

- pose challenges around understanding and social cohesion
- cause individuals or groups to feel isolated and excluded from participating in society.

This can mean that some people are unable to achieve their aspirations, resulting in increasing economic disparity.

Intercultural cities recognise the value of cultural diversity and the benefits of cross-cultural interaction. This goes beyond tolerance and co-existence and focuses on more active approaches that build cross-cultural dialogue and cooperation to create greater wellbeing and prosperity for all. Cities around the world use this approach, known as interculturalism, to foster social inclusion.

Participation in social and community activities, and in civic life, can help Aucklanders to recognise interests they have in common with others. Celebrating our differences as a strength helps build relationships and reinforces our sense of belonging.

Participation can occur in many different settings, for example through:

- families and whānau
- interest and cultural groups
- geographic communities and neighbourhoods
- faith groups
- sports and arts
- community events
- in the workplace.

Community building initiatives

Festivals, Auckland-wide and local events, community programmes, arts and cultural initiatives, and celebrating local histories build local pride, develop and maintain community cohesion, retain cultural knowledge, attract visitors, and stimulate the economy.

These initiatives can provide opportunities for people from different social, ethnic, and cultural backgrounds to meet, connect, participate in, and enjoy community life.

However, to really strengthen social cohesion, we need to take steps to pro-actively foster relationships between different communities in Auckland.

Local leadership and decision-making

Local leadership and volunteering are ways that people can be actively involved in their communities. They create a sense of purpose and achievement and help make communities resilient.

Participation in civic and community life leads to people feeling that they have influence over the decisions that affect their lives, and a high degree of confidence in their governmental institutions.

Summary

For Auckland to be a place where people continue to want to live and work, all Aucklanders must have the opportunity to succeed.

This means we need to be on a path that will lead to everyone being able to belong and to participate in society.

It also means a path to equity where all people can share in Auckland's prosperity.

How we track progress

We will track progress against a set of measures.

The measures for this outcome are:

- Aucklanders' sense of community in their neighbourhood
- Aucklanders' sense of safety in their homes and neighbourhood
- Aucklanders' quality of life
- relative deprivation across Auckland
- Aucklanders' health
- Treaty of Waitangi awareness and understanding

How we can implement the plan

Aucklanders have a shared responsibility for implementing the plan. Read more about implementation later in this section.

Foster an inclusive Auckland where everyone belongs

Many Aucklanders already have a strong sense of belonging. Some, however, experience loneliness and isolation, which impacts on their self-esteem and wellbeing.

The sense of belonging is different for everyone.

Belonging can be tied to feelings of wellbeing, identity, and attachment to place.

It can be influenced by:

- how safe and secure people feel
- whether people have the opportunity or ability to participate in society
- whether people feel able to express themselves and play an active role in decisions that impact them.

It can also be influenced by how well, and how easily, people can see themselves reflected in civic and community life, in positions of leadership, decision-making and in public spaces.

See Map 1 - Voter turnout - Local body elections 2016

Auckland's significant population growth is an opportunity to increase a sense of belonging among existing Aucklanders and to foster it amongst newcomers.

It is not always easy for people to adjust to and welcome change. Sharing time and activities with other people builds trust, social connection, a sense of belonging, and attachment.

The more Aucklanders trust each other, the more connected, productive, and thriving they are likely to be.

The process of fostering inclusion, however, requires time and commitment. Building an inclusive Auckland is a collaborative endeavour, as it is not within the control of any one person, group or organisation.

Achieving a sense of belonging and supporting the ability to participate requires activity under all the outcomes in the Auckland Plan 2050.

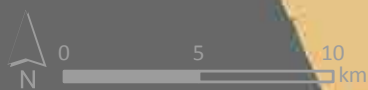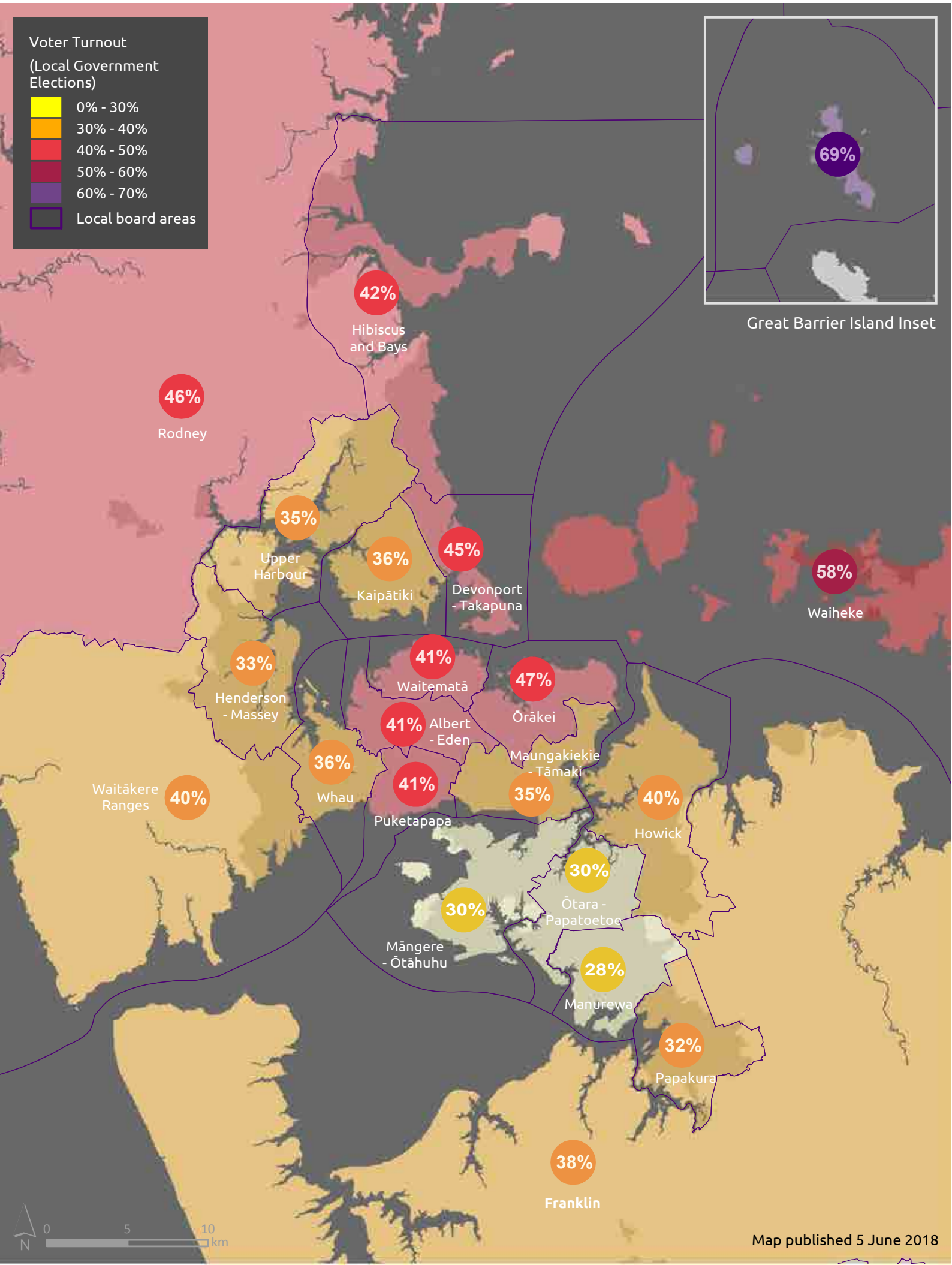We can all help create a sense of belonging through our own actions.

Figure 17 - Quality of life survey results for sense of belonging. Data source: Auckland Council, Quality of Life survey 2016: results for Auckland

77% believe a sense of community in their neighbourhood is important

56% experience a sense of community in their neighbourhood

Arts and culture — **66%** agree their local area has a culturally diverse arts scene

Common social networks — **43%** belong to an online network or social group

Cultural diversity — **53%** say cultural diversity makes Auckland a better place to live

Neighbourly contact — **64%** had some positive contact with people in the neighbourhood

Sense of isolation — **68%** never or rarely felt isolated

Voter Turnout (Local Government Elections)
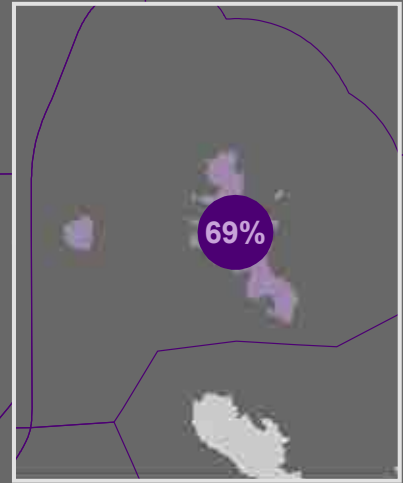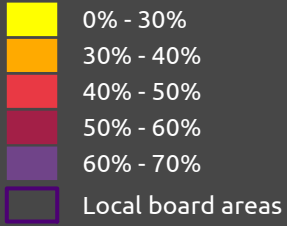
- 0% - 30%
- 30% - 40%
- 40% - 50%
- 50% - 60%
- 60% - 70%
- Local board areas

42% Hibiscus and Bays

46% Rodney

35% Upper Harbour

36% Kaipātiki

45% Devonport - Takapuna

33% Henderson - Massey

41% Waitematā

47% Ōrākei

41% Albert - Eden

58% Waiheke

36% Whau

41% Puketapapa

40% Waitākere Ranges

35% Maungakiekie - Tāmaki

40% Howick

30% Ōtara - Papatoetoe

30% Māngere - Ōtāhuhu

28% Manurewa

32% Papakura

38% Franklin

69%

Great Barrier Island Inset

0   5   10 km

N

Map published 5 June 2018

Improve health and wellbeing for all Aucklanders by reducing harm and disparities in opportunities

Improving Aucklanders' physical and mental health and wellbeing means people will be happier, healthier, and more able to participate in activities that they value.

A wide range of central and local government agencies, the private sector, and the community and voluntary sectors all play important roles in promoting wellbeing and reducing harm (for example from smoking, alcohol, drugs and gambling) to achieve good quality of life outcomes.

This includes positive actions towards a healthy lifestyle and programmes such as Healthy Auckland Together - visit the Healthy Auckland Together website to find out more.[28]

You can also read the Alcohol Harm Reduction Strategy[29] and the Smokefree Policy.[30]

Assessing the health and wellbeing implications of decisions and promoting public health improves Aucklanders' health and wellbeing and helps to achieve equitable health outcomes.

Being able to get around easily and achieve educational or employment goals contribute to a person's ability and

Equal access to facilities, education and employment opportunities
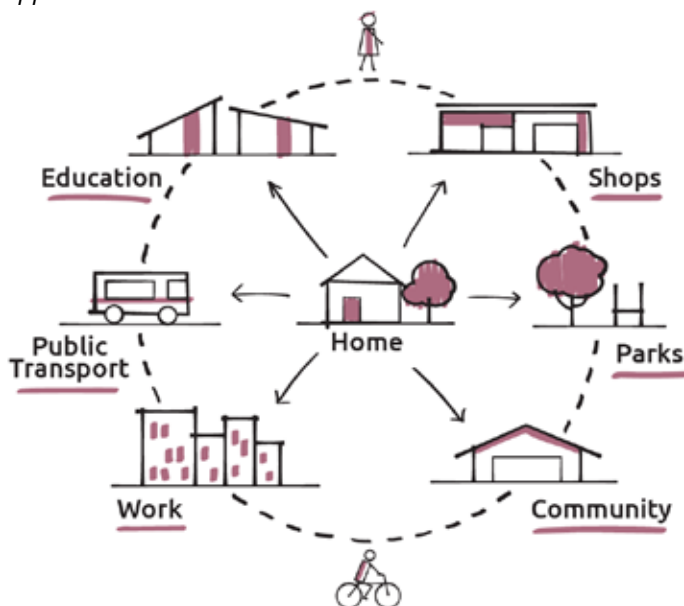
motivation to participate in and enjoy community and civic life.

An increase in access to opportunities for all Aucklanders can have positive benefits in:

- health and life expectancy
- trust and social cohesion
- educational performance
- employment
- the reduction of crime
- cultural and civic participation.

To improve health and wellbeing, we must address inequity, exclusion and disadvantage experienced by individuals, whānau and communities.

This includes ensuring that children and young people are given the opportunity to reach their potential so that they do not experience disadvantage as adults.

We must also address structural discrimination by encouraging a more diverse range of people in positions of decision-making and influence.

Socio-economic disparity, low social mobility and entrenched inequalities exist across Auckland, often in distinct geographic patterns.

See Map 2 - Deprivation Index for the region

Socio-economic disparity and poor living standards have multiple effects, both at the individual and household level and on society and the economy in general.

It's not just a matter of putting social systems in place. Individuals and communities need active support to ensure that they can make the most of opportunities and have the skills and resources to make positive changes.

To improve the health and wellbeing of all Aucklanders, we must work together to remove barriers, eliminate discrimination and disadvantage and provide meaningful opportunities and choices for all.

AUCKLAND
PLAN
2050

Belonging &
Participation

Deprivation

Map 2
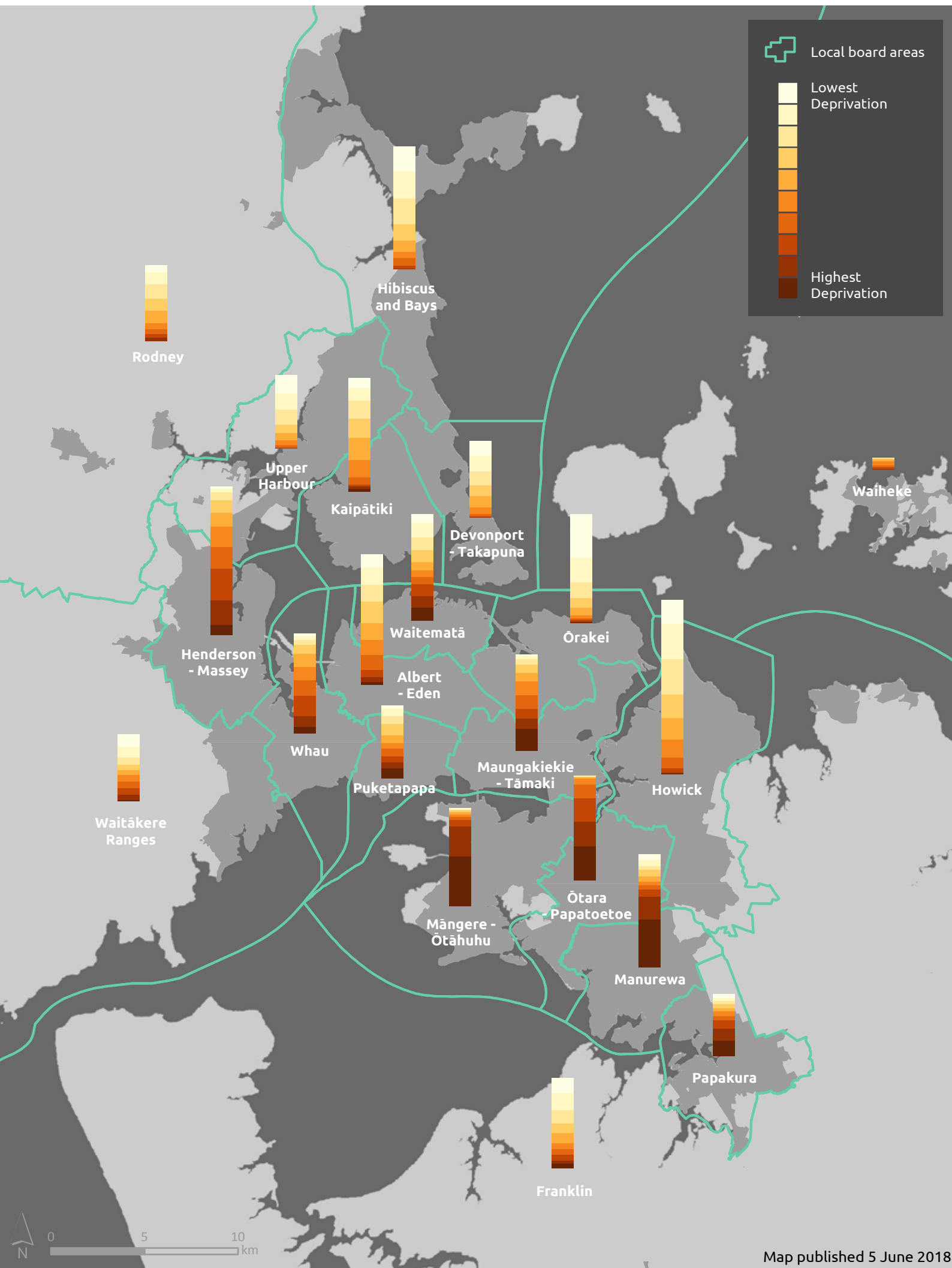
Local board areas

Lowest
Deprivation

Highest
Deprivation

Rodney

Hibiscus
and Bays

Upper
Harbour

Kaipātiki

Devonport
- Takapuna

Waiheke

Henderson
- Massey

Waitematā

Ōrakei

Albert
- Eden

Whau

Puketapapa

Maungakiekie
- Tāmaki

Howick

Waitākere
Ranges

Māngere -
Ōtāhuhu

Ōtara
- Papatoetoe

Manurewa

Papakura

Franklin

N

0   5   10
                          km

Map published 5 June 2018

Create safe opportunities for people to meet, connect, participate in, and enjoy community and civic life

A well-connected society enables access to community resources, and provides for positive experiences and better life outcomes.

One key way to support a connected society is to provide safe, shared places and spaces where social and cultural life can flourish.

Welcoming and safe places can help combat loneliness, depression and addictive behaviours. Everyday interactions with others in such places help create positive relationships, increase our perception of safety and contribute to our sense of community.

The nature and quality of these places and spaces is therefore important. They need to be well connected, inclusive and easily accessible.

Also, our sense of belonging is tied to identity and attachment to place. The way people use Auckland's streets, squares, parks and other public open space influences the meaning they attach to these places and spaces. Heritage, particularly built heritage, anchors our sense of history and place and helps define what is unique and distinctive about Auckland.

Our urban, rural and island communities all have distinctive identities and unique character. Neighbourhoods and settlements reflect local heritage, culture and identity. This in turn fosters local pride, connectedness, a willingness to work together, and ultimately enhances our sense of community.

This identity and character can be expressed in our places and spaces. Find out more in the Homes and Places section.

The rise of online communities is an important way for people to connect with each other and participate in issues important to them, but physical spaces for human contact remain important.

When people connect and interact they learn about other cultures, practices, languages and abilities. This leads to more trust and greater respect for differences.

How this can be done

Efforts to create community connectedness can focus on:

- providing sufficient safe, shared spaces and places that are flexible in how individuals, whānau and communities can use them and that are easily accessible

- ensuring universal access is built into developments

- community initiatives and expression of local identity, character, historic and cultural heritage

- festivals and events, including events that are accessible and free, especially at a local level, that create opportunities to interact and learn about each other

- ways to better involve individuals, groups and communities, especially those generally under-represented and not often heard, in civic and democratic processes

- supporting activities which actively foster relationships between different communities.

Provide accessible services and social and cultural infrastructure that are responsive in meeting people's evolving needs

Population growth and demographic change will put pressure on existing services and facilities. For example, our ageing population will increase and require services and social infrastructure that enable older people to fully participate.

It is essential that we proactively plan for, and develop, social and cultural infrastructure in tandem with physical infrastructure, if we are to create communities and neighbourhoods that are liveable and successful for everyone.

See Map 3 - Population Growth

Varied and accessible services and facilities which support the needs of communities are essential in helping people to participate in society and create a sense of belonging.

 These services may include:

- pools
- parks and open spaces
- marae
- hospitals
- schools
- employment and housing services.

Local and Auckland-wide facilities such as museums and art galleries, theatres, libraries, community centres, sports fields and playgrounds, and public places all play their part in helping people learn, socialise and connect with each other. They provide venues for recreation, arts, sports, and cultural events and community-led activities.

Not only do these social and cultural infrastructure and services provide opportunities for social interaction, many also encourage physical activity with its associated health and wellbeing benefits. Others stimulate the mind and encourage learning.

Local people and groups must be involved in their planning and development to ensure that services and facilities are responsive to local needs.

There are many barriers that prevent people from accessing services and facilities, such as affordability or social and cultural barriers. Providing affordable or free access to facilities, like council-operated pools, encourages children and young people to be active and healthy.

Homeless people experience disadvantage and value safe public places like libraries as a way to achieve important connections in the community.

Barriers to physical access (for example, from transport difficulties, disability or frailty, or hours of operation) must be addressed through universal design. Find out more on the Auckland Universal Design website.[31]

The under-provision of services needs to be addressed alongside investment in new development areas and in existing areas that have significant population growth. We also need to make sure people have easy access to a range of social infrastructure across Auckland. Good public transport connections and options to walk and cycle help improve access to social and cultural infrastructure.

It is essential that we plan and design services and infrastructure in such a way that they can adapt to different usage and demand over time.

We therefore need to better utilise existing facilities and develop new flexible and multi-purpose facilities. Find out more by reading the Community Facilities Network and Action Plan.[32]

How this can be done

Efforts to maximise the investment in social services and infrastructure can focus on:

- areas where there is current under-investment and areas where there is significant population growth and redevelopment
- creating quality public places and spaces
- ensuring our urban landscape has high amenity value as it forms part of people's social space
- providing social infrastructure that encourages people to be active
- being innovative in how we develop and deliver social services and facilities, ensuring they are flexible to allow for different uses during their lifetime
- recognising and meeting local needs.

Great Barrier Island Inset

Local board areas

Key to Colours:
Population Growth

	2047 - 2051
	2037 - 2046
	2031 - 2036
	2026 - 2030
	2021 - 2025
	2017 - 2020

Key to Labels:

- 2051 Population

- 2017 Population

Hibiscus and Bays
137954
103017

Rodney
160422
64748

Upper Harbour
148420
63610

Kaipātiki
106216
92153

Devonport - Takapuna
88518
61307

Waiheke & Great Barrier
12689
10196

Henderson - Massey
181160
117453

Waitematā
154343
95294

Ōrakei
122930
87844

Albert - Eden
150665
103260

Whau
122928
87320

Waitākere Ranges
56000
51650

Puketapapa
88397
62240

Maungakiekie - Tāmaki
151043
84059

Howick
195545
148727

Māngere - Ōtāhuhu
93503
79752

Ōtara - Papatoetoe
101353
84834

Manurewa
101954
91287

Papakura
82360
52760

Franklin
177522
77156

Map published 5 June 2018

N

0   5   10
km

Support and work with communities to develop the resilience to thrive in a changing world

A community can be a community of place, interest or identity. An active community is one that can:

- take the lead
- influence decisions
- take action
- bring about change.

Supporting people to work with and lead their own community enables many positive results. Local ways of doing things and developing local solutions better addresses communities' diverse needs. Building strong relationships and a shared sense of purpose:

- brings diverse communities together
- builds a sense of belonging
- creates resilience.

This means communities and individuals are able to adapt as circumstances change.

Many people expect to have a more active role in decision-making when decisions affect their wellbeing, their home, community or area of interest.

This involvement in decision-making is an integral part of creating strong, sustainable and cohesive communities. Volunteers, and the organisations that support them, also play a vital role in enabling participation in local action and decision-making.

Supporting local leadership is a key way to support communities in decision-making. Local leadership requires a more locally-centric approach, increasing the range and quality of relationships and developing a better understanding of local aspirations and needs.

This involves building on and developing local communities' existing strengths and assets. Some Aucklanders are already effective at working in and shaping their own community as seen on the Creating a community-led physical activity space in Grey Lynn page.

Others need assistance and support to increase their knowledge, skills and human and financial resources to act.

Organisations have a social responsibility and need to think differently about how they work at the local level and how current and future challenges for Auckland's communities can best be met.

How this can be done

Efforts and investment to support local leadership and community resilience can:

- provide support to and share decision-making with local people and organisations so they can actively shape, influence, lead and be part of what happens in their communities and how it happens
- support a strong and well-networked community sector that delivers services to those in need, especially vulnerable communities and those experiencing significant change and growth.

Value and provide for te Tīriti o Waitangi/ the Treaty of Waitangi as the bicultural foundation for an intercultural Auckland

Te Tīriti o Waitangi/the Treaty of Waitangi is the founding document of New Zealand. It recognises that Māori, as tangata whenua, belong in Aotearoa.

The relationship between Māori and the Crown is guided by te Tīriti o Waitangi/the Treaty of Waitangi. It provides the basis for working together in partnership and in good faith for mutual benefit.

It also recognises the desire to approach future New Zealand settlement and the governance of all future New Zealanders in an agreed way.

Te Tīriti recognises both the rights of Māori as indigenous people and the rights of all who have subsequently settled here. As such, the Treaty provides the basis for all people to belong in Aotearoa. Find out more about your rights and the Treaty of Waitangi at The Human Rights Commission.[33]

It recognises the special place of Māori as tangata whenua by recognising and protecting rangatiratanga and the relationship between Māori, the government and future citizens.

Valuing and better understanding the Treaty helps us to engage with te ao Māori and contributes to our shared identity and sense of belonging.

Auckland is diverse and multicultural with different cultural or ethnic groups. It embraces the place of whānau, hapū and iwi, as the indigenous people. Auckland's Māori identity and vibrant Māori culture are important in creating a sense of belonging, cohesion and identity for everyone who calls Auckland home.

To be Māori is to have a tūrangawaewae, a place of strength and belonging, a place to stand. The history and culture of mana whenua helped establish, shape and define today's Auckland and is an important part of what it means to belong in Auckland.

Mana whenua obligations to manaaki manuhiri (extend hospitality and care for others) and tikanga Māori can help to connect all cultures and ensure that Auckland is a welcoming place for all.

Whanaungatanga can provide all Aucklanders with a sense of belonging and a strong basis for an intercultural Auckland. Interculturalism is an approach to fostering social inclusion that has been shown to have a positive impact on economic development and social cohesion. For example, all Aucklanders are invited to participate and experience Māori culture on Waitangi Day and during Matariki events.
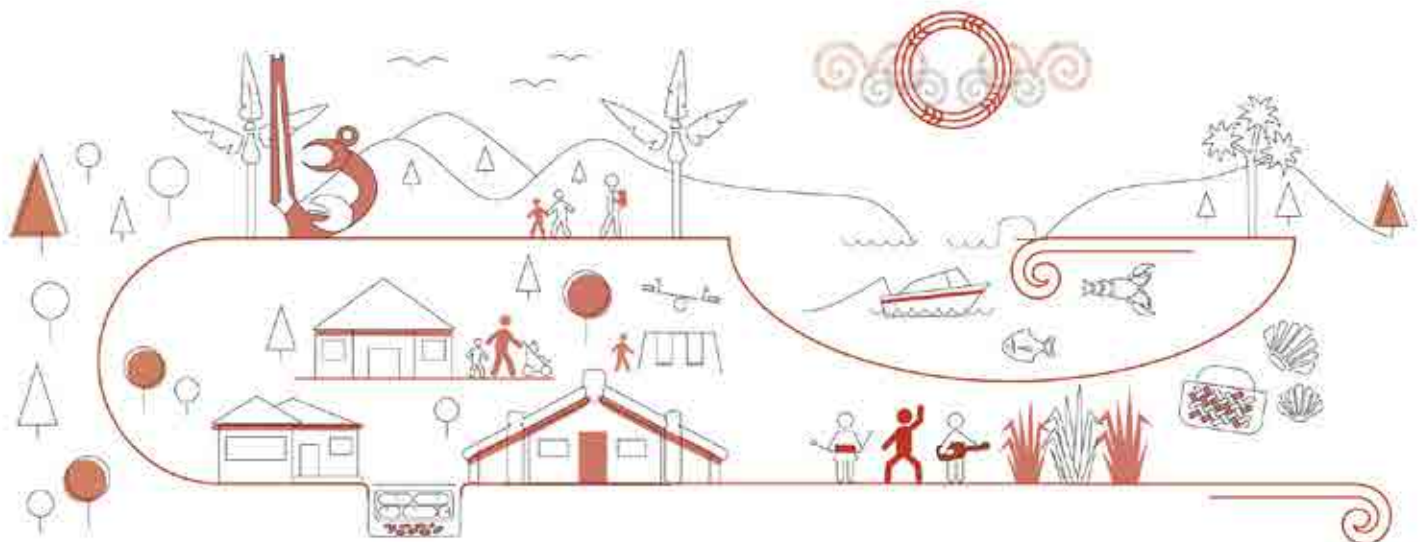
Providing opportunities for mana whenua to shape Auckland's Māori identity and to share Auckland's Māori cultural heritage with other Aucklanders can promote wider understanding and strengthens our sense of belonging and pride as Aucklanders.

It is important to the future of Tāmaki Makaurau that all Aucklanders understand and can confidently engage with Māori culture. For recent migrants, learning about their new home includes learning about New Zealand's history, the role of the Treaty and traditions. Both existing Aucklanders and new residents can connect with Māori through, for example, experiencing a pōwhiri, engaging in customary Māori activities or attending a hui at a local marae.

We can all take part in Māori language and culture. Doing so helps to form part of our identity as Aucklanders. Celebrating Auckland's Māori identity recognises our history and underpins how we welcome people from diverse backgrounds and cultures.

Building strong positive relationships based on understanding and mutual respect will help strengthen Auckland's bicultural foundation.

How this can be done

We can do this by:

- promoting understanding of the history of Tāmaki Makaurau, the Treaty and what this means for Aucklanders in the future

- acknowledging and better understanding the importance of te ao Māori

- working with and supporting Māori to connect with all Aucklanders

- recognising and supporting the role of mana whenua to manaaki manuhiri in a way that expresses their cultural identity

- fostering engagement of all Aucklanders with te reo Māori as a means of accessing and understanding Māori culture

- encouraging all Aucklanders to engage and interact positively with Māori and Māori culture, values and ways of doing things to help build intercultural understanding. For example, through incorporating Māori urban design elements[34] in public places and spaces.

Recognise, value and celebrate Aucklanders' differences as a strength

Auckland is becoming increasingly diverse. Our diverse communities encompass a broad range of differences in addition to ethnic and cultural diversity. Diversity is a resource and adopting a positive approach is the first step in realising its benefits. Acknowledging, respecting and embracing differences are part of treating diversity as strength.

As our population grows and changes, it is important that we continue to nurture and support our diverse community identities. We must also tap into the skills and talents of all our citizens and create the conditions for everyone to fully participate in society.

Increasing social and cultural differences pose both challenges and opportunities.

Multicultural refers to a society that contains several cultural or ethnic groups that may not interact. We need to encourage intercultural approaches, where cultures exchange and interact constructively, and there is universal respect for human dignity.

To be the Auckland that New Zealand needs it to be, it is essential that we support all our people to achieve their social, economic and cultural potential and fully capture the benefits of diversity. One such benefit is when new skills and talent help the economy to prosper.

Auckland's organisations, whether large or small, all have an important role to play in supporting diversity. People need to see themselves reflected in the organisations they come into contact with. Diversity in organisations,

particularly at senior levels, enhances creativity, innovation and financial performance.

Auckland is a gateway to New Zealand. There is more we can do to welcome and include new people from other places and cultures. Successful settlement involves empowering people to participate in the social, economic and political life of Auckland.

How this can be done

Our rich diversity provides an opportunity to model a cohesive and inclusive society in which all groups can thrive. Ways by which we can achieve this are:

- actively building trust between communities by promoting interaction, inclusion and shared values
- providing opportunities for communities to express and celebrate their language and culture and share it with all Aucklanders
- supporting organisations that provide settlement services and programmes that assist with migrant settlement
- adapting governance structures, institutions and services to the needs of a diverse population
- providing opportunities for our diverse communities to participate in decision-making
- supporting initiatives by organisations to better reflect our diversity
- proactively addressing discrimination and prejudice against minorities.

Multi culturalism
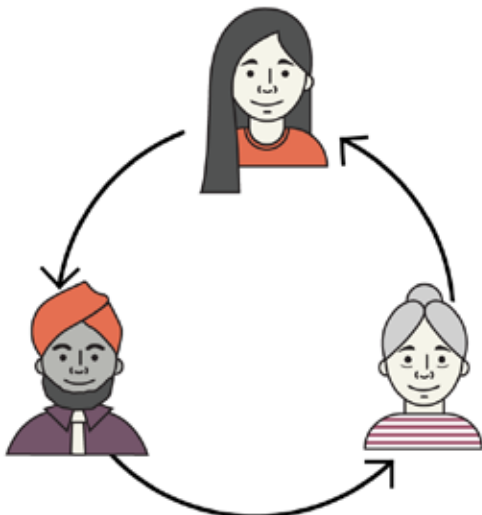
Inter culturalism

Focus investment to address disparities and serve communities of greatest need

Growing socio-economic inequity in Auckland means that many people cannot achieve their potential.

As the population grows and successive generations of families experience inequity, the impact will be more visible and harder to change.

Adopting an 'equitable' approach means prioritising the most vulnerable groups and communities to achieve more equal outcomes.

People-based initiatives put the needs of vulnerable Aucklanders, including children, young people and families, at the centre of decision-making and support those most at risk of poor outcomes.

Supporting all parts of our community to succeed will benefit individuals and families now and will produce wider socio-economic benefits across generations and for all of society. Focusing our efforts to address disparities and communities of greatest need means doing more to achieve equitable outcomes for all Aucklanders.

When people feel disadvantaged in relation to other individuals or communities, it reduces social cohesion and affects the development of a sense of belonging, which in turn reduces the likelihood of community and civic participation.

The reasons for socio-economic inequity are many and they often have to be addressed at the same time to make any real, long-lasting impact.

For example, we may increase school attendance, but if children go to school hungry they are not likely to succeed, and if they do not have waterproof clothing they may be unwell and unable to go to school.

Housing availability and costs are major contributing factors to the rise of inequity in Auckland. Rising housing costs increase neighbourhood segregation on the basis of wealth. Many people, particularly older people, young people, and people on low incomes are being priced out of their current community or cannot afford to hold on to their property. This can break social connections and support networks and add to the difficulty of finding employment or achieving educational success. This in turn limits the opportunities for social mobility and contributes to inter-generational disadvantage. Providing for a range of housing types and tenures in new developments helps support mixed neighbourhoods.

Place-based initiatives represent a targeted and integrated approach to addressing entrenched issues within a specific geographical area. Institutions and organisations can play their part in addressing disparities through place-based work such as The Southern Initiative.

Others can make a significant impact through the redevelopment of housing or assistance for warm and dry homes. Integrated approaches in targeted locations can achieve transformational change for Auckland's communities.

EQUALITY   EQUITY
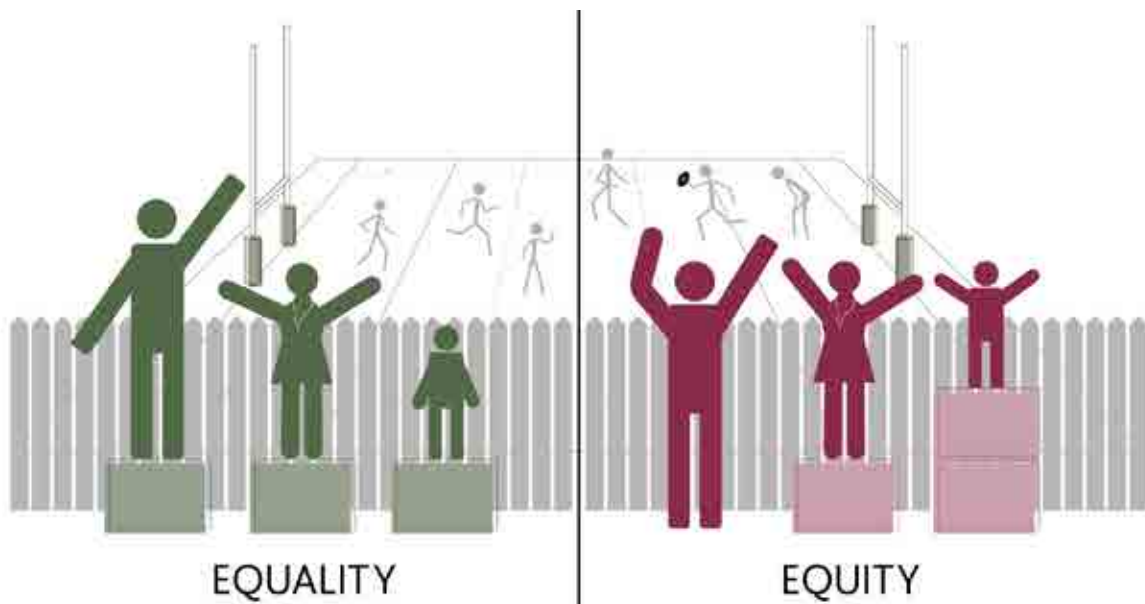
How this can be done

Focusing our efforts in communities of greatest need and areas where there are entrenched disparities in outcomes will create the greatest benefit to individuals, communities and Auckland as a whole.

Early action in areas of growth and significant change also provides the opportunity to focus activity on addressing disparities before they become embedded. This is a particular opportunity in the redevelopment of existing urban areas.

We are focusing on achieving change, and that means doing more in areas and communities where change is most needed.

Recognise the value of arts, culture, sport and recreation to quality of life

Our quality of life is central to our physical and mental wellbeing. We get fulfilment from having a purpose and feeling we contribute to society.

How we spend our time is important to a balanced and healthy lifestyle, whether it is spending time with family and friends, taking part in outdoor activities or going to an event.

Many Aucklanders already enjoy a lifestyle where they engage in a wide range of activities that contribute to their quality of life. The ability to take part in sport and recreation, and arts and cultural activities is particularly important. It supports both mental and physical wellbeing – they feed both body and mind.

Providing opportunities for all Aucklanders to access, participate in and experience arts and culture, helps create cohesiveness amongst people and communities through learning, understanding and appreciation of difference. Participating and engaging in the arts can:

• improve self-esteem and confidence

• foster identity and pride,

• build social connection

• increase our sense of belonging and wellbeing.

Participating in arts and cultural initiatives also enables Aucklanders to express our unique cultures and see ourselves reflected in public places. Creativity, culture and the arts make Auckland a vibrant and dynamic city.

The Toi Whītiki - Arts and Culture Strategic Action plan[35] aims to integrate arts and culture into our everyday lives and create a culturally rich and creative Auckland.

Appreciation of our cultural heritage, especially our built heritage, is an equally important aspect of what contributes to our quality of life. It reminds us of our past and provides a visual context of where we have come from. It is one aspect of our culture that is easily observed and there for everyone to see and appreciate.

Participating in sport and recreation is a major contributor to our quality of life, health and general wellbeing. More active lifestyles help combat obesity and related health issues. Evidence shows that participation can have a positive impact on physical and mental health, social cohesion and educational outcomes.

Recreation and sport draw people from different backgrounds together. They promote social interaction and help build relationships within and across diverse communities. Participation is especially important for children and young people. It helps them to develop life skills and confidence and life-long, healthy living habits. Providing a wide range of recreation and sport opportunities enables all Aucklanders to be more active, more often contributing to healthy lifestyles.

The sport and recreation sector is diverse. It relies on the significant contribution of volunteers, local clubs and community organisations to support delivery. The Sport and Recreation Strategic Action plan[36] provides an example of regional sports organisations and sporting codes working together to target resources more effectively and build capability.

Access to and the ability to participate in cultural events or sport activities are not equitable across the region. Common barriers are distance, affordability, location across the region and physical access, particularly for people with disabilities.

How this can be done

• supporting a range of arts and cultural activities that reflect Auckland's diversity

• providing a range of arts, culture and heritage experiences that all Aucklanders can enjoy

• integrating arts and culture as part of our everyday lives

• providing innovative and flexible options to meet the changing lifestyles of all Aucklanders including programmes for older people and disabled people

• continuing to build the sector's capability to deliver quality recreation and sport experiences.

Implementing the Belonging and Participation outcome

Implementation partners

We all have a part to play in creating an inclusive and equitable Auckland. The impact that communities and individuals have in shaping Auckland cannot be underestimated.

Mana whenua, as kaitiaki of Tāmaki Makaurau extend manaakitanga to visitors and new comers to Auckland.

Community groups and organisations provide opportunities for people to connect, learn, understand and support their community.

Central government contributes to this outcome through multiple functions, for example:

- providing funding and support for refugee and migrant resettlement facilities and programmes
- ensuring the human rights of all Aucklanders are upheld through the Human Rights Commission.

Auckland Council also undertakes a variety of functions that enhance Belonging and Participation for all Aucklanders. This includes:

- provision of social policy
- supporting community organisations and providing community facilities and services
- funding events and other initiatives that celebrate and showcase Auckland's diversity
- encouraging participation in the decision-making process by a range of diverse groups and communities through advisory panels.

Auckland Council will develop an implementation approach for this outcome working alongside our key partners and stakeholders. This will be built on existing programmes and ensure all new elements introduced in Auckland Plan 2050 are planned for.

Mechanisms used to work together

Auckland Council embraces an empowered community approach, where individuals, whānau and communities have the power and ability to influence decisions, take action and make change happen in their lives and communities.

Groups are encouraged and supported to identify their own ways for working together and for getting on with making a difference in their community.

Auckland Council, through its committees and local boards has a number of different ways that it listens, engages and supports its diverse communities.

Its advisory panels are an important source of knowledge and expert advice on the diverse interests and issues experienced by the disability, ethnic peoples, Pacific peoples, rainbow, seniors and youth communities.

An important part of civic participation is Aucklanders taking leadership roles in community activities in a variety of different ways such as voting in and standing for local or central government, district health boards, school boards, or being a representative for community, cultural or sporting groups.

Supporting strategies and plans

Toi Whītiki - Arts and Culture Strategic Action Plan

The Toi Whītiki - Arts and Culture Strategic Action plan's[37] overall goal is to enable arts and culture to be integrated into our everyday lives, and create a culturally rich and creative Auckland. One of its six goals is to build a flourishing creative economy. It is a 10-year plan for the region, delivered by Auckland Council in partnership with the creative sector.

Thriving Communities Action Plan Ngā Hapori Momoho

The Thriving Communities Action Plan[38] provides a platform for Auckland Council to work together with Auckland's diverse communities in new and more sustainable ways.

Sport and Recreation Strategic Action Plan

This is a sector-wide plan for Auckland's sport and recreation sector. The focus of the Sport and Recreation Strategic Action plan[39] is to get Aucklanders more active, more often.

Healthy Auckland Together

Healthy Auckland Together is a coalition of 26 organisations representing local government, mana whenua, health agencies, non-government organisations, university and consumer interest groups. The coalition has a five year action plan outlining the priorities and the solutions urgently needed to reshape Auckland's obesogenic environment. Visit the Healthy Auckland Together website[40] for more information.

Community Facilities Network and Action Plan

The Community Facilities Network and Action plan[41] provides direction for the development of new arts, culture, community and leisure facilities, upgrades of existing facilities and dealing with facilities no longer meeting community needs.

Parks and Open Spaces Strategic Action Plan

Sets Auckland Council's priorities for investment in parks and open space[42] (includes Open Space Provision Policy[43] and Parks and Open Space Acquisition Policy[44]).

I Am Auckland - the Children and Young People's Strategic Action Plan

I Am Auckland - strategic action plan[45] sets out council's commitments to children and young people.

Auckland Design Manual

A Universal Design approach recognises and inclusively designs for human diversity and various life scenarios such as:

- pregnancy
- childhood
- injury
- disability
- old age.

The tool takes developers through a Universal Design approach to development. It provides practical design solutions illustrated with diagrams, real life examples and checklists.

Visit the Auckland Design Manual website.[46]

Auckland Council's strategies, policies and plans have acted as an important input in the development of the Auckland Plan 2050. With the adoption of the plan, the council will assess these documents to ensure they remain fit for purpose.

How to get involved

- Visit the Our Auckland website[47] or Auckland Live website[48] for information on events and activities in your area.
- There are a variety of ways Aucklanders can tell us what they think on what matters to them. All Aucklanders can help shape Auckland and have a say on projects, plans and strategies by visiting Have your say[49.]
- Opportunities to volunteer can be found on the Volunteering Auckland website[50]
- Community groups can email a local strategic broker[51] for advice. Strategic brokers work alongside communities in local board areas to understand their aspirations, increase their capability do things for themselves, and to navigate the council and access resources and information.

Supporting information

Knowledge Auckland website[52] provides free published research, information, analysis and data about Auckland's communities, economy and environment.

Auckland Counts website[53] contains 2001, 2006 and 2013 census information specifically for Auckland. It provides interactive mapping, graphing and data export functions.

Supporting information

Library engagement with homeless people

Creating a community-led physical activity space in Grey Lynn

The Southern Initiative

Library engagement with homeless people

Rough sleepers value the Central City Library as a safe public space.

This was one of the findings in An insight into the experience of rough sleeping in central Auckland study.[54]

After learning this, library staff wanted to find out more about the experiences and expectations of the homeless community. Supported by the Auckland City Mission and other partners, they hosted a hui with more than 30 rough sleepers.

At this hui, and in other discussions, community members shared stories and ideas for initiatives the library could implement.

Now the library offers:

- Monday Movies and morning tea – for which participants select titles from the library's DVD collection and the library obtains a licence to screen them without charge
- a weekly book group
- a media club which enables participants to blog about life on the streets.

Building on the trust established through working together, the library and rough sleeping advocates have worked together to raise awareness of homelessness in Auckland.

One example is the interactive maze created by urban artist Margaret Lewis. It takes people on a journey from being housed to homeless. It was an event run at the Central City Library as part of Artweek 2017 and marking World Homeless Day.

Another example is the Human Library event, in collaboration with

Splice that enabled people to book time with a homeless person to hear their story first-hand. Read more on the Splice website.[55]

These initiatives have been shaped through co-design and partnership, and have been led by rough sleepers themselves.

A member of one of the weekly book groups held at a local library.
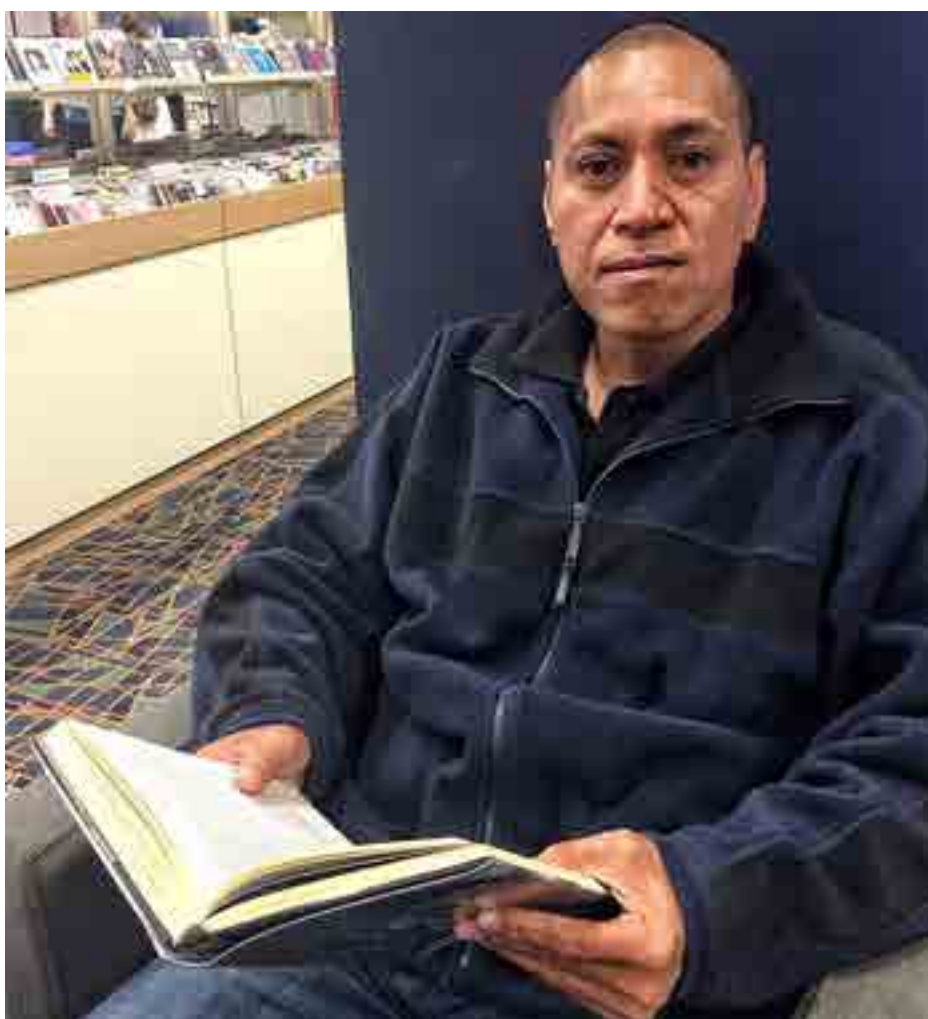
Creating a community-led physical activity space in Grey Lynn

The Grey Lynn pump track is a great illustration of how local communities can lead the development of exciting new spaces for fun and exercise. The track encourages kids of all ages to be physically active and burn off energy while having fun and adventure with their friends.

What is now the pump track was previously a patch of grass in an inner city park. Local residents, led by parents Scott Kuegler and Paul Wacker, formed the Grey Lynn Pump Track Association, and set about transforming it.

Once the initial concept was developed, the association worked with a number of partners to turn the dream into reality. Sport Auckland was a very helpful partner. They played an important advocacy and influencing role and gave practical assistance in how to source funds.

The Waitematā Local Board strongly supported the proposal. They saw how it could link to the local Greenways Plan, and how it fitted into their approach of working with the community. Other funders and partners were encouraged to join in, providing donations of materials and time that led to the track being built.

This has been a truly collaborative process, with the local community, Sport Auckland, Auckland Council and others coming together to provide a great, well-used asset for the community.

One parent thanked everyone for making this a reality as their children and friends "absolutely love it."

The Southern Initiative

The Southern Initiative (TSI) was established through the 2012 Auckland Plan to provide a focus for work in an area covered by the four local board areas of Māngere-Ōtāhuhu, Ōtara-Papatoetoe, Manurewa and Papakura.

See Figure 18 - Map of the Southern Initiative

The purpose of The Southern Initiative

The purpose of TSI is to plan and deliver a long-term programme of co-ordinated investment and actions to bring about transformational social, economic and physical change in this area.

It was set up with six priorities:

- early childhood intervention and strong family attachment
- education, training or employment for all young people leaving school
- an outstanding international gateway and destination area

Figure 18 - Map of the Southern Initiative

- economic development and jobs for local people
- increased public transport services
- housing development.

TSI is responsible for kick starting, enabling and championing social and community innovation in South Auckland.

It tackles complex socio-economic challenges and creates opportunities that will benefit the people of South Auckland.

It focuses on purpose-designed effective innovations that make better use of current resources and empower local people. It tests solutions lightly, quickly and affordably to understand what works and why before implementing them more widely.

By applying a 'think like a system, act like an entrepreneur' mind set we do not attempt to take on grand societal challenges in their entirety, instead we look to identify nimble opportunities for change within the system, seed innovations, test prototypes and support successful efforts to grow and influence other parts of the wider system.[56]

The Southern Initiative's focus

Working towards the same priorities, there is now a particular focus on social innovation and entrepreneurship.

This is evident in the following streams of work:

1. Lifting incomes through quality employment opportunities and establishing businesses that create shared prosperity.

The vision: South Auckland will be an example of inclusive growth where social and economic development is explicitly integrated.

2. Building resilience and adaptability to use creativity, culture and technology to harness opportunities from climate change, technological breakthroughs, shifts in the economy and major demographic changes.

The vision: South Auckland will be known for intergenerational creativity, entrepreneurship and innovation and its young people will be sought after in an increasingly globalised and technological world because of their advanced skill base.

3. Supporting whānau, especially those with very young children, to develop their own solutions to thrive and set the foundations for positive lifelong outcomes for their children.

The vision: children and young people in South Auckland will be given the best start in life.

How The Southern Initiative started

This initiative was started in 2012 to unleash human and economic potential in an area of Auckland with high social need, yet with significant economic opportunity.

Its aim was to drastically improve the quality of life of local residents, reduce disparities between different parts of Auckland, and grow businesses and jobs in the area.

Almost 20 per cent of all Aucklanders live in TSI area. At the 2013 Census, the area was home to almost a quarter of all Auckland's children and young people, and almost 40 per cent of people living in south Auckland were 25 years or younger.

Three out of every five residents is from a Pasifika ethnic group, or is Māori.

The area is part of New Zealand's largest centre of economic activity. However, as Auckland grows, so too does the risk of South Auckland not fulfilling its potential.[57]

Given the mix of a young and ageing population, coupled with the current low wage, low productivity economy, complex social and economic challenges need to be tackled.

These challenges include:

- low incomes, high unemployment and underemployment
- poor housing quality
- many social and health harms caused by hardship and poverty.

At the same time, South Auckland's economic importance, abundance of talent and creativity and large, diverse and youthful population are strengths and assets waiting to be unlocked.

TSI recognises that a different approach is needed – one that sufficiently lifts personal and inter-generational outcomes, rather than trapping people in ongoing poverty.

Solutions lie within local communities themselves. Rather than creating more services to 'fix' South Auckland, the initiative works with whānau, local social change agents, grassroots entrepreneurs, businesses and agencies to explore, create and test radical and innovative solutions.

To create deep change, TSI has concentrated on improving people's lives in real time and making change to systems that affect population groups.

How the Auckland Co-design Lab supports The Southern Initiative

The Co-design Lab is an integral part of the project's innovation capability. It is funded by Auckland Council and sponsored by eight central government departments.

The Lab was established to provide a neutral space to explore the use of co-design and other innovative approaches to address complex social issues.
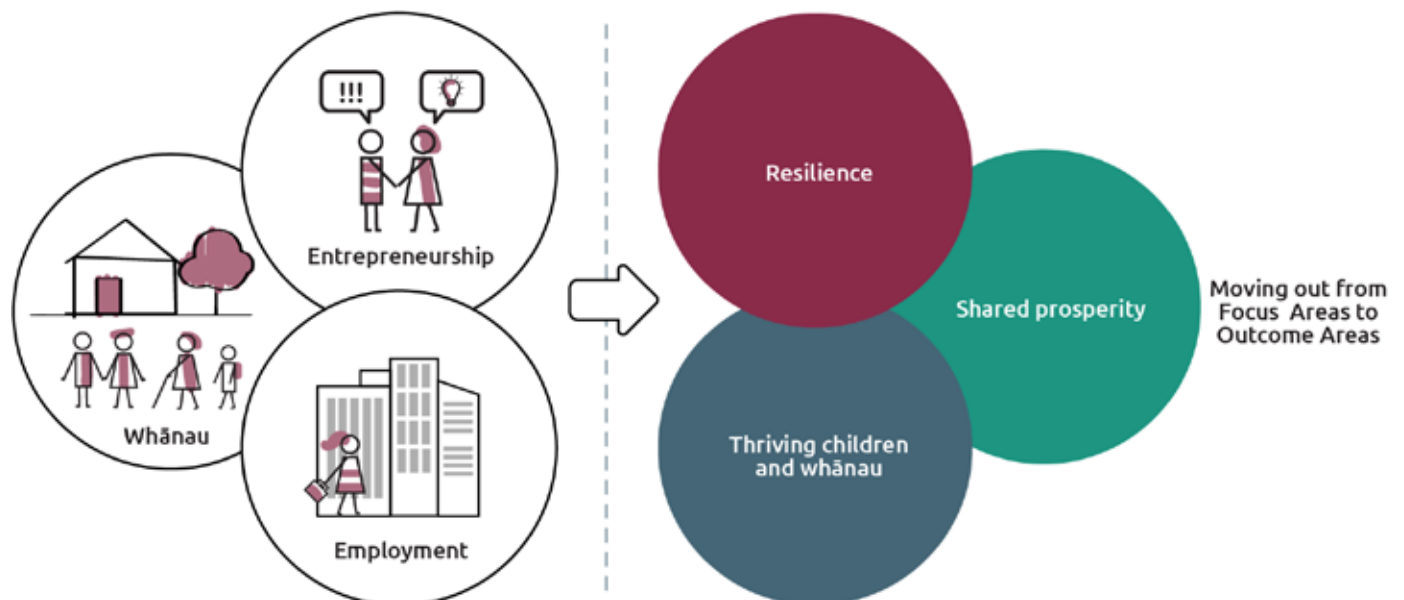
A key focus is to provide space for multi-agency teams to collaborate, work alongside citizens and to support and broker innovative ideas and solutions.

It also focuses on unlocking people's capability to participate in designing their future, while advocating for system-level change.

Highlights of The Southern Initiative

- Training more than 400 people in pre-apprenticeship construction, infrastructure and allied trades through its Māori and Pasifika Trades Training programme.

- Supporting the business growth and development of more than half a dozen Māori, Pasifika and community-led enterprises.

- Developing sustainable procurement practice, to the point of being recognised as a leader in New Zealand.

- Creating the UPsouth online platform. Here young South Aucklanders can contribute their ideas, in any creative medium, to questions about opportunities and challenges facing South Auckland. It develops and nurtures a network of young people who lead together and support one another's development in a way that is both entrepreneurial and altruistic. Visit the UPsouth website for more information.[58]

- User-centric co-design with families experiencing some of the toughest housing and poverty challenges. This has led to valuable insights and prototypes, designed by the very people who are affected.

- Turning South Auckland into a Maker City and part of the global maker movement. Events include days where locals fix, upcycle and repurpose items. The Fix Stop initiative transforms bikes from the landfill to new. Others have involved young makers in shared projects including Mbots (a way for kids to learn electronics and programming), coding, gaming, virtual reality and 3D printing. Read more on the Maker City website.[59]

Māori Identity and Wellbeing

A thriving Māori identity is Auckland's point of difference in the world that advances prosperity for Māori and benefits all Aucklanders.

DIRECTION	FOCUS AREA
Direction 1 Advance Māori wellbeing	**Focus Area 1** Meet the needs and support the aspirations of tamariki and their whānau
Direction 2 Promote Māori success, innovation and enterprise	**Focus Area 2** Invest in marae to be self-sustaining and prosperous
Direction 3 Recognise and provide for te Tiriti o Waitangi outcomes	**Focus Area 3** Strengthen rangatahi leadership, education and employment outcomes
Direction 4 Showcase Auckland's Māori identity and vibrant Māori culture	**Focus Area 4** Grow Māori intergenerational wealth
	Focus Area 5 Advance mana whenua rangatiratanga in leadership and decision-making and provide for customary rights
	Focus Area 6 Celebrate Māori culture and support te reo Māori to flourish
	Focus Area 7 Reflect mana whenua mātauranga and Māori design principles throughout Auckland

Māori Identity and Wellbeing explained

Māori culture and identity is celebrated by Aucklanders and is our point of difference in the world. It brings visitors to our shore, attracts investment, and builds a sense of belonging and pride.

Auckland embraces its uniqueness founded on te Tiriti o Waitangi and shaped by its Māori history and presence.

Te Tiriti recognises the rangatiratanga of Auckland's hapū and iwi, and the inseparable bond between Tāmaki Makaurau the people and Tāmaki Makaurau the place.

Māori, the indigenous people of Aotearoa New Zealand have lived in Tāmaki Makaurau for over 1000 years.

Today, the population of Māori in Tāmaki Makaurau is diverse and dynamic. They comprise nearly 12 per cent of Auckland's population, and number around 160,000 people. Over half are under 25 years and nearly a third under 15 years.

A significant proportion of Māori, however, are not benefitting from Auckland's success.

Māori living in Auckland are:

- the hapū and iwi of Tāmaki Makaurau ,known as mana whenua, or
- those who are not in a Tāmaki Makaurau mana whenua group, known as mataawaka.

There are 19 mana whenua groups in Tāmaki Makaurau whose interests and boundaries overlap, and make up around 15 per cent of Auckland's Māori.

See Map 4 - Tangata Whenua for more information on sites of significance to Mana Whenua and tribal boundaries - an interactive version of the map is available at aucklandplan. govt.nz

Māori continue to be important to Auckland's success, and successful outcomes can be achieved when we create opportunities for:

- Māori self-determination and expression
- shared efforts between Māori and with others
- the integration of Māori values into planning, decision-making and delivery.

The strengths and contributions Māori bring to Auckland will fuel growth and advance Māori social, cultural, economic and environmental wellbeing.

How we will measure progress

We will track progress against a set of measures.

The measures for this outcome are:

- The benefits of whānau Māori measured through tamariki and rangatahi
- Māori in employment, education and training
- Māori decision making
- Te reo Māori across Tāmaki Makaurau

Kaipara Harbour

Wellsford

Te Kiri Marae (Ōmaha Marae)

Warkworth

Puatahi Marae

Te Aroha Pā (Araparera Marae)

Te Kia Ora Marae (Kākanui Marae)

Orewa

Haranui Marae

Helensville

Hauraki Gulf / Tīkapa Moana

Reweti Marae (Whititera Marae)

Kumeu

Takapuna

Waiheke Island

Waitemata Harbour

Orākei Marae

Henderson

Howick

Umupuia Marae

Waitakere Ranges

Titirangi

Te Puea Memorial Marae

Makaurau Marae

Ngāti Kōhua Wharetipuna & Papakāinga

Pūkaki Marae

Manukau

Clevedon

Manukau Harbour

Hunua Ranges

Whātāpaka Marae

Motairehe Marae

Kawa Marae

Barrier Islands Inset

Pukekohe

Reretēwhioi Marae

Tahuna Marae

Waiuku

Legend

- Marae (Mana Whenua)
- Historic Maori Occupation
- Archaeological Site (CHI)

Heritage New Zealand Listed Sites
- ★ Wahi Tapu
- ■ Wahi Tapu

NZ Archaeological Association (NZAA) Archaeological Sites
- Combination Site Type
- Maori Site Type
- Co-governed or Co-Managed area
- Sites and Places of Significance to Mana Whenua (Unitary Plan)
- Local Board Area

15 Tribal Overlaps

4 Tribal Overlaps

Map published 5 June 2018

Note: The best way to view the data presented here, is by using the interactive map on the Auckland Council website. It has different layers that become visible at different zoom levels

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Advance Māori wellbeing

Thriving Māori identity and wellbeing means whānau, hapū, iwi and Māori communities lead healthy and prosperous lives where their housing, employment, education, and health needs are met.

To advance Māori well-being requires a holistic approach, one in which rangatiratanga is central.

Two key pathways have led to successful outcomes for Māori:

- the role of marae as focal points for social, cultural, and economic development
- the delivery of services 'by Māori, for Māori', based on te ao Māori values and practices.

However, rapid rises in housing, transport and living costs have affected many whānau, and continue to do so. This has sometimes led to the displacement of whānau, and has impacts on access to education, employment, services and facilities.

The impact of being displaced can also reduce the resilience of whānau and the sense of belonging that comes from strong bonds within the community in which you live.

To achieve outcomes that meet the needs and aspirations of Māori, service providers must be culturally competent, accessible and better connected. They must move towards strengths-based models with whānau at their heart.

One way to do this is by drawing on Māori-centric models, as shown on the Te Whare Tapa Whā website,[60] and collective models of learning, so that key Māori concepts become embedded in service design and delivery.

One successful example is Whānau Ora, as shown on the Whānau Ora website,[61] a national multi-agency approach that places families at the heart of decisions that affect them.

Figure 18 - Māori wellbeing Source: Results from the Te Kupenga 2013 survey on Māori cultural well-being (Total NZ, Statistics NZ)

70% felt involvement in Māori culture was important

34% visited their ancestoral marae in the last year

55% are able to speak some Te Reo Māori

84% saw whanau not living with them in the last month

66% felt wairuatanga was important

Promote Māori success, innovation and enterprise

An Auckland of prosperity and opportunity for all seeks to advance and support Māori business and iwi organisations to be significant drivers of Auckland's economy.

Innovation and enterprise are two key elements of Māori success and have been a hallmark of Māori development since Māori first arrived in Aotearoa.

Marginalisation of Māori and large land losses have had substantial effects on Māori economic progress over the past 170 years. However, Treaty settlements and strategic iwi investments now contribute to an increasingly strong economic base.

Hapū and iwi are enduring and perpetual, and have an intergenerational approach to investment outcomes. Their enterprises and activities will advance Māori wellbeing through economic development. This will also benefit Auckland's economy.

The Māori economy in Tāmaki Makaurau is growing and thriving, but it is also complex.

See Figure 19 - Māori business.

Māori enterprises range from those formed to grow profit from collectively owned resources to others focused on cultural expression, language and social enterprise.

Greater collaboration between Māori organisations and the private sector can drive better outcomes. This will benefit Māori, Tāmaki Makaurau and Aotearoa New Zealand.

The development and growth of rangatahi to drive and contribute to Māori innovation and enterprise is essential for a successful future. Rangatahi leadership, education and employment are therefore key focuses for achieving Māori success and innovation through enterprise.

Rangatahi are embracing the self-employment opportunities that the digital space has opened up, working wherever and however they choose. This challenges traditional employment expectations in positive ways.

Figure 19 - Māori business. Source: NZIER report to the Independent Māori Statutory Board, July 2015

55% of national Māori asset base is in Auckland

$23 Billion of assets owned by Māori in Auckland

27% of national Māori economy is in Auckland

$4 Billion Māori contribution to Auckland's GDP

10% of Auckland's population is Māori

Recognise and provide for te Tiriti o Waitangi outcomes

To achieve te Tiriti o Waitangi outcomes first and foremost requires a commitment to te Tiriti and strong support by everybody.

Te Tiriti o Waitangi/the Treaty of Waitangi is our nation's founding document and recognises the special place of Māori in New Zealand.

Recognising and providing for te Tiriti o Waitangi outcomes enables Māori to exercise rangatiratanga in decisions that matter to and affect them.

For whānau, hapū, iwi and Māori communities in Tāmaki Makaurau, recognising te Tiriti outcomes includes access to cultural and traditional taonga and mātauranga.

This means delivery for Māori, as Māori, through Māori organisations in relation to:

- a flourishing language
- access to customary Māori arts and culture
- activities and initiatives that support Māori development.

Te Tiriti outcomes for hapū and iwi also mean acknowledging and recognising their mana, and protection of their rights and interests in Tāmaki Makaurau. This reflects their important relationship to the whenua and wai.

Treaty principles provide guidance for decision-making, partnership, and collaboration between mana whenua and government. They also create opportunities for partnerships with the private and third sectors.

Treaty partnerships in natural resource management provide integrated approaches. These produce holistic and sustainable environmental, social and cultural outcomes that benefit both Auckland the people and Auckland the place.

Mana whenua as kaitiaki are strengthened through successful Treaty partnerships such as those that use co-governance and co-management models.

Showcase Auckland's Māori identity and vibrant Māori culture

Auckland's Māori identity is its unique point of difference in the world. This identity can be built on and developed through a number of approaches.

Auckland's Māori history and presence must be woven throughout Auckland's fabric - the design of our places and spaces.

Showcasing and sharing Māori history, stories, and arts creates opportunities for all Aucklanders and visitors to learn about, experience and embrace Auckland's vibrant Māori culture. Sharing these stories could continue to focus on key gateways into Auckland and through Māori public art, local events and digital story telling.

Māori must play a central role in crafting and sharing these stories.

Māori values and traditional knowledge, combined with contemporary Māori design, art and culture offer a unique and authentic means to design our built environment.

They enable Māori to see themselves reflected in their city, and foster a sense of Māori identity and pride in all Aucklanders.

Creating this unique reflection requires ongoing partnership with Māori that generates beneficial outcomes for all parties.

To have a flourishing Māori language – te reo Māori – requires all Aucklanders to grow their capability.

Transforming Tāmaki Makaurau to a fully bi-lingual city will create a place where Aucklanders and visitors can see, hear and use te reo Māori daily.

Businesses have the opportunity to embrace Auckland's Māori identity, and through collaboration with Māori, can attract visitors and investment and showcase Auckland to the rest of the world. This sets Auckland apart from other international cities.

Meet the needs and support the aspirations of tamariki and their whānau

Investing in the future of our tamariki is vital to advancing Māori wellbeing. Nearly a third of all Māori in Auckland are under the age of 15 years. Whānau is the smallest unit of Māori society and the wellbeing of tamariki is intricately linked to whānau wellbeing.

Research has shown that early experiences provide the foundation for all future learning, behaviour and health. Read more on the Centre on the Developing Child website.[62]

This aligns with the Whare Tapa Whā model that recognises four dimensions of Māori health and wellbeing - physical, spiritual, mental, and whānau. Read more on the Ministry of Health website.[63]

Whānau encompasses the extended family, many of whom are collectively and actively involved in raising tamariki. Some are being raised by two parents, some by their grandparents and others by single parents.

The Markers of Flourishing Whānau framework[64] identifies six significant domains of wellbeing for tamariki and whānau.

Many of these domains such as wealth, standard of living and connectedness are addressed through other Auckland Plan outcomes. Still, all efforts should be holistic and consider the needs of tamariki in the context of their whānau.

How this can be done

Efforts to support tamariki can focus on:

- supporting sustainable funding of whānau and kaupapa-based programmes to strengthen culturally responsive institutions
- improving the specific needs of vulnerable tamariki and whānau, particularly whānau who are experiencing substandard housing and homelessness
- increasing levels of Māori trust in public institutions that impact tamariki and whānau Māori
- increasing equitable outcomes for whānau, hapū, iwi and Māori communities, with particular focus on investing in community development projects.

Invest in marae to be self-sustaining and prosperous

Marae are hubs for the Māori community. They physically and spiritually anchor Māori identity, and function as focal points for Māori social, economic and cultural leadership.

Hapū and iwi marae provide the tūrangawaewae for their people. As Māori moved to Auckland from other parts of New Zealand, urban marae were built to meet the cultural and social needs of their Māori communities.

There are more than 60 marae across Auckland that include tangata whenua, Māori community, taurahere, church and education-based marae.

See Map 5 - Tangata Māori for more information on Māori community marae, institutions, service providers and Matawaka - an interactive version of the map is available at aucklandplan.govt.nz

Marae are not-for-profit organisations and many rely on volunteers for support. They vary in size and the services they provide.

All provide for hui and tangihanga. Some also offer services such as kōhanga reo early childhood education through to a range of health, education and social services.

Marae are valued as cultural hubs by all Aucklanders. The responsibility of the hau kāinga to manaaki manuhiri and foster whanaungatanga are often extended to the wider community in times of need.

Marae play a resilient and adaptive role for the wider community including emergency housing and civil defence responses. This has been exemplified recently with marae opening their doors to Auckland's homeless during winter.

The leadership role marae have in enabling better outcomes for Māori and the wider community is evolving which means appropriate resources and support for marae is needed.

This will require a focus on supporting the governance, management, and physical infrastructure of marae. It will also mean that service providers, hapū and iwi, charities, funders and businesses will need to be better coordinated alongside marae.

How this can be done

Efforts can focus on:

- addressing funding and resourcing barriers for marae facilities and services
- supporting marae aspirations such as developing kaumātua and papakāinga housing
- recognising marae aspirations to explore the design and delivery of culturally appropriate programmes

Legend

- Community / Mataawaka
- Institutional
- Taurahere
- Kura
- Te Kōhanga Reo
- Local Board Area

Maori Ethnicity Destribution (2013 Census)

- 0 to 100 Maori (per CAU)
- 100 to 200
- 200 to 400
- 400 to 600
- 600 to 800
- 800 to 1000
- 1,000 to 2,500 Maori (per CAU)

Great Barrier Island Inset

Kaipara Harbour

Wellsford

Warkworth

Orewa

Helensville

Hauraki Gulf / Tīkapa Moana

Kumeu

Takapuna

Waitemata Harbour

Waiheke Island

Henderson

Howick

Waitakere Ranges

Titirangi

Manukau

Clevedon

Manukau Harbour

Hunua Ranges

Pukekohe

Waiuku

Map published 5 June 2018

Note: The best way to view the data presented here, is by using the interactive map on the Auckland Council website. It has different layers that become visible at different zoom levels

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Strengthen rangatahi participation in leadership, education and employment outcomes

Rangatahi have an important role in shaping Auckland's future.

More than 50 per cent of Māori in Auckland are aged under 25 years.

To enable their leadership, rangatahi must have opportunities to engage in civic and local decision-making. They will need access to relevant education and support to pursue meaningful careers that contribute positively to Auckland's economy.

A key focus is the creation of opportunities for rangatahi to participate as leaders in decisions that affect them. To enable their voices to be heard there needs to be further investment in 'for rangatahi by rangatahi' communication methods and platforms that resonate with them.

Education and training must develop to meet the learning needs and aspirations of rangatahi in an ever evolving education system and job market. Education and training models that enable new thinking and approaches to unlock rangatahi talent will be valuable.

Alongside this the current formal education system needs to:

- accelerate the success of rangatahi
- improve the culturally appropriate learning environment
- steadily reduce the over-representation of rangatahi among those achieving poor educational and employment outcomes.

Fostering Māori models of learning will provide opportunities to build rangatahi capability and to staircase them into career paths they value.

How this can be done

Efforts can focus on:

- valuing the importance of rangatahi and their skills, knowledge and world views as important to the health of the community
- investing in and valuing rangatahi-led approaches to support rangatahi needs and aspirations
- growing rangatahi participation in decisions of importance to them
- increasing rangatahi achievement in education, employment and training.

Grow Māori intergenerational wealth

A key challenge for Māori within Tāmaki Makaurau is to create opportunities for intergenerational wealth (cultural, social and economic wealth transferred from one generation to the next).

Loss of traditional land, undermining of Māori culture and impacts of economic reforms have contributed to a lack of individual and whānau assets handed down to the next generation.

Māori ownership of business, land, and other assets provides the strongest opportunity to express rangatiratanga and aspirations for cultural and social well-being.

Several te Tiriti o Waitangi settlements have occurred within Tāmaki Makaurau with others likely to occur over the coming years. These settlements provide an opportunity for Māori collectives to create economic resilience and build the Māori asset base. Building that asset base can achieve outcomes for their people in education, housing, business and enterprise.

There are a number of ways to create intergenerational wealth for whānau.

Whānau-centric housing models such as papakāinga not only grow hapū and iwi asset bases but also provide homes where tamariki can grow and learn, confident in their identity.

To make more of these whanau-centric models possible, some of the key constraints on the retention and use of Māori land for housing and development will need

to be mitigated. These include access to finance, land use regulations, the capacity of iwi and the challenge of coordinating with various organisations.

Education is also an important pathway for individuals and their whānau to increase their financial literacy and grow their savings. This will empower whānau to determine their future ownership outcomes.

Māori business owners and the self-employed are major contributors to economic activity that can grow intergenerational wealth. Māori businesses are driven by more than profit.

The point of difference that many Māori businesses bring to the market is their intergenerational focus and intentional contribution to multiple outcomes - cultural, social and environmental.

How this can be done

Our efforts can focus on:

- increasing Māori financial and investment literacy and savings practices
- enabling Māori economic outcomes through procurement opportunities
- supporting Māori collaborations to work at a larger scale and share knowledge and experience
- improving regulatory processes and collaboration for Māori land development
- developing partnerships with Māori that enable economic growth for whānau, hapū and iwi.
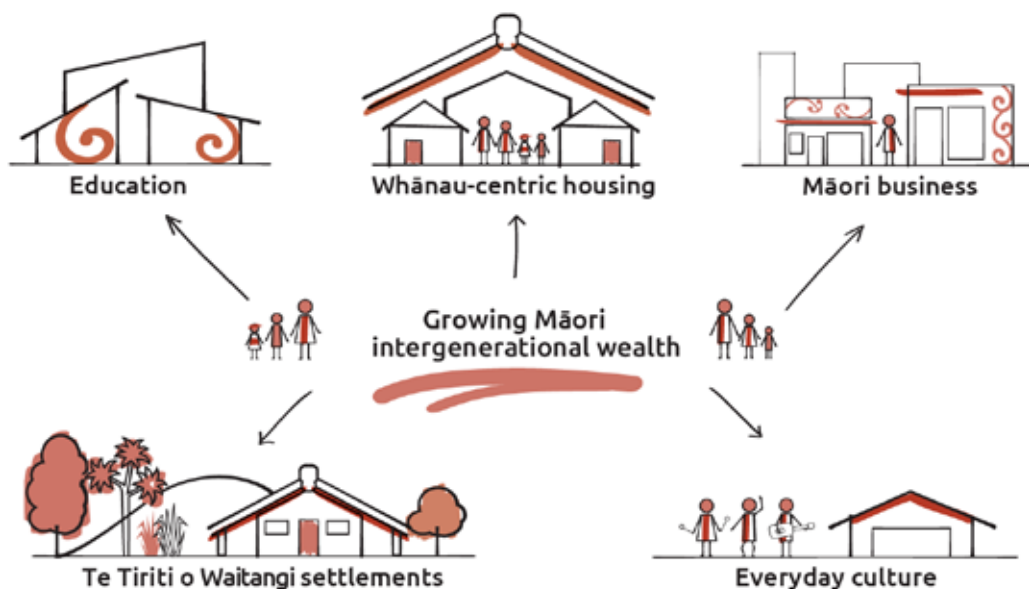
Advance mana whenua rangatiratanga in leadership and decision-making and provide for customary rights

Mana whenua have a unique role to play in governance and leadership in Auckland. This is a role that they have undertaken for hundreds of years and which was instrumental in the establishment of Auckland.

Enabling partnerships with mana whenua in Tāmaki Makaurau honours our commitment to the Treaty and provides a pathway towards a future-focused dynamic, successful Auckland.

The Mana Whenua Kaitiaki Forum, a collective of the 19 hapū and iwi authorities, has identified several priorities to advance collectively:

- supporting rangatira ki te rangatira relationships with central and local government
- strengthening mana whenua and Māori identity in Auckland, with a particular focus on advancing te reo Māori in the public realm
- partnering and influencing property and infrastructure development outcomes
- protecting and enhancing natural resources and taonga tuku iho, with a particular focus on freshwater
- advancing Māori economic development and advocating for improved education outcomes for rangatahi.

Achieving these aspirations requires partnership and collaboration with central and local government organisations.

The aspirations of iwi and hapū organisations to partner and collaborate with the private, third sectors and other iwi organisations can further create greater investment outcomes and opportunities that will advance the wellbeing of Tāmaki Makaurau the people and the place.

Te Tiriti o Waitangi settlements require hapū and iwi involvement in decision-making of natural resources through, for example, co-governance models. This ensures mātauranga and tikanga Māori are integrated into the management of these taonga.

This Treaty-based approach is exemplified by the Tūpuna Maunga o Tāmaki Makaurau Authority[65] which focuses on the health and wellbeing of the maunga in all decisions.

Māori customary rights and interests will continue to evolve as te Tiriti o Waitangi settlements and legal provisions change, as has already occurred in coastal management and the fisheries sector.

How this can be done

Efforts can focus on:

- continuing to identify and protect sites of cultural heritage, particularly in the planning and development of Auckland
- increasing reciprocal partnership, collaboration and decision-making opportunities with mana whenua, public, private and community partners
- enabling kaitiakitanga outcomes in the management of natural resources and customary rights
- advancing mana whenua priorities.
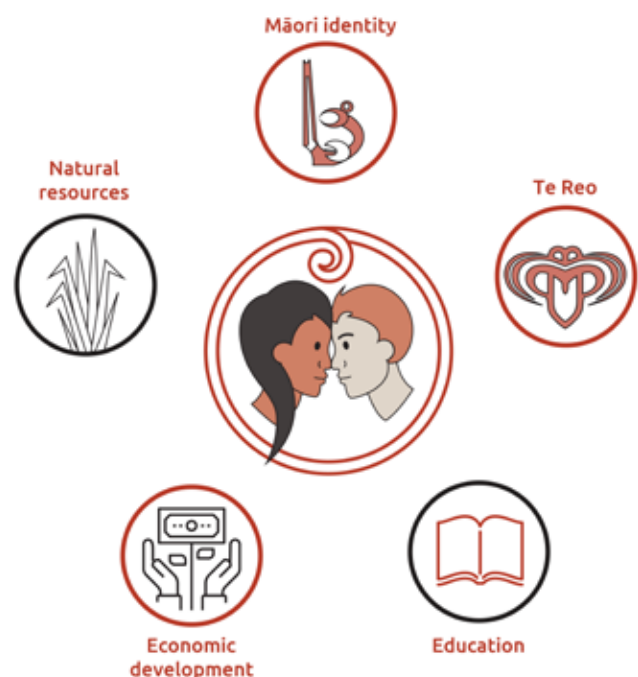
Celebrate Māori culture and support te reo Māori to flourish

Auckland will continue to provide, invest in and support opportunities that celebrate Māori identity and heritage. We can create experiences to share Māori culture in its many forms through a variety of channels that can be seen, heard, spoken and felt.

A culturally vibrant Tāmaki Makaurau showcases Māori art, music and performance locally and globally.

Continued expansion and resourcing is needed for events, and activities associated with Māori events, such as Matariki. Celebrations steeped in Māori culture can ignite all cultures in Auckland to celebrate their relationship with the land.

Te reo Māori, the Māori language, is fundamental to a thriving Māori identity for Tāmaki Makaurau. A bilingual Tāmaki Makaurau can be demonstrated through language on signs, heard on transport modes and reflected on media platforms.

There are many opportunities for investment and action in these areas such as through naming, broadcasting, and major and local events.

Te reo Māori is an official language in Aotearoa New Zealand. Widespread commitment to increase fluency in day to day usage of te reo will ensure this taonga tuku iho flourishes for generations to come.

How this can be done

Efforts can focus on:

- a programme of Māori local and regional events and activities throughout the year
- more partnership opportunities across public and private sector with mana whenua and mataawaka to advance Auckland specific cultural events and initiatives
- greater involvement and advocacy for te wiki o te reo Māori (Māori language week) activities
- opportunities to develop and utilise the skillsets of rangatahi in the development and promotion of Māori arts, performance and te reo Māori.

Figure 20 - Where te reo speakers use the language outside of the home Source: (Total NZ, Statistics NZ).

74% Speak te reo when at hui or meetings

67% Speak te reo when helping at school

65% Speak te reo when attending a club or interest group

61% Speak te reo when at religious activities

53% Speak te reo when visiting friends or whānau

42% Speak te reo when at paid or unpaid work

30% Speak te reo when playing or at sport

2.4% of Aucklanders who speak te reo
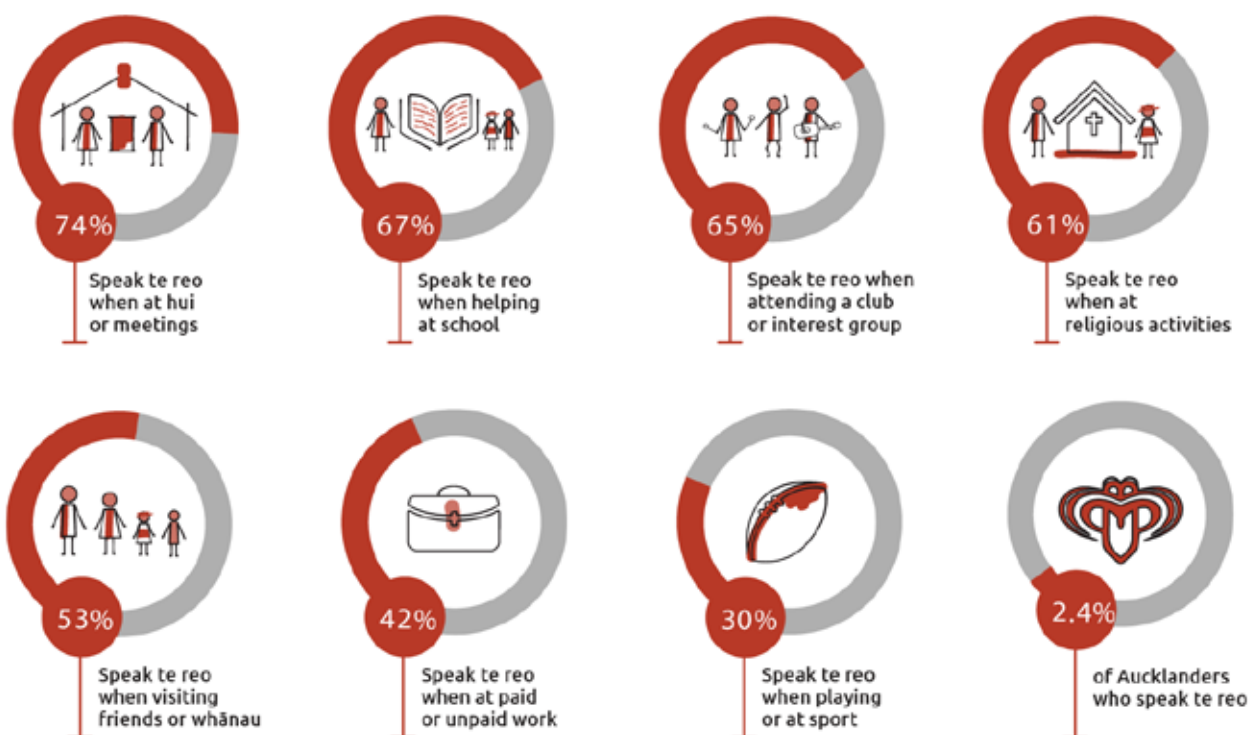
Reflect mana whenua mātauranga and Māori design principles throughout Auckland

Mana whenua contribution through Māori design is a critical component of Auckland's future development.

Since 1840, Māori identity and culture has been minimised in the Auckland landscape.

Through Māori design mātauranga Māori can be placed at the centre of planning, design and development. This offers a holistic approach that creates places and spaces that are welcoming to all, from tamariki and young whānau to kaumātua.

Mana whenua opportunities to influence placemaking can reinforce a sense of belonging for generations to come through the expression of their mātauranga and pūrakau in urban design.

Te Aranga Māori design principles provide a way to instil Māori cultural identity in the built landscape, bringing mana whenua to the centre of Auckland's design. Read more about the principles on the Auckland Design Manual website.[66]

There are a number of examples that express the unique forms and benefits of adopting Māori design thinking. One example is Te Oro Music and Arts Centre in Glen Innes, where Māori design is etched into the look, form and function of this community space.

How this can be done

Efforts can focus on:

- providing opportunities for mana whenua to partner, input and influence urban design within Auckland
- requiring the application of Te Aranga Māori design principles in public development
- encouraging greater uptake of Te Aranga Māori design principles in private development
- supporting and advocating opportunities to showcase and protect Auckland's Māori identity, culture and heritage.

Implementing the Māori Identity and Wellbeing outcome

Implementation partners

Many agencies and organisations support and contribute to Māori identity and wellbeing, either as the main focus of their work, or through the delivery of services and activities. This includes various Māori and iwi organisations, government agencies and Auckland Council, as well as non-government and the private sector.

Kaupapa Māori and Māori-led organisations as well as key Māori change agents continue to be critical to delivery of appropriate and effective services for Māori. Public sector organisations also have responsibilities to meet the needs and aspirations of Māori and improve Māori wellbeing.

The Independent Māori Statutory Board was established in 2010 under the Local Government (Auckland Council) Act 2009, to assist Auckland Council to make decisions, perform functions, and exercise powers.

It does this through promoting cultural, economic, environmental, and social issues of significance for mana whenua groups and mataawaka of Tāmaki Makaurau. It also must ensure that the council acts in accordance with statutory provisions referring to te Tiriti o Waitangi/the Treaty of Waitangi.

Auckland Council works with mana whenua and mataawaka, with guidance and support from the Independent Māori Statutory Board, to enable Māori to be involved in decision-making processes. Mana whenua are involved in the consenting process and input into a range of other resource management activities.

The Tūpuna Maunga o Tāmaki Makaurau Authority (Maunga Authority) was established in 2014 to co-govern 14 Tūpuna Maunga. The Maunga Authority comprises equal representatives from Ngā Mana Whenua o Tāmaki Makaurau and Auckland Council, together with Crown (non-voting) representation.

Auckland Council will develop an implementation approach for this outcome working alongside our key partners and stakeholders. This will be built on existing programmes and ensure all new elements introduced in Auckland Plan 2050 are planned for.

Mechanisms used to work together

Here are some examples of current mechanisms that will contribute towards this outcome:

- Co-governance arrangements between Māori and the council, or iwi and the Crown, allow for a more direct influence and greater exercise of authority by mana whenua over the taiao. In 2017 there were eight co-governance and co-management arrangements between Auckland Council and Māori in Tāmaki Makaurau. The number of sites that involve Māori in governance roles is expected to grow.
- Actively partnering with others is a key mechanism for Auckland Council to support Māori identity and well-being. The Southern Initiative is an example. It brings together a range of organisations and willing partners and challenges existing ways of working. Partnering with the community is imperative to the success of the approach.
- Adoption of Te Aranga Māori design principles by Auckland Council and the development sector will transform the visual elements of Auckland's public and private places.

Supporting strategies and plans

Here are some examples of current strategies, plans and initiatives that contribute towards this outcome:

- The Independent Māori Statutory Board's Māori Plan for Tāmaki Makaurau[67] This plan provides the high level outcomes and focus areas to achieve a healthy and prosperous Tāmaki Makaurau.
- Auckland Council's Te Aranga design principles, as shown on the Auckland Design Manual website[68] and Te Reo Māori policy[69] This supports the use of Māori design and te reo Māori in council infrastructure, communications and publications.

How to get involved

- Check out the Auckland Design Manual website[70] for guidance to use and apply Te Aranga design principles in urban design.

- The Te Taura Whiri website[71] provides a range of guidance, resources, and research to increase the use of te reo Māori.

- Find more information about Tūpuna Maunga Integrated Management Plan.[72]

Supporting information

Information about local marae of Tāmaki Makaurau on the Māori Maps website.[73]

For information about Māori public health in Tāmaki Makaurau check out the Hapai Te Hauora website.[74]

Read the research offering perspectives on Measuring the value of the contribution of Māori language and culture to the New Zealand economy.[75]

Find out about The Southern Initiative[76] a place-based regeneration programme designed to stimulate and enable social and community innovation in South Auckland.

Homes and Places

Aucklanders live in secure, healthy, and affordable homes, and have access to a range of inclusive public places.

DIRECTION	FOCUS AREA
Direction 1	**Focus Area 1**
Develop a quality compact urban form to accommodate Auckland's growth	Accelerate quality development at scale that improves housing choices
Direction 2	**Focus Area 2**
Accelerate the construction of homes that meet Aucklanders' changing needs and preferences	Increase security of tenure and broaden the range of tenure models, particularly for those most in need
Direction 3	**Focus Area 3**
Shift to a housing system that ensures secure and affordable homes for all	Improve the built quality of existing dwellings, particularly rental housing
Direction 4	**Focus Area 4**
Provide sufficient public places and spaces that are inclusive, accessible and contribute to urban living	Invest in and support Māori to meet their specific housing aspirations
	Focus Area 5
	Create urban places for the future

Homes and Places explained

Homes

Auckland must think strategically about how the housing system can provide secure, healthy and affordable homes for all its people.

The housing system does not work for many Aucklanders. We currently have one of the least affordable housing markets in the world. Aucklanders, whether buying or renting, pay more for housing than most other New Zealanders.

Addressing these issues will require different ideas and approaches.

How we got to this point

Auckland's housing supply has not kept pace with increases in population or met demand for investment, creating the current housing crisis.

Over the last few decades Aucklanders have generally had high expectations of their housing in terms of size and type: large and free standing. This determined what was being built and affected the average cost of housing.

Today, speculation in the real estate market pits investors against first-home buyers. This has underpinned price increases that have significantly outstripped wage and salary growth.

Since 1981, house prices in Auckland have increased at a faster rate than in the rest of New Zealand. Over the past 15 years they have trebled, and in the past five years they have increased by over 50 per cent.

The result is that a growing number of Aucklanders cannot afford to buy a home and will therefore not benefit from the financial security that home ownership traditionally provides. This puts them at a significant disadvantage in both the short and long-term.

Rents have also outstripped wage and salary growth, straining the budgets of many families and households. This has resulted in increasing incidences of housing stress, and the numbers of people who find themselves homeless and without shelter have increased considerably. Read more about homelessness in Auckland later in this section.

House price and rent increases also mean some households find themselves in unsuitable accommodation. Some live far from jobs, schools and other facilities due to limited availability of affordable options.

This trade-off between the cost of housing and proximity to jobs and facilities is a driver of spatial inequalities and social exclusion in Auckland.

Changing the housing system

Auckland needs holistic thinking and action. Local and central government, developers, builders, home owners, investors, renters and non-government organisations all have a stake in the system and can all work towards smarter solutions.

The market has failed to supply the number and types of housing to meet Aucklanders' needs.

There are many factors that affect how many homes we build, how quickly we build them, what type of homes we build, and what they cost.

The way we regulate land supply, what we charge for development, and the size and capacity of the building sector are all aspects of the housing system that influence the price of a completed home.

But other fundamentals of the system also have to be looked at. For example:

- how and where urban development is initiated, and by whom
- productivity of the development and building sectors and their ability to innovate
- ability to ramp-up construction activity in times of strong demand
- the cost of new infrastructure for development and who pays for this
- different tax treatment of property investment relative to other investment types
- building material costs and the limits on product choice
- property sales methods
- the financial sector's lending and ownership criteria
- how innovative building approaches become mainstream.

In addition, affordability interventions generally focus on the price of a home. There are other large household

budget items that are often ignored yet are part of ongoing living costs - being able to afford to live in a home once you have it is as important. For example, the urban form and where housing is located increases or minimises people's transport costs.

Demographic change and housing demands

Within the general context of consistent population growth, there are some broad population characteristics and shifts that will drive the demand for different housing solutions.

Auckland's and New Zealand's population is ageing. Over the next 30 years, a larger number of people will be aged 65 years and over. This group will also make up a larger proportion of Auckland's population than ever before.

The ability to find suitable and affordable housing in Auckland is not always straightforward for older people. The available housing stock often does not meet their needs, and the costs of owner-occupied and private and social rental housing are increasing. Also, the overall quality of the housing stock is poor, particularly the quality of rental stock, which has both health and safety implications.

Auckland's Māori and Pacific populations will continue to have relatively younger age structures due to their higher birth rates. By 2038 they are expected to reach a median age of 29.2 years and 29.7 years, respectively, compared with 42.0 years for Europeans.

Māori and Pacific peoples have seen no increase in home ownership over the past 30 years. This has traditionally provided households with both a secure home and greater intergenerational wealth.

If Māori and Pacific peoples are to enjoy the security of tenure, social mobility and levels of wellbeing in line with other groups, their poor housing outcomes cannot continue for the next 30 years.

Places

Auckland's places and spaces are where we live, work and play. Public places can be:

- parks, playgrounds and sports fields
- streets and roadways
- town centres with their squares, plazas and spaces between buildings.

These places are where we meet and interact with each other, relax, enjoy being in the open air, share our differences and celebrate successes.

They have a key role in Aucklanders' mental and physical health as they are places for activity and recreation. Public places where people can interact and connect have always been important and will continue to be vital to Auckland's success.

Public places are part of a holistic approach to wellbeing and can provide respite for those who feel isolated or experience stress or safety issues at home.

As Auckland's population grows, we must provide sufficient public places that meet the needs of residents. They are an extension of our homes and the way we live, and their design must therefore be flexible to accommodate how people of all age groups will use them.

At its core, placemaking recognises that the elements of place such as buildings and spaces and the connections between them, and how people use and experience them are created collectively.

When we focus on place, we do things differently. Placemaking recognises that our places foster wellbeing and support the way we live. It is a process that puts community-based participation at its centre.

Good design influences what is possible in a space:

- would you walk through here?
- would you sit here?
- would you enjoy yourself here?
- would you bump into someone you know?

The quality of our public realm is critical to the successful evolution of our urban areas in particular.

Auckland's vision for the future is not only limited to what is measurable such as the number of jobs and homes created; it includes the quality of places that are created.

Getting placemaking right is crucial to the Auckland Plan 2050's quality compact growth model.

Public places reflect who we are and where we have come from; they are the destinations we travel to and they contribute to our sense of belonging.

How we will measure progress

We will track progress against a set of measures.

The measures for this outcome are:

- New dwellings consented by location and type.
- Net new dwellings consented and completed.
- Housing costs as a percentage of household income.
- Homelessness.
- Resident satisfaction with the built environment at a neighbourhood level.

How we can implement the plan

Aucklanders have a shared responsibility for implementing the plan. Read more about implementation later in this section.

Develop a quality compact urban form to accommodate Auckland's growth

Auckland's population will increase significantly over the next 30 years and its urban form will continue to develop and change as a result.

Auckland will follow a quality compact urban form approach to growth to realise the environmental, social and economic benefits and opportunities this approach brings.

The Development Strategy sets out what this means.

Some of the benefits of this approach are that it:

- allows opportunities for more intensive living and working environments, and for more housing to be built around areas of activity and close to good transport options
- improves the efficiency of the substantial investment required in infrastructure – such as transport and wastewater – and other services. This also results in the best asset management and infrastructure provision
- means lower travel costs for people and businesses and increased economic agglomeration benefits
- helps to protect our natural environment and maintain Auckland's rural productivity by limiting urban sprawl.

A quality compact approach to future development will be achieved by:

- enabling sufficient capacity for growth across Auckland
- embedding good design in all developments and new housing
- sequencing and prioritising what gets delivered
- leveraging existing infrastructure investments
- aligning the timing of infrastructure provision with development.

Accelerate the construction of homes that meet Aucklanders' changing needs and preferences

Auckland must make a significant change in its ability to meet housing demand. Our population is increasing at a fast rate, and our housing needs will continue to change.

There are currently about 540,000 dwellings in Auckland. These are made up of stand-alone houses, terraced housing and an increasing number of apartments. Around three quarters of our housing stock is stand-alone dwellings, dispersed throughout Auckland.

At today's rates of population growth and household occupancy, Auckland will likely require another 320,000 dwellings to be built by 2050.

Current levels of construction fall well below demand and a substantial change in how new housing is delivered is needed. This is particularly important given that much of what is currently built is at the higher priced end of the market.

Not only do we need more good quality housing to be built, we must also ensure that a range of housing types and sizes are built across the region.

We need to build more apartments, including for individuals and large families, and townhouses, of different sizes and at different price points. Other examples could include intergenerational, papakāinga-style, and communal or co-housing.

This will reflect the fact that Aucklanders' lifestyles and housing preferences are changing. For example, there has been positive take-up of terraced housing and apartments that are close to transport corridors and nodes in recent years.

Our housing must also be well-designed and constructed and delivered at affordable prices. This includes homes and developments that are accessible for older people and people with disabilities.

Delivering the number of well-constructed and affordable homes that Aucklanders need is a significant challenge and can only be overcome through concerted effort.

Local and central government, the development, design and construction industries, and the financial sector, need to work together to find smart and practical ways to remove barriers and bottlenecks.

Shift to a housing system that ensures secure and affordable homes for all

A secure and healthy home is the hub of family life and provides a foundation for building strong communities.

Auckland's future economic and social prosperity will be underpinned by our ability to provide housing that people can afford to own or rent, and in which they can feel at home.

Auckland is experiencing a housing affordability crisis. Affordability is measured by the amount a household spends on housing-related costs, like rent or mortgage payments, heating and transport, whether they own or rent their home.

The crisis has resulted in serious social and economic consequences such as an unparalleled surge in the number of people (including whole families):

- without shelter, sleeping rough in cars or on the streets
- living in unsuitable and/or unhealthy temporary accommodation
- sharing units or houses in very crowded conditions.

Key workers such as teachers and nurses are leaving Auckland because they cannot afford to buy or rent a home here. Employers are reporting difficulties in retaining and attracting skilled staff.

This is all symptomatic of a housing system that is not working for all Aucklanders.

It points to the need for more state housing, and other social housing, such as housing provided by community housing providers or housing for older people provided by the council, for example. Also, the prospect of owning a home is becoming increasingly unrealistic for a growing number of Aucklanders. Renting has become a long-term, possibly permanent, reality for many families, individuals and households.

We need to ensure that renting is not a second-rate option to home ownership, and that the rental system better serves Aucklanders.

Specifically, we must ensure that:

- private landlords, including their agents, fulfil their duties and responsibilities under tenancy legislation
- people can afford their rental costs
- the rules are changed to minimise the disruptive effects on individuals and families of evictions at relatively short notice.

The deteriorating quality of much of Auckland's current housing stock is a concern. The financial and systemic barriers to maintaining and improving its condition must also be addressed.

Cold and damp housing all too often results in poor health outcomes, as described in Healthy homes. This creates substantial costs for individuals, families and society as a whole.

Our rental housing stock is typically in poorer condition than owner-occupied homes. We must work to ensure landlords are better able to maintain and repair their properties.

Addressing these issues will not be easy. Bold initiatives are needed if we are to ensure that all Aucklanders can realise their basic human right to adequate housing.

Provide sufficient public places and spaces that are inclusive, accessible and contribute to urban living

Public places and spaces provide 'breathing space' for people. They help us connect with others and with our surroundings, offer respite from the pressures of daily life and are part of a holistic approach to wellbeing.

Public places play a role in the quality of our urban life, as they provide opportunities for people to:

- undertake numerous recreational activities
- enhance their everyday activities such as going from home to work or school.

Our public places are where children play, people relax and meet others, and where we hold celebrations. They are an extension of living space, especially for people who have limited or no private outdoor space. They need to be well designed, inclusive and accessible to a wide range of people.

They help create our identity and define a sense of place by reflecting local communities, local character and local history.

They also help to green the city, play a part in carbon reduction, and contribute to eco-system health and biodiversity.

As Auckland's population increases and becomes more urbanised, our public places and spaces will become even more important to our wellbeing. This is particularly the case in areas of high growth, increased density and socio-economic need.

This has implications for the number, size and location of our public places. It is also an important reason why we need to think differently about what we consider to be a public place and how we conceive its use. We also need to think differently about how we design and deliver them.

They have to:

- support multiple uses
- be able to adapt and change in the future
- reflect who we are as communities, Aucklanders and New Zealanders.

As Auckland grows and intensifies, space will be at an even higher premium.

Acquiring new public space is expensive. Auckland must therefore complement any new public places by getting more out of what we already have. Innovative and thoughtful design will be key ways of meeting this challenge.
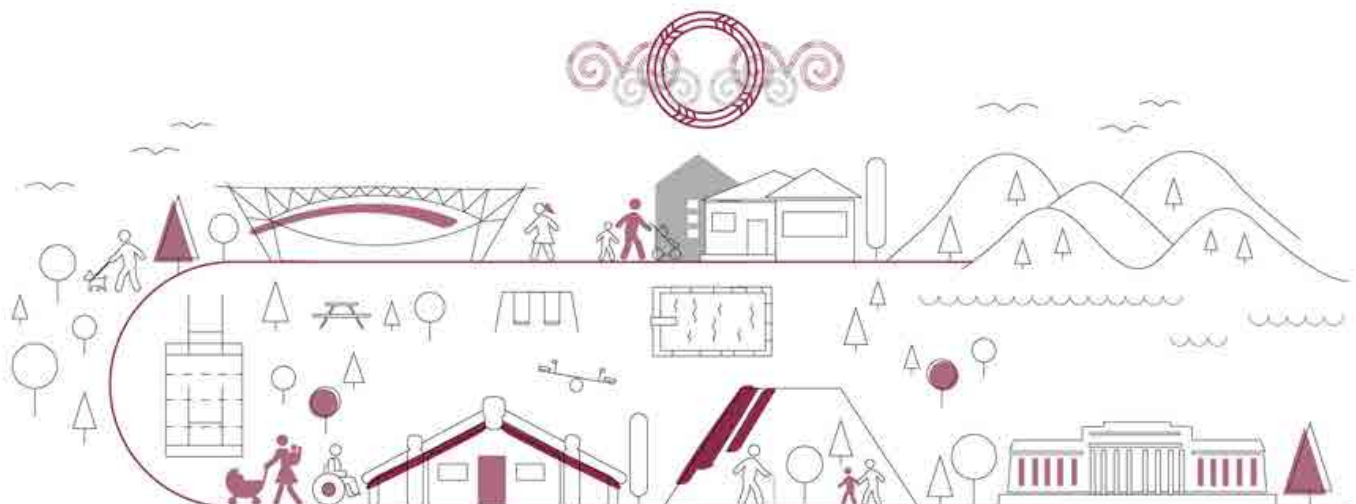
Accelerate quality development at scale that improves housing choices

Auckland must increase production efficiencies to deliver new housing at the scale and pace necessary to meet anticipated need. This includes the ability to accelerate the delivery of quality large-scale developments.

Our development and construction sectors must raise their productivity and take up new opportunities. The right support mechanisms need to be in place for this to happen.

This has been recognised by many, including the Mayoral Housing Taskforce Report[77] charged with finding solutions to address housing supply.

Delivering housing is a complex process. There are multiple players in the system and they need to work together to ensure new housing meets demand, and is affordable.

Some fundamental requirements for long-term success include:

- making the right decisions about development location and development sequencing
- lowering house build and operating costs
- improving access to finance
- raising the capacity and capability of the building industry to deliver an appropriate range of housing types
- well designed, quality new developments and housing
- coordinating investment in infrastructure.

How this can be done

New Zealand's building industry is small-scale and fragmented, and there is a shortage of qualified builders. Local capacity and expertise needs to be strengthened. We also need to attract big development companies from overseas who have expertise in delivering large-scale projects and who will help build local expertise over the medium term.

Auckland needs to replicate overseas construction techniques, and be able to use alternative and newly launched products with ease. The aim is to bring the cost of construction down.

For instance, the level of prefabrication in our construction industry is largely restricted to components, such as panels and trusses, as opposed to at-scale and wholesale prefabrication occurring in factories with dwellings being 'assembled' on-site. Visit the Prefab NZ website[78] to read more about these construction methods.

Adopting these new approaches, however, requires our legislative, testing and accreditation mechanisms, such as the New Zealand Building Code, to be flexible, less costly and more responsive.

It also requires our building industry to be adaptable, well-coordinated and equipped with sufficient expertise to be able to move away from bespoke houses built largely on-site.

We need to accelerate large-scale quality developments.

This can be done by:

- making it easier to source affordable building materials without compromising quality
- deploying innovative designs at scale
- helping the industry readily adopt modular building techniques or other faster ways of construction
- amalgamating land parcels to allow for at-scale development
- encouraging large-scale overseas development companies to enter the Auckland market.

Increase security of tenure and broaden the range of tenure models, particularly for those most in need

Tenure broadly describes the legal and financial arrangements that give someone the right to live in a home.

Security of tenure is crucial to people's wellbeing as it provides them with stability and continuity. Households that have a reasonable level of control and certainty over their living arrangements are better able to plan for their future.

The tenancy types most common in Auckland are owner-occupier and renting from a landlord. The landlord might be a private individual, a non-governmental organisation such as a community housing association, or local or central government.

How this can be done

Many people are being priced out of the ability to buy a home.

Therefore, we have to explore new and different ways to buy, rent and manage our housing.

This can include:

- cooperative and collective ownership models
- rent-to-buy models
- encouraging long-term institutional landlords.

Body corporates govern many aspects of living in multi-unit developments. It will be increasingly important that body corporates are managed well.

This requires tightening up rules around the management of body corporate funds. It is also important that apartment and unit owners understand their rights and responsibilities when buying into a body corporate.

We must continue to focus on improving stability and security of tenure for households that rent. Households that rent have few legal protections and are subject to power imbalances that limit their ability to plan for financial expenses.

Rent increases in New Zealand are unregulated aside from a frequency limit of once every six months. In contrast, many mortgages may be fixed for two to five years, at the discretion of owners.

Improve the built quality of existing dwellings, particularly rental housing

It is estimated that our current housing stock will make up half of all dwellings in Auckland in 2050.

We must ensure that the quality of existing housing is improved significantly. Healthy homes are fundamental to our health and wellbeing. Housing requires ongoing maintenance, repairs and in some cases modifications. However, this can be costly and disruptive, and there are inadequate levers to enforce minimum standards.

Cold and damp housing is the most serious issue in Auckland's existing dwellings. They cost more to heat, and have links to negative health outcomes. Rental housing stock is typically in poorer condition than owner-occupied houses.

The impact of cold and damp housing is greatest on those with weak or vulnerable respiratory systems, mostly children and older people. Respiratory infections are a leading cause of hospital admissions for children under two years of age.

This also applies to other forms of rental accommodation, such as boarding houses, that equally need to be healthy and warm.

Read more about Healthy homes later in this section.

How this can be done

Auckland's rental households are a priority.

Improvements in the rental housing stock can be made by:

- addressing the inability or unwillingness of some owners to attend to repairs, maintenance and needed upgrades
- addressing the powerlessness of tenants to require owners to undertake ongoing maintenance
- introducing compulsory 'warrants of fitness' for all rental properties and using levers to enforce minimum standards
- clarifying the relative ambiguity of the provisions under the Residential Tenancies Act.

Figure 21- Healthy homes
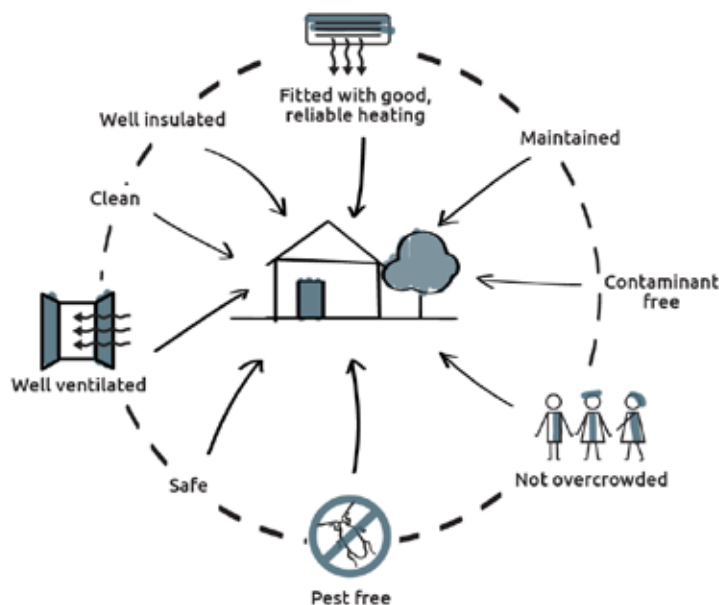
Invest in and support Māori to meet their specific housing aspirations

Like all Aucklanders, Māori want to live in warm and secure homes. Māori want their homes to support the way they live and the activities they associate with a prosperous quality of life, especially education and employment. Connectivity in terms of transport and communications are equally as important.

In addition, some Māori may prefer housing options such as papakāinga or whanau-oriented housing that reflect te ao Māori, and support the ability to extend manaakitanga and strengthen whanaungatanga.

Many Māori in Auckland live in homes that do not meet these aspirations. Housing choices can be limited by:

- employment options and income
- access to savings and intergenerational equity
- not being able to access services, support, and bank lending on an equitable basis.

How this can be done

Māori have experienced particular housing stresses over many years. Housing-related services therefore need to be responsive and innovative in meeting Māori needs.

Ways to address this could include:

- ensuring Māori have access to affordable housing initiatives to promote community health, whānau stability and Māori social wellbeing
- leveraging off the work that the community and the Māori housing sector is already doing to create increased options and opportunities for housing for Māori.[79]
- ensuring regulatory and consenting processes are effective and responsive to Māori developers and iwi organisations
- tapping into the potential of Māori commercial enterprises from across New Zealand, some of which are already playing a key role in delivering housing
- aligning housing initiatives in Tāmaki Makaurau with the Māori Housing Strategy He Whare Āhuru He Oranga Tāngata – Better Housing, Better Lives.[78]

Create urban places for the future

Well-designed public places and spaces are an integral part of urban living. They are also important for our rural and island communities whose needs are different.

Our urban public places will play an increasingly vital role in the future as Auckland grows and intensifies.

Public places and spaces include a wide range of land that is publicly owned, and potentially available for use by everyone, such as:

- open space, sports fields and parks, ranging from small local parks to large regional parks
- walkways, greenways and cycleways
- roads and footpaths
- squares, plazas and some land between buildings.

Given the cost of land, we will not be able to rely exclusively on acquiring new public places to meet the needs of a growing, and increasingly urbanised population.

It is therefore crucial that we:

- consider all publicly owned land as potential public space that is able to contribute to greening the city
- use existing public places and spaces as effectively and efficiently as possible, including green spaces for sport and recreation
- design our public places to be multi-functional in use, and adaptable in the future
- focus investment in areas of greatest need, such as areas of particularly high population density, or areas characterised by underinvestment
- create public places that are welcoming to all, with inclusive design and architecture
- ensure our public places and spaces are accessible for all people, applying universal design principles.

Placemaking plays an important role in creating high quality urban environments. It also supports our culture and identity, such as Auckland's unique Māori cultural identity, in our public places. We can also reflect and embed our unique local character in the built environment by, for example, incorporating and integrating built heritage and public art into existing and new spaces.

How this can be done

First, we need to shift our perception of what a public place or space ought to be.

Second, we need to adopt different approaches to the design of public places so they:

- can perform many functions at the same time, giving people flexibility in how they use them, and finding the right balance between the various functions of a space
- connect areas and residents to each other and to the public amenities they value.

Auckland is already starting to recognise the value of turning its public places to new and multiple uses. This needs to be accelerated.

While some parts of Auckland are well served with quality public places and spaces, others are not.

Investment must therefore be specifically targeted at:

- those areas that undergo significant growth and where population densities are increasing
- those parts of Auckland that are currently under-served and where it will make the most difference to quality of life.

Our efforts could focus on:

- restructuring streets and other public land into new public places and spaces that support housing intensification and centre development, and provide safe environments for the people who use them
- communities where real improvements in quality of life can be achieved, using place-based initiatives. These combine investment in public spaces, service centres and community facilities to achieve broader social, cultural, environmental and economic outcomes.

Implementing the Homes and Places outcome

Implementation partners

Private sector landlords, not for profit sector housing providers, the development sector, the construction industry, Auckland Council and central government all contribute to delivering Homes and Places across Auckland.

Private individuals, community housing providers, and central government are the main housing providers within Auckland.

Central and local government

Central government is a key contributor to the housing market in Auckland through a variety of functions:

- providing social housing - Housing New Zealand is the largest single residential landowner in Auckland and provides a range of support services to social housing tenants
- providing accommodation support for individuals
- government grants that enable community organisations to provide housing and related services
- policy settings and the legislative frameworks.

Central government has recently signalled its intent to change the legislative framework that provides for minimum quality standards for privately-owned rental properties.

Auckland Council and central government work together to deliver Homes and Places through:

- contributing funding that supports the provision of bulk infrastructure within Auckland, unlocking potential development
- delivering projects that unlock development opportunities.

Auckland Council facilitates the release of land for development through the Auckland Unitary Plan and other planning processes and consenting services.

Panuku Development Auckland[81] helps to rejuvenate parts of Auckland – from small projects that refresh a site or building, to major transformations of town centres or neighbourhoods.

Panuku Development Auckland coordinates with Auckland Council, Auckland Transport and Watercare to deliver many of these projects together with Housing New Zealand, the New Zealand Transport Agency, and other Crown agencies.

The Auckland Design Manual (ADM)[82] developed by Auckland Council provides guidance on the design concept and development phase in accordance with the Auckland Unitary Plan[83] rules. The ADM's Universal Design Tool[84] and guidance on Māori Design[85] are examples of more specific guidance that can apply to both private and public places.

Community housing sector

Community housing providers play a fundamental role in supporting people to be well-housed and live in homes that are habitable, affordable, accessible, secure and culturally appropriate. Community Housing Aotearoa[86] is New Zealand's umbrella organisation that supports the community housing sector and providers to achieve these goals.

Māori housing sector

There are a number of actors across government and the community housing sector that support and enable Māori housing aspirations. Some of these include:

- the Māori Housing Network[87]: this network is led by central government agency Te Puni Kōkiri and provides information, advice and practical support to build capability and improve housing outcomes for Māori
- Te Matapih[88]: an independent organisation that advocates for Māori housing interests and assists policy development at central and local government levels
- Community Housing Aotearoa: supports other Māori housing providers in partnership with Te Matapihi.

Auckland Council will develop an implementation approach for this outcome working alongside our key partners and stakeholders. This will be built on existing programmes and ensure all new elements introduced in the Auckland Plan 2050 are planned for.

Mechanisms used to work together

The Housing First Auckland partnership applies a multi-agency approach to provide ongoing wrap-around support services to help people stay in their homes and to end homelessness in Auckland. Find out more on the Housing First website.[89]

Central government has signalled its intention to accelerate the construction of housing and development at scale in Auckland through a range of mechanisms.

Some of these mechanisms include:

- working with iwi, councils and the private sector to establish the KiwiBuild home building programme and major greenfield and urban development regeneration projects
- over $2 billion funding for KiwiBuild[90] to deliver 100,000 homes for first-home buyers, half of them in Auckland
- establishing an urban development agency to support KiwiBuild and to allow such large-scale projects to be built more quickly
- identifying vacant or under-utilised Crown-owned land that is suitable and available for housing development and facilitating the construction of dwellings to increase housing supply in collaboration with the iwi/hapū of Tāmaki Makaurau and private developers.

In the long-term, Auckland Council needs to find new ways of funding infrastructure through existing funding tools or potentially coming up with new mechanisms.

The Auckland Housing Programme is a joint initiative between Housing New Zealand and its subsidiary company, HLC Ltd, to deliver small, medium and large-scale housing developments in Auckland over the next 10 years. Read more about this initiative on the Housing New Zealand website.[91]

Auckland Council offers tailored services to meet consenting needs for large-scale and complex developments. As an alternative to the standard online consenting service, Auckland Council partners with developers through the qualified partner service[92] (applies to standardised, repeat new builds or selected customers with approved assurance plans) and premium service[93] (for large-scale development, infrastructure projects or social infrastructure projects including emergency housing, iwi developments and Māori housing developments).

Supporting strategies and plans

Auckland Unitary Plan

The Auckland Unitary Plan[94] helps achieve the direction of the Auckland Plan 2050 by setting the rules for:

- what can be built and where
- how to create a higher quality and more compact Auckland
- how to provide for rural activities
- how to mitigate environmental impacts.

How to get involved

- If you're interested in providing community housing visit the Housing assessment website[95]
- to find out more about the building and consents process and other building considerations see Building and consents.[96]

Supporting information

Central government sets the framework for ensuring that Auckland's land for development meets demand, through the National Policy Statement on Urban Development Capacity. Read more on the Ministry for the Environment website.[97]

Auckland's Mayor set up a taskforce early in 2017 to identify barriers and constraints to building new homes in Auckland at a speed and scale needed to meet the demand caused by population growth. Read the Mayoral Housing Taskforce Report.[98]

Supporting information

Homelessness in Auckland

One of the worst impacts of the Auckland housing crisis has been the significant increase in homelessness. This includes people sleeping on the streets and in cars but can also be described in other ways.

Stats NZ defines the state of homelessness as a living situation where people, with no other options to acquire safe and secure housing, are:

- without shelter – for example, sleeping rough or living in a car
- living in temporary or emergency accommodation such as night shelters, refuges, hotels/motels, motor camp sites and boarding houses, or sharing accommodation temporarily with others
- living in uninhabitable housing, such as dilapidated dwellings or those not intended for human habitation, like garages.

Read more about the New Zealand definition of homelessness on the Stats NZ website.[99]

Homelessness is complex and results from multiple factors.

A key driver is a lack of social and affordable housing. The most at-risk groups include those with mental health issues or alcohol and drug addictions, and those experiencing family violence.

Homelessness is increasingly affecting groups who have not traditionally been at risk.

This includes low-income households (both working and beneficiaries), sole parent households, and young people (in particular gay, lesbian, bisexual, transgender and intersex - GLBTI).

The rate of homelessness in Auckland is likely to remain high – and possibly get worse – unless there is a systematic and coordinated effort from all partners and stakeholders to end it.

Initiatives to address this may include increasing the social housing stock, reviewing the eligibility criteria for social housing, and enhancing security of tenure.

Numbers of homeless in Auckland

Analysis of 2013 Census data by the University of Otago[100] found 20,296 Aucklanders met the definition of homeless:

- 771 people without shelter
- 3175 people in temporary accommodation
- 16,350 sharing temporarily
- an additional unknown number of people living in uninhabitable dwellings.

The number of homeless people in Auckland is likely to have been understated because of:

- the unknown number of people living in uninhabitable dwellings
- the complexities involved in reaching the homeless
- a reluctance by households to reveal their true circumstances.

Homelessness in Auckland had increased by 35 per cent between the 2006 and 2013 censuses. The study also found that nationally, 52 per cent of homeless adults were working, studying or both.

Read the Severe housing deprivation in Aotearoa/New Zealand 2001-2013[101] on the Healthy Housing website.

Healthy homes

Housing is one of the key modifiable determinants of health. Inadequate housing can have far-reaching consequences for health outcomes.

A healthy home is a core foundation for positive health and wellbeing.

A healthy home can be defined as one that is:

- of good quality and habitable
- well insulated, ventilated and fitted with good, reliable heating
- not overcrowded
- pest and contaminant free
- safe (potential hazards are minimised and/or isolated and/or eliminated)
- clean and maintained[102]

Unhealthy homes are often cold, damp and mouldy due to inadequate insulation, heating and ventilation.

People who live in unhealthy homes have increased risk of contracting a range of serious and avoidable illnesses such as meningitis, rheumatic fever and pneumonia.

Unhealthy homes also heighten the risk of physical injury and can lead to depression and other forms of mental illness.

These health risks are often exacerbated by the fact that people who live in unhealthy homes are more likely to have to make trade-offs between housing costs and decent food, heating, health services and other necessities of life.

Those who are affected, including children, are often hospitalised and treated but they return home to the same conditions that caused the illness. The most vulnerable people, particularly children and older people, are among those who experience the worst effects of inadequate housing.

Unhealthy homes and health

Poor quality housing is a significant driver of hospitalisation among children.[103]

Poor quality housing, particularly cold and damp houses, is linked to the following diseases:

- asthma
- respiratory infections
- rheumatic fever
- cardiovascular disease
- respiratory illnesses and infections, including asthma, bronchiolitis, pneumonia, bronchiectasis, tuberculosis.[104]

Doctors report that illnesses related to poor quality housing are increasing in number and severity, with serious long-term consequences and disability. The rate of bronchiectasis in children (an irreversible, life-threatening lung disease usually only seen in adults or in developing countries) has tripled in 15 years.[105]

Hospitalisation rates for bronchiolitis have nearly doubled from 2000 to 2015, over 2000 per 100,000 children.[106]

Over 400 per 100,000 children were hospitalised in 2015 for asthma.[107]

Sub-standard, high-cost housing at least doubles the risk of admittance to hospital for pneumonia, and is the most important risk factor for rheumatic fever and meningococcal disease.[108]

Māori and Pacific children are at significantly greater risk of hospitalisation and death from preventable housing related disease. Rates of hospitalisation for Māori aged 15-29 with bronchiectasis were 14.5 times higher than for non-Māori, Pacific, Asian (MPA) peoples.

Overall, Pacific peoples were 8 times more likely to be hospitalised than non-MPA and Māori were 4.4 times more likely to be hospitalised.[109]

Poverty is one of the most significant determinants of poor health outcomes, and poor housing is a key component of poverty. Auckland's low-income suburbs have the worst rates of preventable, poverty-related childhood diseases in Auckland.

There is no simple means of ensuring all Aucklanders have access to healthy homes.

Solutions will involve increasing supply, and building to high standards, increasing the social housing stock, as well as improving the built quality of existing dwellings (particularly rental properties).

Household crowding

A key impact of Auckland's housing crisis is household crowding.

What is considered to be a crowded household can vary across Aucklanders, and there is no official statistic or index of household crowding in New Zealand.[110]

Stats NZ reports that the Canadian National Occupancy Standard provides the best fit to measure crowding for the New Zealand context, although it is acknowledged that it may not fully align with all social and cultural norms.

This measure states that crowding occurs where a household needs one or more additional bedrooms to meet the following conditions:

- no more than two people per bedroom
- children aged between five and 18 of different genders should not share a bedroom
- single adults aged 18 years or over should have their own bedroom.

Using this definition, Goodyear and Fabian[111][112] found that at the 2013 Census:

- 8 per cent of Auckland households were considered crowded – over 36,500 households
- 15 per cent of Aucklanders lived in crowded households – more than 203,000 Aucklanders
- Auckland accounted for almost half of all crowded households in New Zealand

Figure 22- House crowding in Auckland by ethnic group.

- crowding rates varied significantly by ethnic group:
  - o 45 per cent of Pacific peoples lived in crowded households
  - o 25 per cent of Māori
  - o 19 per cent of Asians
  - o 5 per cent of Europeans
- by local board area the highest rates of household crowding were in:
  - o Māngere-Ōtāhuhu – 42 per cent of residents lived in a crowded household
  - o Ōtara-Papatoetoe – 39 per cent of residents lived in a crowded household.

Between 1991 and 2013, crowding rates fell considerably in most parts of New Zealand, but remained at around the same level in Auckland.

There is no official data for the years since 2013. However, given the increase in housing costs and the continued shortfall in housing supply, it is reasonable to expect that household crowding in Auckland has worsened since the 2013 Census.

It is important to note that levels of household crowding are likely to be understated as people tend to feel uneasy about fully disclosing their living arrangement in an official capacity such as the census. Similarly, these statistics will not reflect instances of 'functional crowding' where household members sleep, live and eat together in a single room to cut down on heating costs.

45%	25%	19%	5%
Pacific people lived in crowded households	Māori people lived in crowded households	Asian people lived in crowded households	Europeans lived in crowded households
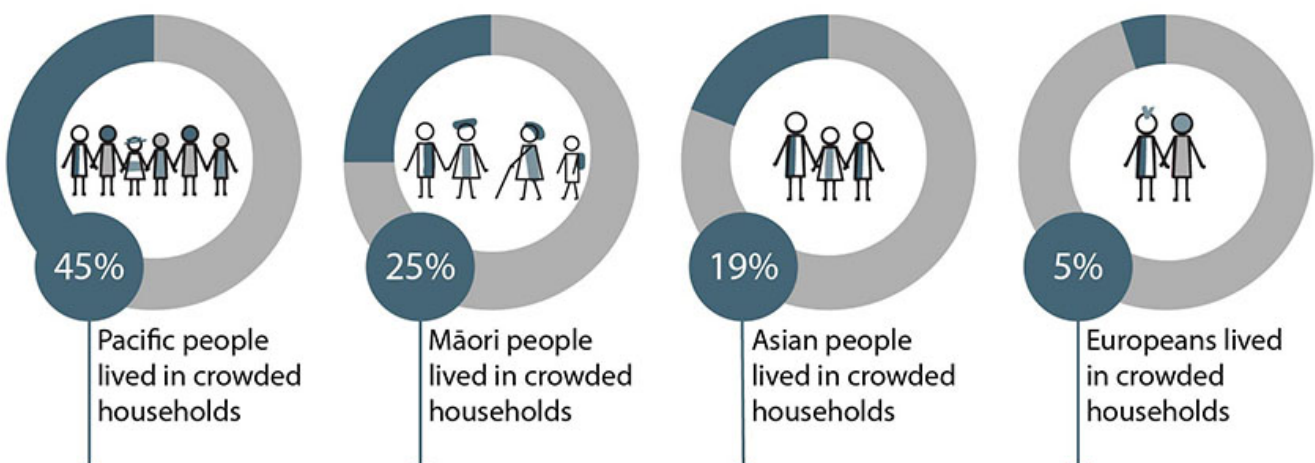
The link between household crowding and negative health consequences is well documented.[113] For example, there is a well-established association between overcrowding and avoidable diseases such as rheumatic fever and respiratory illnesses.

Household crowding can also affect mental and emotional wellbeing. Living in close quarters, without adequate privacy or enough space for all, can place significant strain on the relationship between household occupants.

As with many of the other problems associated with the housing crisis, reducing household crowding requires acceleration in the construction of affordable houses and new measures to enhance the security of tenure. Increasing Auckland's social housing stock will make a significant difference as well.

The housing continuum

The Auckland Plan 2050 has a strong focus on ensuring that Aucklanders have security of tenure, as renting is becoming a long-term, possibly permanent, reality for many households. Not every Aucklander may be able to, or will choose to, own their own home.

The diagram below shows the continuum, or range, of housing tenure models from emergency housing through to private home ownership.

It helps us understand the levels of housing assistance that different households may need.

The diagram also shows the importance of using a combination of central and local government policy levers to deliver optimal housing outcomes, for example:

- ending homelessness
- delivering mixed tenure housing.

Emergency housing

Emergency housing is temporary and includes overnight accommodation and short term stays of around 12 weeks. This type of housing responds to an urgent and immediate need for accommodation. The affected household either has nowhere else to go or is unable to remain in its usual residence. This type of accommodation requires high levels of subsidy.

Social housing

Social housing is subsidised rental accommodation. It is usually funded by the Income Related Rent Subsidy and provided by the government or community housing providers, with support services as needed.

Assisted rental housing

Assisted rental housing is rental housing usually made available below market rent levels and usually part funded by the government through the accommodation supplement. Assisted ownership includes schemes which provide household income-related pathways to home ownership such as rent to buy, affordable equity and shared ownership. Schemes are typically provided by community housing providers with criteria-based eligibility. The role of assisted home ownership has increased recently and this is likely to continue.

Private ownership and private rental

Private ownership and private rental are tenures under the free market with affordability determined by market conditions. Some eligible households may be able to access an accommodation supplement from the government to lower the burden of housing costs.

Emergency housing	Social housing	Assisted rental	Assisted ownership	Private rental	Private Ownership

Increasing support → Decreasing support

Mixed tenure housing

The term 'mixed tenure housing' generally refers to the provision of housing options at a variety of costs and tenures in developments. For example, developments which include social and affordable housing alongside housing offered at full market price.

This can be done in several ways.

Legislation can require developers to ensure that a certain proportion of completed dwellings in a subdivision or multi-unit development is sold at a price that is accepted (often specified) as being affordable. Other delivery mechanisms include long-term renting options, rent-to-buy options and social housing.[114]

Mixed tenure housing models also seek to integrate communities.

This can involve developing whole neighbourhoods in which some streets are intended for owner occupiers, and others for social housing, or adopting a 'pepper-potting' approach in which social housing is located amongst privately-owned housing.

Mixed tenure communities reduce spatial inequality and bring about wider benefits such as de-stigmatisation of an area, social cohesion and better health outcomes. These have positive multiplier effects that:

- help enhance the sense of belonging
- induce positive, participatory actions
- improve access and connectivity
- create opportunities for sustained prosperity.

In Auckland, a mixed tenure housing model is being used by the Auckland Housing Programme, a joint venture between Housing New Zealand and its subsidiary company HLC Ltd. Visit the Housing New Zealand website[115] for more information about the housing programme.

The programme is designed to deliver small, medium and large-scale housing developments in Auckland.

It involves increasing the number of new and affordable dwellings in areas of existing Housing New Zealand stock, by replacing current stock.

New dwellings are sold on the open market, some at a price deemed affordable, and the remainder are retained by Housing New Zealand for social housing purposes.

The programme is seeking to build around 11,000 additional new social housing homes and just over 12,600 new affordable and market homes by 2026.

The mixed tenure housing model will remain an important consideration for the life of the Auckland Plan 2050 because its aim is not just to increase the supply of new dwellings, but to optimise housing outcomes for all Aucklanders.

Renting in Auckland

The current rental situation

Secure, healthy and affordable housing is fundamental to the health and wellbeing of Aucklanders.

An adequate supply of quality, affordable housing located near jobs and transport links is a core foundation for strong communities, society and the economy.

Auckland's housing landscape has changed in the last 10 years, and more so in the past five years.

Auckland's housing challenges are escalating. Home ownership rates are decreasing and finding affordable housing is moving beyond the reach of many Aucklanders. This has resulted in lengthy travel times to employment, and increased financial stress, overcrowding and homelessness.

Business productivity, competitiveness, economic stability and social cohesion in our communities are all affected by a lack of affordable housing.

With a growing pool of potential tenants, landlords can be selective about who they rent to and what price they charge. This can disadvantage some potential renters already struggling to find secure accommodation.

Renting is no longer a short-term step before home ownership. It is becoming a long-term housing solution for many, and the number of lifelong renters is likely to increase.

Long-term renters increasingly include professionals, higher income earners and families who are unable to transition into home ownership. This will have a significant, and as yet unknown, impact on social and economic outcomes.

Traditionally, financial security in New Zealand has been largely predicated on home ownership.

Lifelong renters do not have the same opportunities, through property, to create wealth for their retirement or for the next generation.

A shortage of rental properties that are suitable for people living with physical disabilities, or that can be modified to suit their needs, such as handrails, level access showers and wider doorways, and the often prohibitive cost of private rentals for people on fixed incomes, will result in higher levels of stress for many older Aucklanders. This will place greater pressure on government for support.

Compared to other countries, renters have less protection and security. Renting costs can be high, and the quality of housing is often poor.

The scope for renters to create a home of their own (by making minor alterations, redecorating, hanging pictures or even having a pet) is also usually more restricted.

Regulation

The New Zealand Residential Tenancies Act 1986 (RTA)[116] is the principal act relating to residential tenancies. It defines the rights and responsibilities of landlords and tenants of residential properties.

Tenancy disputes and mediation are considered by the Tenancy Tribunal, which has legal powers.

There are two main types of residential tenancy in New Zealand:

- a periodic tenancy - this continues until either landlord or tenant gives written notice to end it
- a fixed term tenancy – this lasts for a predefined period of time.

The rental market and the associated policy settings have not caught up with the changes in Auckland's housing landscape resulting in issues of affordability, security of tenure and housing quality.

Affordability

Households in Auckland spend more of their income on housing than elsewhere in New Zealand.[117]

Rents are largely unregulated, and high demand means tenants can face regular rent increases with little recourse. The only restriction is that under the RTA, rents can only be increased once every six months.

High housing costs can mean there is little left over to meet basic needs such as food and heating, particularly for lower-income renters.

The negative trade-offs can include:

- frequent moves to find cheaper accommodation
- taking lodgers or overcrowding
- substantial commute times.

Rates of overcrowding are estimated to be higher in rental accommodation than in owner-occupied housing. There are frequent reports of multiple people sharing a home that was not designed to accommodate large numbers of occupants, particularly in the southern parts of Auckland.

Read more in the Housing Continuum in this section.

Worsening housing affordability also creates pressure for government finances in the form of increased payments to support low income households meet their housing costs.

Security of tenure

By international standards, security of tenure provided by the RTA is weak, short term tenancies are the norm and tenants can be asked to leave at short notice, and for no stated reason. Under a periodic tenancy, landlords must give at least 90 days written notice, or 42 days if the property is being sold or a member of the landlord's family is going to live there. Tenants must give at least 21 days written notice.

Germany, for example, has a well-established rental sector with high levels of legislative protection for tenants, and gives tenants the ability to decorate their home. Indefinite tenancies are the norm and there are few reasons a tenancy can be terminated.

Transience is more common for Auckland renters, affecting their ability to be part of a cohesive community.

At the time of the 2013 Census, 35 per cent of renters had lived in their house for less than one year, compared with 14 per cent who owned their own home.[118]

Seniors and school age children are particularly affected by transience in the rental market. Transience increases the frequency of school moves which impacts on educational attainment.

The 2013 Census recorded 44 per cent (more than 120,000) of Auckland's children living in rental housing. Just over a quarter (28 per cent) of 5 to 9 year olds, and 25 per cent of 10 to 14 year olds in Auckland rented households had moved at least once in the past year.

By contrast, only 12 per cent of 5 to 9 year old children in owner-occupied households, and 10 per cent of 10 to 14 year olds, had moved during the previous year.[119]

For older Aucklanders, moving to new areas without connections can lead to isolation and security concerns.

Housing quality

Poor and deteriorating housing quality is a pandemic issue in New Zealand, particularly for private rental housing.

Tenants are more likely to experience poor quality housing than owner-occupiers.

A comprehensive study into housing quality in New Zealand undertaken in 2015 found that almost half (49 per cent) of all houses surveyed showed some visible signs of mould, and that there was a higher prevalence among the properties that were rented (56 per cent) compared to owner-occupied (44 per cent).[120, 121, 122]

Few minimum quality standards are required under the RTA. The Act introduced new obligations for landlords and tenants, including provisions to make working smoke alarms in all rental properties compulsory, and requiring minimum standards of insulation in rental properties by 2019.

There is an under-supply of good quality rental stock in Auckland, and it often comes at a premium price.

Lower-income renters, facing greater restrictions on their ability to pay, are most affected by quality issues and trade off quality for affordable accommodation.

Housing quality remains a key priority.

Research such as the BRANZ 2015 Housing Condition Survey[123] articulates the link between a warm, dry home and positive health outcomes, particularly for children.

Transport and Access

Aucklanders will be able to get where they want to go, more easily, safely and sustainably.

DIRECTION	FOCUS AREA
Direction 1	**Focus Area 1**
Better connect people, places, goods and services	Make better use of existing transport networks
Direction 2	**Focus Area 2**
Increase genuine travel choices for a healthy, vibrant and equitable Auckland	Target new transport investment to the most significant challenges
Direction 3	**Focus Area 3**
Maximise safety and environmental protection	Maximise the benefits from transport technology
	Focus Area 4
	Make walking, cycling and public transport preferred choices for many more Aucklanders
	Focus Area 5
	Better integrate land-use and transport
	Focus Area 6
	Move to a safe transport network, free from death and serious injury
	Focus Area 7
	Develop a sustainable and resilient transport system

Transport and Access explained

Why Transport and Access is important

To lead successful and enjoyable lives, it is vital that people can easily, safely and sustainably reach the things that matter most to them, such as work, school, friends, recreation and healthcare.

To achieve this we need efficient ways for people, goods and services to move within and across Auckland, throughout New Zealand and across the world.

For Auckland to be a truly accessible city we also need to make sure that people of all ages and abilities, including people with reduced mobility levels, can go about their daily lives and get from one place to another easily, affordably and safely.

This means tailoring the way infrastructure and services are provided so they meet the wide range of Aucklanders' needs.

Find out more by visiting the Universal Design website[124] and the Office for Disability issues website.[125]

Transport and Access in the past

Our transport system is key to making Auckland more accessible, and for us all to benefit from growth. While great improvements have been made over the past 20 years, historic under-investment, combined with rapid population growth, means we still face big challenges.

Past decisions shaped Auckland into a relatively low-density city where private vehicles were the only viable option for almost all trips.

Auckland's continued population growth and a concentration of job growth in a few key locations have put this car-focused transport system under significant strain. Congestion has led to delays and highly variable travel times that adds cost and undermines our quality of life. Reducing the impact of congestion on people's lives is a key component of improving accessibility. However, there is now widespread recognition that we cannot simply build our way out of congestion. This means making progress requires a combination of:

- additional investment
- rebalancing effort to other forms of mobility that can avoid congestion
- focusing on changing our travel behaviour.

A big increase in transport investment over the last two decades has mostly completed the motorway network and started to develop a quality public transport system. That makes it possible for people to avoid congestion when they travel by bus, train or ferry. Auckland's rapid transit network barely existed a decade ago, but investment in the rail network and construction of the Northern Busway mean this network now carries over 26 million passengers a year, with use continuing to grow strongly.

Over the last few years there has also been increased investment in cycle ways. Read about how we're making Auckland more cycle friendly.

In some areas there have been improvements for pedestrians as well, such as the Te Ara Mua Future Streets[126] project in Māngere, ranging from how traffic is managed, to better paving, lighting and safety.

However, the legacy of past decisions is still felt today. Many projects that were first planned decades ago, such as the City Rail Link, are only now being built. This makes it difficult to address today's problems, let alone prepare ourselves for future growth. Read more on the City Rail Link website.[127]

As a consequence, people living in large parts of Auckland still don't have many choices in the way they travel. Major chokepoints and bottlenecks also remain on many main roads.

How we can improve Transport and Access

An integrated strategy

Improving Transport and Access in Auckland requires an integrated approach and is a partnership between Auckland Council and central government. The Auckland Transport Alignment Project (ATAP) developed a long-term strategic approach to address Auckland's transport challenges.

This work emphasised the need to focus on:

- getting much more out of existing infrastructure
- maximising new opportunities to influence travel demand
- ensuring investment is targeted to the greatest challenges.

For more information visit the Auckland Transport Alignment Project website.[128.]

Increased funding

ATAP confirms a major increase to transport funding in Auckland and enables a $28 billion ten year transport programme. This programme will make major improvements to Transport and Access, and help to support Auckland's growth.

ATAP also identifies key priorities for further investment and signals the need for ongoing funding and financing work, including exploring new funding tools. This recognises that traditional funding sources such as rates, fuel excise duty and road-user charges are not enough to fully meet the needs of such a fast growing area.

Alongside this ongoing investigation into increasing transport funding, we also need to ensure:

- funding is prioritised by need rather than transport mode
- the cost of projects is allocated fairly and consistently between central government, Auckland Council and the private sector

Adapting to an uncertain future

We can predict some changes to the transport system, but the further into the future we look, the more unknowns there are.

What we can confidently expect is that physical travel will be very different. The things we travel in or on may be very different than now, and the networks or infrastructure that support these ways of travelling may also be very different.

This change may be gradual, but is highly likely. The plans we make and the transport infrastructure we build must be as adaptable to the future as possible. Read more about Transport and Access in Auckland, 2050.

How we track progress

We will track progress against a set of measures.

The measures for this outcome are:

- access to jobs
- delays from congestion
- use of public transport, walking and cycling
- household transport costs
- transport related deaths and injuries

How we can implement the plan

Aucklanders have a shared responsibility for implementing the plan. Read more about implementation later in this section.

Auckland Transport Alignment Project Strategic Approach
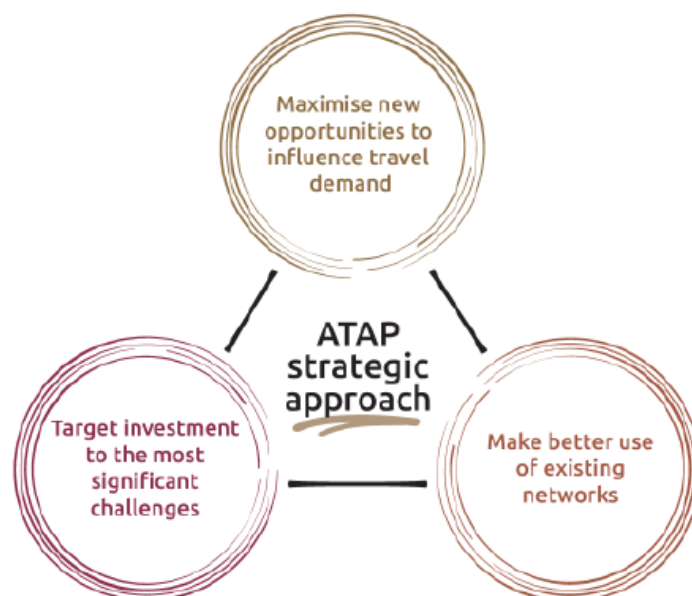
Better connect people, places, goods and services

Auckland's size and scale supports many economic, cultural, educational and recreational opportunities. These will increase as Auckland grows, but will only be realised if everyone can easily get to them when they need to.

Improving access depends on the entire transport system being managed and developed as an integrated whole, across the different networks (arterial roads, light and heavy rail, motorways, local streets, ferries) and different modes (private vehicle, public transport, walking and cycling).

See Figure 23 - Auckland's future strategic transport network

The system must also cater for the different places where people live and work, from high density urban centres to local suburbs and rural areas.

Making it easier and more affordable for people to get to work, school or training is particularly important for increasing economic productivity and everyone's prosperity.

A transport system that offers reasonable commuting times to a wide range of jobs has multiple benefits:

- it enhances the ability of employers to find suitable workers
- it boosts job satisfaction and business productivity
- it reduces the vulnerability of workers to long-term unemployment in the event of (unforeseen) employment change or job loss.

The efficient movement of goods and services is also essential to prosperity. The Ports of Auckland and Auckland Airport are New Zealand's main international gateways, so Auckland has a significant role in the distribution of freight within Auckland, to neighbouring regions as well as to the rest of New Zealand.

While major upgrades to State Highway 1 to the north and south of Auckland are planned or underway, these improvements may have to be complemented by future upgrades to the rail network to better connect the upper North Island.

Read about Passenger rail transport between Auckland, Hamilton and Tauranga later in this section

The vast bulk of freight and commercial travel in Auckland is by medium and small size vehicles distributing goods to retailers or to homes, and by service workers such as plumbers or electricians. Travel delays and uncertainty about trip times from congestion create real and substantial costs to businesses. This increases costs for everyone.

An integrated approach will improve our ability to ensure consistent service provision, an effective network and affordable travel choices.

Figure 23 - Auckland's future strategic transport network

Warkworth

Orewa

Albany

Takapuna

Kumeu

Devonport

Westgate

City Centre

Newmarket

Swanson

Botany

Sylvia Park

Henderson

New Lynn

Onehunga

Manukau

Airport

Papakura

**Auckland's future
strategic transport
network**

Strategic public transport
network

Strategic road network

Primary arterial road

⦿ Major centre

Pukekohe

Direction 2:
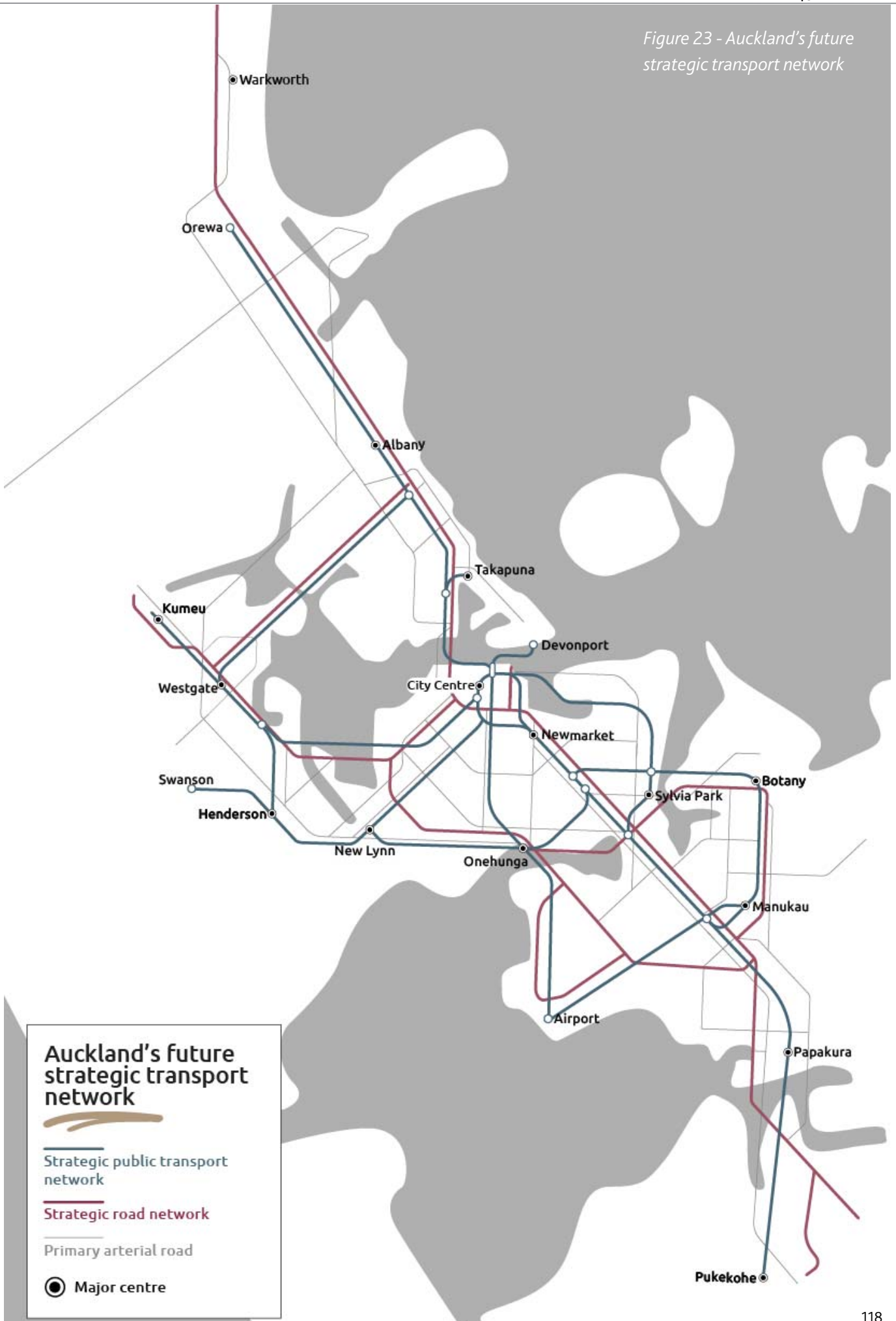
Increase genuine travel choices for a healthy, vibrant and equitable Auckland

Many of us lack reliable, safe and affordable choices about how we travel. This means we often depend on using private vehicles for most trips.

A lack of travel choice is often a particular problem for lower income households and in rural areas. Transport costs can be a large and unaffordable part of the household budget, making financial pressures worse.

Giving people more travel choices enables them to travel in a way that best suits their particular needs.

See Figure 24 - Graph of the morning peak travel into the city centre from 2001 to 2016 projected for 2046

A lack of choice also means that travel is often long and unreliable, with Aucklanders unable to avoid congestion that wastes precious time and reduces life quality.

By developing Auckland's rapid transit network and separating public transport from general traffic, as described on The Rapid Transit Network page, we can reduce the impact of congestion on people's lives and provide more certainty about how long a trip will take.

As Auckland grows it is essential that more people walk, cycle or travel by public transport. This will reduce pressure on our roads and free up room for freight and commercial trips, which are reliant on road travel and make major contributions to Auckland's economic prosperity. More walking and cycling will also have significant health benefits through increased physical activity. See more on the Healthy Auckland website.[129]

People-oriented streets are fundamental to the quality of experiences people have in our urban areas. We must therefore also transform how we design the transport network, so it's about people and places, not just moving vehicles.

Streets are used for a number of purposes, and should be attractive, suitable and enjoyable public spaces for residents, workers and visitors, particularly when travelling by foot.

Achieving this will require a change in the way we design, manage and operate our streets and transport networks.

Our streets need to better reflect the role they play in making up a large part of our public space and in shaping Auckland's character and the way we live.

At the same time, it's important to acknowledge that moving a large numbers of people, goods and services along some key corridors is important for Auckland's economic success. This means a good balance must be struck between transport and place functions.

Allocating space for vehicles, cyclists, pedestrians, and amenities such as street furniture and trees, is a challenge. This challenge will increase as our population grows.

Figure 24 - Graph of the morning peak travel into the city centre from 2001 to 2016 projected for 2046. Source: Auckland Transport

Morning peak travel into city centre

2001 - 2016 (2046 Projected)

Year	Private motor traffic	Walking and cycling	Public Transport
2001	60%	8%	32%
2006	53%	7%	39%
2011	51%	7%	42%
2016	48%	7%	45%
2046	27%	19%	54%
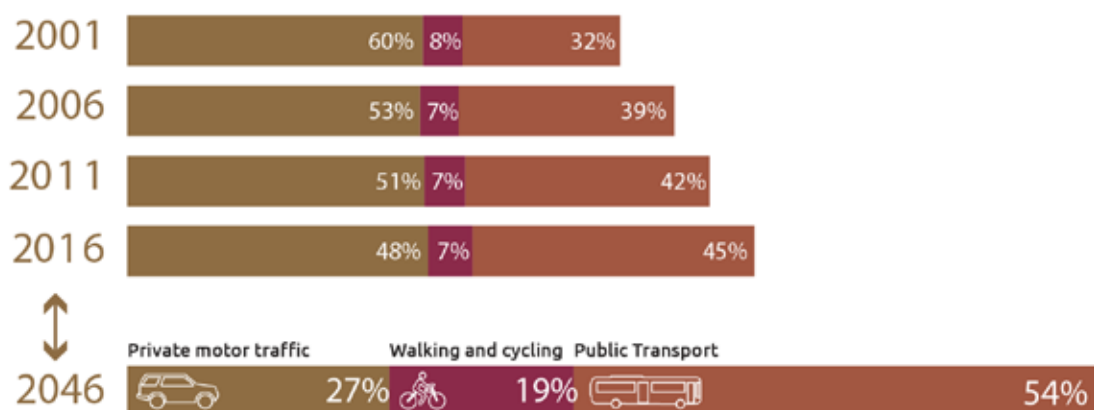
Maximise safety and environmental protection

Our transport system creates unacceptable levels of harm to people and the environment.

Progress has been made in some areas, particularly through cleaner and safer vehicle technology, but much more needs to be done.

There has been a noticeable annual increase in traffic-related deaths and serious injuries since 2012 after many decades of decline.

Reversing this trend requires new approaches to safety. We should be guided by the 'Vision Zero' movement, which aims to eliminate transport-related deaths and serious injuries.

This approach accepts that people make mistakes, and seeks to minimise the harm from any mistakes.

Find out more on the Vision Zero Network website.[130]

See Figure 25 - Graph of the umber of rod deaths and serious injuries in Auckland from 1981 to 2017

In addition, our approach to transport safety needs to be in line with health and safety legislation which gives people the highest level of protection against harm.

Priorities are to:

- improve the safety for those walking, cycling or riding motorcycles
- address safety issues for people crossing roads and railways.
- improve personal safety and security while travelling.

Overall, to make progress we need to give safety a higher priority in our decision-making than it has at the moment.

We must also do more to minimise the harmful environmental and health impacts of the transport system. It is therefore fundamental that the use of fossil fuels is reduced, and harmful pollutants are prevented from entering Auckland's waterways and atmosphere.

Pollutants and particulate emissions from vehicles and road dust reduce air quality and harm people's health, particularly those who have fragile respiratory systems or who live close to busy roads.

Petrol and diesel vehicles are the largest contributors to Auckland's emissions, which means transport is critical to reducing Auckland's overall greenhouse gas emissions. Making substantial progress on reducing Auckland's greenhouse gas emissions from transport will require a major reduction in the use of fossil fuels.

Figure 25 - Graph of the umber of rod deaths and serious injuries in Auckland from 1981 to 2017, the statistics are a 5 year average from 1981 to 2011. Source: NZTA

Road deaths and serious injuries
in Auckland 1981 - 2017   (5 year average until 2011)

Road deaths	Period	Reported serious injuries
144.6	1981 - 1985	1176.4
169.2	1986 - 1990	1277.2
105.8	1991 - 1995	559.6
89.4	1996 - 2000	559.6
74.8	2001 - 2005	546.6
62	2006 - 2010	509.4
51	2011	403
41	2012	380
48	2013	437
36	2014	447
52	2015	567
46	2016	613
64	2017	749

Road deaths
Reported serious injuries
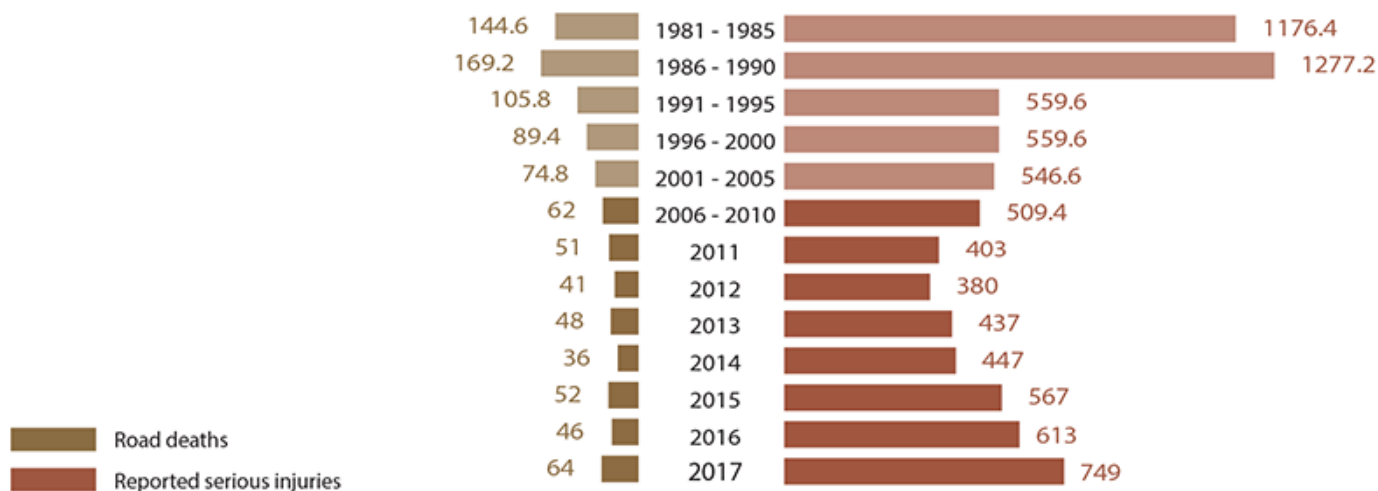
Paved and sealed surfaces that form part of the transport system, including roads, streets and parking lots, also have negative environmental impacts. Copper, zinc and sediment runoff pollutes waterways.

Impermeable surfaces prevent rainwater from recharging groundwater reserves, add to local flooding, and increase the amount of water that needs to be treated as stormwater.

Make better use of existing transport networks

Adding new roads to Auckland's transport network or widening existing ones is increasingly expensive and difficult. While investment in new infrastructure is required, existing transport corridors will need to accommodate much of the increase in travel as Auckland's population grows.

Making the best use of our existing roads, rail, footpaths, cycle ways, ferries, ports and airports is therefore essential. This will require:

- increased investment in small-scale improvements that help to optimise the existing transport network
- ongoing support for initiatives that best allocate street space between competing uses
- a coordinated approach to freight planning
- robust asset management processes to ensure we look after existing infrastructure.

Our transport system is not used as efficiently as it could be. Most infrastructure is under-utilised outside peak periods, or used inefficiently by vehicles carrying a single person. To improve this, we need to change the demand we put on the transport system.

This means better balancing our need to travel with the capacity of the transport system.

It is likely there will always be some level of congestion at times of peak demand. However to limit the increase in congestion and reduce the need for valuable land to be used as parking, we need to encourage:

- greater use of public transport, walking and cycling
- an increase in the number of people travelling in each vehicle
- taking non-essential trips outside peak times.

Travel planning, parking policies and more flexible working hours will help support these changes. However, to make a 'step change' improvement we need to provide a direct incentive to encourage people to travel more efficiently. This means moving away from the current 'flat-rate' way of charging people to use the transport system – through fuel taxes, road user charges etc. – to a system that varies the charge according to the time and location of each journey.

Before implementing this change, central government and Auckland Council will need to fully understand what effect this will have on people's travel costs so that issues of equity and affordability are understood and addressed.

How this can be done

We will make better use of existing networks by:

- identifying key routes for the movement of people, goods and services around Auckland and ensuring they operate as efficiently as possible
- increased investment into network optimisation initiatives that can deliver significant improvements through small-scale interventions, such as dynamic lanes and intersection upgrades
- progressively shifting to smarter transport pricing. Find out more at the Congestion Question[131] for information about using existing roads efficiently
- continuing to improve the way Auckland's existing transport assets are maintained, and renewed, including better co-ordinating planned maintenance with improvements. Find out more about Auckland Transport Asset management.[132]

Target new transport investment to the most significant challenges

While it's not possible to solely build our way out of our transport challenges, population growth means we need to continue to expand and upgrade our transport networks. An increase in funding from recent levels will be required to make genuine progress.

The very large scale of investment required across the whole network means that funding needs to be targeted, strategic and effective. Fixing all of Auckland's transport challenges at once is unaffordable, which means we need to focus first on the most severe challenges.

Joint strategic planning and integrated priority setting are essential for deciding when, where and how investment in new infrastructure should be made.

Working together, regionally and nationally, will help to ensure that new investments deliver best value for money, focus on the most appropriate travel mode and are made at the right time and the right scale.

The future is uncertain, so it's important to trial small-scale interventions and test decisions against a variety of futures.

The Development Strategy has detail on the key transport investments that will be needed to support development across Auckland.

How this can be done

Investment in new infrastructure and services must:

- upgrade and expand Auckland's strategic road, rail and other public transport networks to ensure they operate effectively and efficiently as the population grows
- improve Auckland's inter-regional and international road, rail, port and airport connections, as described on the Ports of Auckland page, which are critical to New Zealand's economic and social success
- use the most suitable travel mode to address the problem and ensure the different parts of our transport network operate as an integrated whole
- move to a "scenarios-based" approach to planning and decision-making, where strategies and major investments are assessed against a range of potential futures
- address disparities in access to opportunities, particularly where this exacerbates existing inequities of travel choice and cost. Find out more in The Equitable transport access across Auckland later in this section.

Maximise the benefits from transport technology

Transport technology is developing quickly and has the potential to help provide new and better travel options.

In the short-term, technology changes are likely to make real time travel information more readily available.

This will help us plan our travel more easily, help avoid the worst impacts of congestion, and help deliver improved and real time solutions (for example, dynamic traffic light sequencing, faster responses to incidents, or changing the allocation of street space between uses).

In the medium to longer-term, developing technologies like connected and autonomous vehicles (including public transport) especially when combined with ride-sharing, have the potential to fundamentally reshape the way transport is used and provided, blurring the boundaries between private and public transport.

These developments could create a number of benefits, including:

- increasing the number of vehicles that can travel on a road at the same time (particularly on motorways), lowering congestion and reducing the need for road widening
- reducing deaths and serious injuries from traffic incidents
- more efficient provision of public transport services
- new travel choices for everyone, regardless of age and ability, and to parts of Auckland difficult to efficiently serve with traditional public transport (e.g. rural areas).

There is also a risk that these technology advances could create negative effects, particularly if they lead to large-scale growth in vehicle travel or poorer quality street environments. Ongoing monitoring and regulation may be required to minimise these risks.

While rapid technological progress is anticipated, it's hard to know which developments will be successful or when we will be able to use them.

Realising benefits from technology will require us to focus on trials, safety, enabling regulation and supporting infrastructure.

How this can be done

Efforts to maximise the benefits of transport technologies must:

- encourage innovation and support a 'fail fast' culture where a wide variety of new transport ideas can be tested, adapted, developed or discarded
- boost the use of big data and open data to improve travel information for Aucklanders, support better network management decisions, and provide effective demand management tools
- encourage the uptake of new technologies such as more intelligent network management, connected and autonomous vehicles, and vehicle sharing. Find out more about Auckland Transport Technology Strategy.[133]
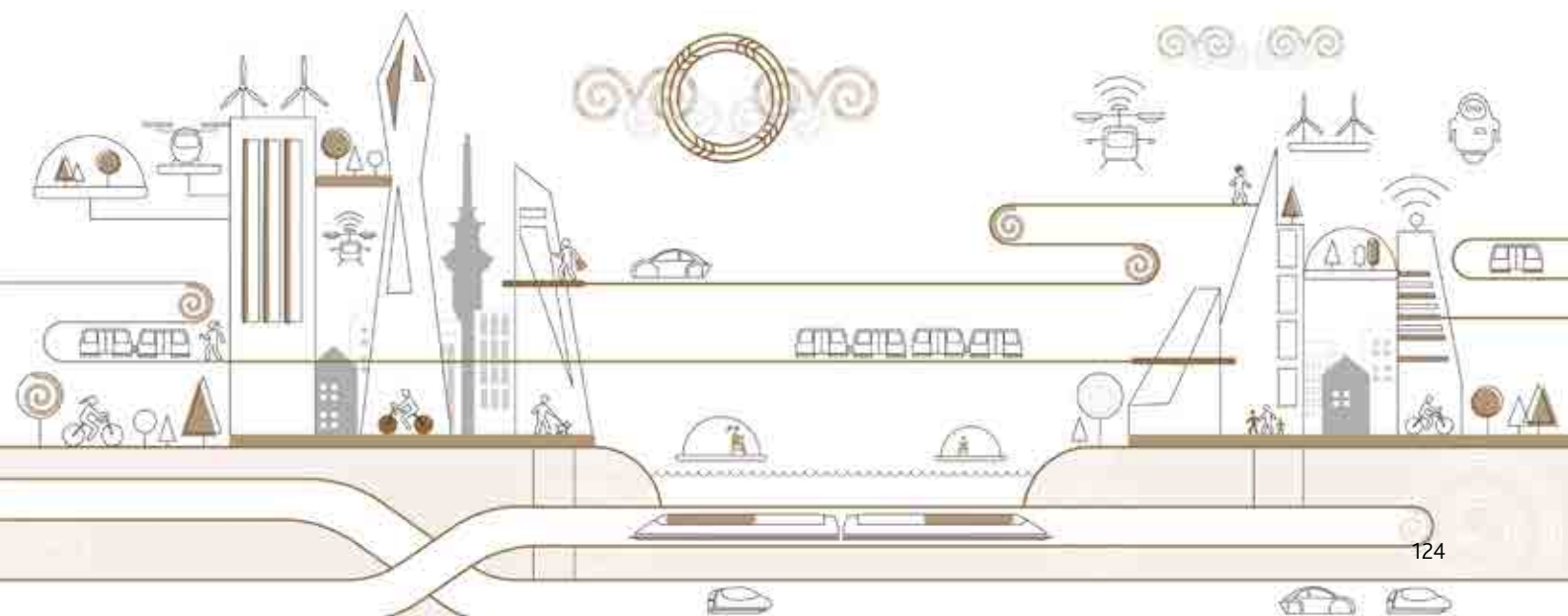
Make walking, cycling and public transport preferred choices for many more Aucklanders

More Aucklanders will walk, cycle and use public transport if it is accessible, efficient, affordable, reliable, safe, and attractive.

Substantial progress has been made in recent years. However, many parts of Auckland, particularly outer suburban and rural areas, still lack good access to these options.

To make public transport a preferred travel choice, we need an integrated system that consists of:

- a rapid transit network that provides fast, frequent and reliable travel between major parts of Auckland
- frequent, connector and local public transport services, often running in dedicated bus or transit lanes, that focus on more local trips and provide access to rapid transit
- walking, cycling and park and ride facilities that make it easy for people to access public transport.

Further detail on our approach to public transport is outlined in the Regional Public Transport Plan.[134]

While improvements are required across Auckland, a key focus of investment must remain on trips to busy locations like the city centre, metropolitan centres and other major employment areas (e.g. Auckland Airport). Large numbers of people travelling by car to these locations creates widespread congestion and requires a lot of valuable land to be used for parking, instead of more productive uses like homes and businesses.

The safe cycling network is still in the early stages of its development. There has recently been a significant increase in investment, generating unprecedented growth in the number of cyclists where improvements have been made. Read more on the Making Auckland more cycle friendly page.

It is essential that walking and cycling accounts for a greater share of short- and medium-distance trips as Auckland grows to reduce pressure on the road and public transport networks, and for their inherent health and environmental benefits. This will require sustained effort and investment into safe and attractive cycling routes across Auckland.

How this can be done

We will make walking, cycling and public transport attractive travel choices by:

- continuing to implement initiatives such as dedicated bus lanes[135] and cycle ways[136] that enable faster, safer and more reliable travel, particularly where a lot of people live and work and along highly congested routes
- designing and managing streets[137] in a way that prioritises walking, cycling and quality urban spaces, including speed management and safe crossing opportunities
- making frequent, efficient, affordable and reliable public transport more widely available
- improving access to public transport through walking and cycling upgrades, feeder services, and park and ride facilities[138]
- implementing the universal design approach and embedding accessibility into all parts of the journey, to make it easier for people of any age and ability to move around. For more information visit the Universal Design website.[139]

Auckland cycling priority areas

- Priority areas for cycling improvements
- Urban Cycleway Programme (to be completed)
- NZTA cycling projects (to be completed)
- Existing high quality cycling network
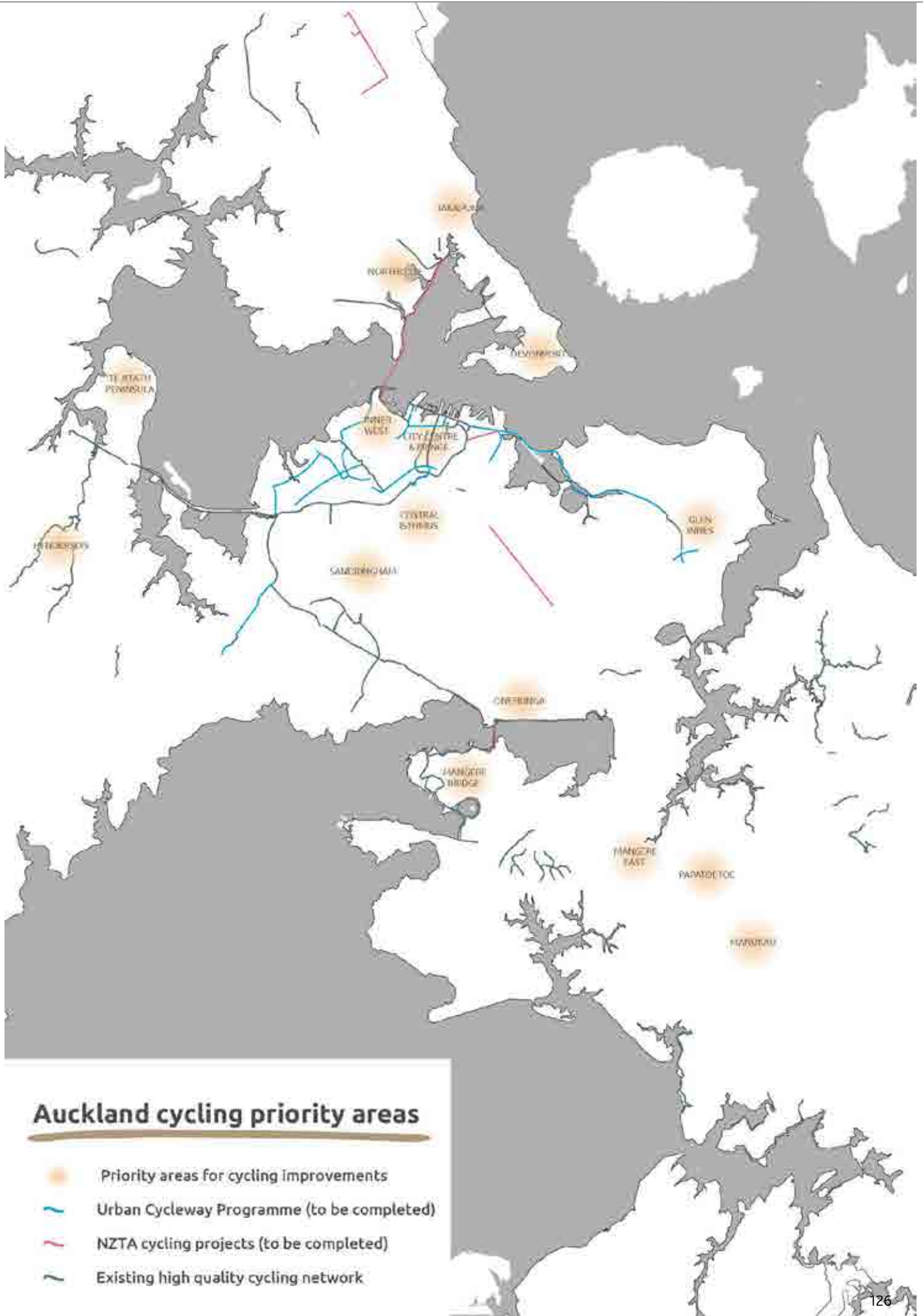
Better integrate land-use and transport

Transport infrastructure and services are important for enabling and supporting population and housing growth in new and existing urban areas, while the location of growth affects how well the transport system performs. Because transport and land use are so strongly connected, all decisions need to consider their impact on the other.

Inefficient land use patterns lead to longer trip lengths and travel times. To address this challenge, we need to encourage housing and employment growth to areas with better travel options.

Encouraging growth into areas with better travel choices will result in more use of public transport, walking and cycling. This will ease some of the pressure growth places on our transport system.

Integrating land use and transport is particularly important for rapid transit. The speed and reliability of rapid transit improves the accessibility of an area, making it more attractive for redevelopment.

Unlocking growth around rapid transit corridors and stations is essential to address Auckland's housing and transport challenges. It will also maximise the benefits from the large investment required to build and operate rapid transit.

Integrating land use and transport is also required at the street level, particularly as Auckland grows and competition for street space increases. The planning and design of our streets must support quality, vibrant urban amenity and good living environments.

This means we need to find the right balance between a street's transport function and how the street space also caters for other uses, such as pedestrians and general place making.

Auckland Transport's Roads and Streets Framework[140] outlines how this will be done.

Auckland's Transport Design Manual[141] provides design and technical specifications that support this framework.

Designing streets and transport facilities to reflect Māori culture, through the use of Te Aranga design principles will help affirm Auckland's unique point of difference. Find out more about these principles on the Auckland Design Manual website.[142.]

How this can be done

Better integration of land use and transport to support quality urban living will include:

- prioritising transport investment that supports intensification in the existing urban area, supports growth in new urban areas and improves connections between these newly developing areas and the rest of Auckland. Find out more about the Supporting Growth Project[143]

- encouraging housing and employment growth in areas with better transport connections

- designing and managing streets[144] in a way that creates vibrant and inclusive places, reflects local character and our Māori identity, and uses good design to manage any trade-offs between vehicle movement and place making functions.
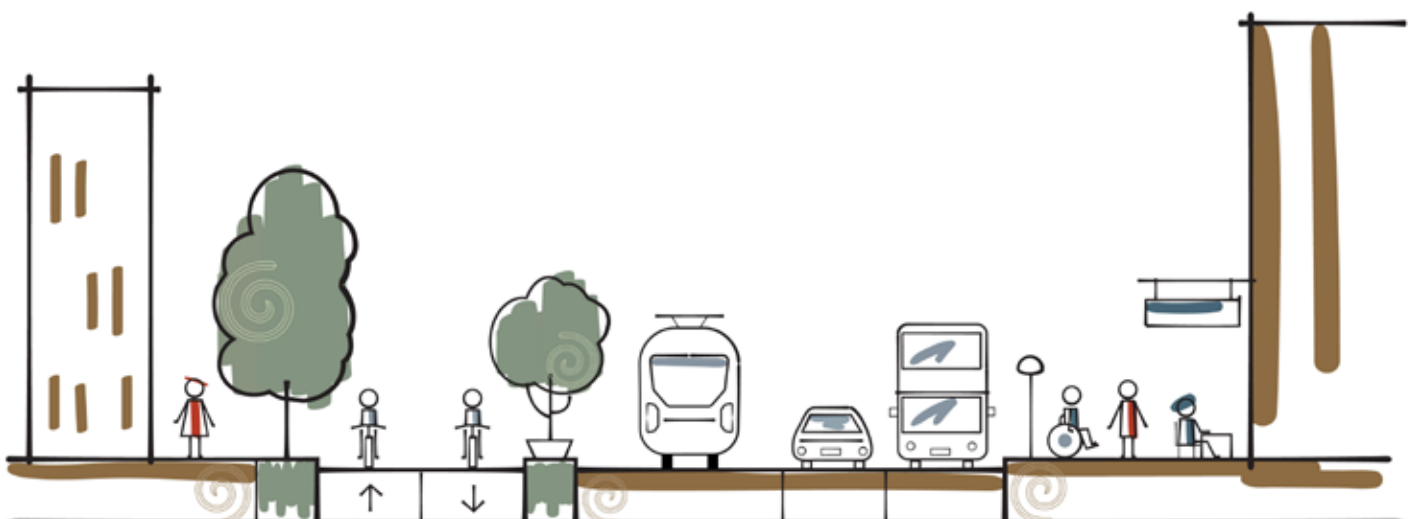
Move to a safe transport network free from death and serious injury

There have been substantial reductions in road-related deaths and serious injury for most of the past 30 years, despite a growing population and an increase in total travel.

However, since 2012, these trends have reversed, with pedestrians, cyclists and motorcyclists facing the greatest safety risk.

This increase suggests previous initiatives are no longer as effective and a new approach to safety, with solutions that make a real difference, is needed.

While eliminating all deaths and serious injuries may be challenging, the starting point must always be that they are unacceptable. This starting point must influence all transport decisions, including project design, regulations, enforcement and investment choices.

Moving to a truly safe transport network will require a greater emphasis on safety in decision-making. Compared to the way we have done things in the past, we will:

- allocate a greater part of the transport budget to dedicated safety projects
- change the way we evaluate potential transport investments
- place greater emphasis on safety in the design of new or upgraded infrastructure
- make necessary regulatory changes to promote safety, such as targeted speed limit reductions
- seek to improve travel behaviour by placing greater emphasis on enforcement, and through public awareness campaigns.

Real and perceived safety and security concerns discourage many people (particularly women, seniors and children) from using public transport, walking and cycling, especially after dark. Ensuring these travel options feel safe to all Aucklanders will help encourage their greater use.

How this can be done

Efforts to achieve a safer transport network must:

- increase investment into dedicated safety projects targeted to the highest risk locations (including intersections, high risk routes and road/rail level crossings). Find out more about the Regional Land Transport Plan[145].
- ensure that safety and accessibility for people of all ages or ability is central to the design of transport infrastructure, as described on the Universal Design website[146].
- introduce appropriate speed limits in high-risk locations, particularly residential streets, rural roads and areas with high numbers of pedestrians and cyclists
- upgrade rural roads, especially where urbanisation is likely to result in increased demand.
- use Crime Prevention through Environmental Design principles to improve real and perceived safety. Find out more about creating safer places[147].

Develop a sustainable and resilient transport system

To make our transport system more sustainable it needs to:

- be more resilient in the face of increasing change
- minimise negative impacts on the environment.

Increasing the sustainability of our transport system will:

- improve Auckland's air quality
- reduce its vulnerability to future oil shocks
- reduce run-off from the road network into our waterways
- mitigate climate change - read more about climate change on the Low Carbon Auckland[148].

Improving the resilience of our transport system in response to potential long or short-term disruption is also crucial. We face a number of potential challenges in this regard, including:

- the impacts of weather events
- long-term impacts of climate change
- disruptions arising from accidents, damage or incidents on the network
- fuel shocks
- impacts from new technologies.

Decisions must also be made in a way that reduces the risk of investments being 'caught out' by rapid change, whether arising from climatic conditions, technological developments or other forms of change.

How this can be done

Efforts to develop a more resilient and environmentally responsible transport system must:

- progressively eliminate transport greenhouse gas emissions by reducing the need to travel, improving fuel efficiency, encouraging the uptake of electric vehicles and improving travel options (particularly walking, cycling and public transport). Find out more at Low Carbon Auckland[149]
- identify parts of the transport network where disruption would have significant and widespread impacts, and develop appropriate strategies to improve their resilience
- progressively reduce the harmful pollutants that enter our waterways and atmosphere
- reduce the impact of non-permeable surfaces on runoff and the creation of urban heat islands.

Figure 26 - Graph of Auckland's greenhouse gas emissions by sector for 2017. Source: Auckland Council
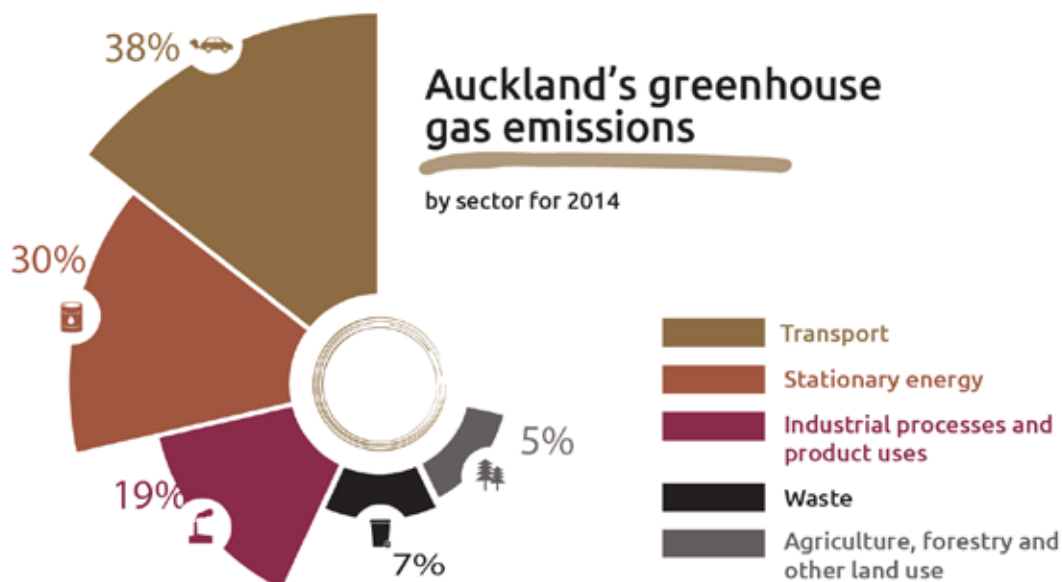
Implementing the Transport and Access outcome

Implementation partners

The New Zealand Transport Agency, Auckland Transport and KiwiRail are the main planning and delivery agencies that will develop and improve the Auckland transport network to achieve the Auckland Plan.

Auckland Airport and the Auckland ports provide key connections between Auckland and the rest of the world.

The future of the sea port on the city centre's waterfront is being considered. Any future change in location is likely to fall outside the timeframe of this plan; if any concrete decisions are made they will be reflected in the plan.

Advocacy groups play important roles in influencing how Aucklanders and businesses make transport choices.

Auckland Council will develop an implementation approach for this outcome working alongside our key partners and stakeholders. This will be built on existing programmes and ensure all new elements introduced in the Auckland Plan 2050 are planned for.

Mechanisms used to work together

Joint planning and prioritisation processes are crucial to provide the best transport solutions to support Auckland's growth.

Auckland Council and central government reached broad agreement on a long term strategic approach to developing Auckland's transport system through the Auckland Transport Alignment Project.[150]

The agreed approach is converted into action through the three-yearly Regional Land Transport Plan (RLTP)[151] which sets out the optimal timing and sequencing of projects given available funding.

Reliance on traditional funding tools is becoming increasingly inadequate to meet Auckland's transport investment needs.

Continued efforts will be needed to assess options for increasing transport funding and how to spread these costs across central and local government, users and non-users, in a fair and equitable way.

Supporting strategies and plans

Auckland Transport Alignment Project (ATAP)

ATAP is a strategic exercise to align the transport priorities of central government and Auckland Council. In 2018, ATAP was updated to place a greater weight on public transport (especially rapid transit), walking and cycling, improving safety, and realising environmental, health and growth outcomes.

Visit the ATAP website[152] for more information.

Auckland Regional Land Transport Plan (RLTP)

This is a plan to respond to growth and the other challenges facing Auckland. The Government Policy Statement on transport and the Auckland Plan set the strategic direction for the RLTP. Funding for the RLTP is provided through the Auckland Council's Long-term Plan, the National Land Transport Programme and through other central government budgets.

Low Carbon Auckland

This plan identifies the way we travel as one of five key areas of transformation to achieve a sustainable, energy resilient, low carbon future. See Low Carbon Auckland[153] for more information.

Transport safety strategies

Visit the Safer Journeys website[154] to read about the government's current strategy to guide improvements in road safety.

Auckland Transport also has a number of initiatives to support safer communities, particularly partnerships with national agencies on improving road safety and reducing the number of people killed or injured on Auckland's roads. Read about these initiatives on the Auckland Transport website.[155]

The Congestion Question

Similar to ATAP, the Congestion Question is a joint project involving the Auckland Council, the Ministry of Transport, Auckland Transport, the NZ Transport Agency, the Treasury and the State Services Commission.

The project will investigate different pricing options and test whether these could improve congestion results, taking into account the impact of these options on affected households and businesses.

Visit the Congestion Question website[156] for more information.

How to get involved

- Get inspired about places to ride, run and walk in Auckland by visiting the Auckland Transport website[157]

- Consider taking more trips by public transport. Find out more on the Auckland Transport website.[158]

Supporting information

Transport and Access in Auckland, 2050

It is 2050, and Auckland's population is around 2.5 million people. The way people, goods and services move around Auckland are very different from what it was 30 years ago. The fast pace of technology development was the main factor shaping this change.

While information and communications technology have replaced some of our travel needs, the basic human desire to interact with other people means that more people are travelling around on a transport network that largely existed in 2018.

Sustained investment over the decades allowed us to broadly keep up with growth and provide much better travel choices. However, major gains in access and reducing congestion only happened through technological advances and a much more sophisticated approach to charging for using the transport network.

A much larger proportion of the vehicle fleet is now driverless, but the real impacts of technology have been in blurring the distinction between different ways of travelling, including:

- electric bikes
- driverless mini-buses
- mobility as a service
- taxi bots
- optically guided buses
- local air travel
- light rail vehicles that carry over 500 people.

Aucklanders now have a wide range of travel options available to meet their needs.

As a wider variety of travel options emerged and investment into public transport and cycleways began to complete these networks, the share of travel by traditional private vehicles declined.

A greater proportion of vehicles now move goods and services around, although driverless technology is leading to further major disruption for the transport and logistics industry.

The vehicle fleet is nearly fully electric, which contributes to the much-needed reduction in greenhouse gas emissions and to eliminating other harmful air pollutants.

Improvements in vehicle technology and a continuing commitment to road safety have also substantially reduced the road toll.

Despite these improvements, access challenges remain for Auckland in 2050. One ongoing challenge is about how we appropriately balance the allocation of street space between a greater number of residents, workers, travellers, and visitors.

Another relates to cyber-security and privacy concerns about a transport system that is ever more reliant on technology.

Finally, it has required ongoing effort to ensure all Aucklanders – not just people in more central urban areas – are able to benefit from these improvements.

Rapid Transit Network

Rapid transit forms the backbone of Auckland's public transport network.

It provides fast, frequent and high capacity services along corridors separated from general traffic and is therefore not affected by road congestion.

Auckland's rapid transit network barely existed a decade ago, but now carries over 26 million passengers a year, with use continuing to grow strongly.

This is a result of investment in:

- rail electrification and new trains
- track and station upgrades
- construction of the Northern Busway.

The rapid transit network will need to play a central role in meeting the travel needs of a fast-growing region, as well as supporting and shaping Auckland's growth and urban form.

In particular, only rapid transit can:

- efficiently move large numbers of people to intensely developed places like the city centre and other major centres
- dramatically increase the number of people able to travel between major parts of Auckland (north, central, west and south)
- provide a fast and reliable travel option that encourages people out of their cars for longer-distance journeys
- deliver long-lasting access improvements to areas near rapid transit stations, which improves their attractiveness for redevelopment.

Major improvements to Auckland's rapid transit network are necessary for it to meet these requirements. In particular, large parts of Auckland are still not served by rapid transit, while existing parts of the network will need to be upgraded to meet future demand.

We may expand or upgrade the rapid transit network through bus improvements, light rail, heavy rail or frequent ferry services.

This will depend on forecast levels of demand, integration with the existing network and cost-effectiveness.

The map below provides an indication of the location and likely mode of Auckland's future rapid transit network:

See Figure 27 - Rapid Transit Network Map.

Robust analysis will be required on a case-by-case basis to confirm the exact timing, alignment and technical specifications of each corridor.

Making the most of the rapid transit network will need complementary initiatives, including:

- improving access to rapid transit stops and stations through walking and cycling improvements, feeder bus services and appropriately placed park and rides
- providing frequent, reliable and attractive services that are intuitive and easy for everyone to use
- providing supportive land use policies that enable and encourage growth into areas within walking distance of rapid transit stations and stops.

Figure 27 - Rapid Transit Network Map. Source: Auckland Transport Alignment Project [159]

Potential Future
Rapid Transit Network

Orewa

Albany

Constellation

Takapuna

Akoranga

Kumeu/Huapai

Devonport

Wynyard
Aotea
Karangahape

Britomart

Westgate

Newmarket

Lincoln Rd

Panmure

Botany

Swanson

Ellerslie
Penrose

Sylvia Park

Henderson

New Lynn

Mt Roskill

Otahuhu

Onehunga

Puhinui

Manukau

Auckland Airport

Papakura

Heavy Rail
Light Rail
Bus Rapid Transit
Ferry

Pukekohe

Making Auckland more cycle friendly

Cycling is often not a safe or easy way to travel for many Aucklanders. Not many people use their bikes to travel to work, school, shopping or many other daily activities.

Getting more people to cycle will help:

- ease congestion by reducing the number of people in cars, trains and buses - especially for shorter trips in busier areas
- increase people's travel choices, particularly for those living in lower income households where travel makes up a significant part of their household budget
- reduce the environmental impact of travel
- improve the health of people who cycle.

What other cities are doing

Auckland has much to learn from other cities about how to dramatically increase the number of people cycling.

For example, up to a third of all travel in Amsterdam and Copenhagen is by bike. Only 20 to 30 years ago these places had much lower levels of cycling.

In younger cities, such as Vancouver, Portland and Seattle, sustained effort into separated cycle routes has substantially increased the share of travel by bike.

What Auckland is doing

Between 2015 and 2018, central government and Auckland Council invested around $200 million in cycling. This investment was the first step towards developing complete cycle networks in and around the city centre. It included improvements such as separated cycle lanes and painted arrows on quiet residential streets.

This approach:

- improves safety for people who already cycle as their main way of getting around.
- aims to get more people to take up cycling.

The recent investment has added an additional 27 km of cycleways in central parts of Auckland and is already increasing the number of people cycling.

Focusing our efforts

While this recent investment has taken the first steps towards making cycling a safer and more attractive travel option, we need to maintain efforts to join up incomplete networks and extend this across more of Auckland. Efforts need to be targeted to the areas of greatest need and opportunity.

The following factors have influenced where efforts will be focused over the next decade as:

- short to medium average trip length
- high socio-economic deprivation
- concentrations of young people
- locations with poor transport choices
- high employment and education activity
- number of crashes.

The Auckland Transport Alignment Project (ATAP)[160] includes around $650 million of funding for cycling over the next decade, enabling recent progress to be continued. ATAP also signals that cycling is a high priority for additional investment if extra funding becomes available.

248%
Increase in cycle trips into the city via Upper Queen Street, since 2013.
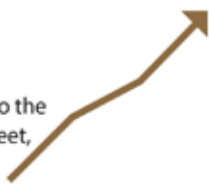
45,600
New cyclists in 2016, enough to fill Mt Smart Stadium.
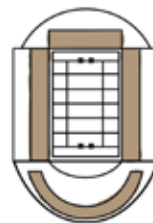
New connections in the cycle network has created a

44%
increase in people on bikes using the Northwestern Cycleway.

Because we've just built 27km of new cycleways:

27km of new cycleways.

39%
of Aucklanders are positive about the state of cycling, compared with 22% in 2015.

Passenger rail transport between Auckland, Hamilton and Tauranga

Auckland, the Waikato and the Bay of Plenty are home to just under 50 per cent of all New Zealanders (as at the 2013 Census).

Combined, these areas:

- account for half of New Zealand's gross domestic product and
- are likely to account for more than 70 per cent of New Zealand's population growth over the next 30 years.

Recent improvements to road transport between Auckland and Hamilton, in particular progress towards completing the Waikato Expressway, have created substantial travel time and safety improvements. However, at peak times journeys are likely to remain long and relatively unreliable, largely because of congestion on Auckland's southern motorway.

Fast and frequent passenger rail services between Auckland, Hamilton and Tauranga would offer a congestion-free alternative to road travel. This would also complement the upgraded road network and therefore provide a better road travel experience for those who continue to drive.

Inter-regional passenger rail has the potential to reduce travel times between Auckland and Hamilton to just over an hour, and reduce times between Tauranga and Auckland to around two hours.

Travel time improvements of this scale would be transformational for this inter-regional corridor by:

- improving economic integration between the Auckland, Waikato and Bay of Plenty regions
- supporting substantial housing and employment opportunities along the rail line as a result of inter-regional commuting becoming a more attractive travel option
- creating vibrant, affordable and successful urban areas in southern Auckland and the North Waikato.

The services would also:

- provide an express rail service within Auckland, which would reduce travel times between Auckland city centre and Auckland Airport (via connection at Puhinui Station) as well as to southern growth areas
- make better use of the existing rail network

- improve the resilience of the transport network
- reduce congestion, transport related emissions and deaths and injuries occurring on the road network.
- reduce the conflict between freight and passenger rail services within Auckland.

Past proposals for improving passenger rail services have not provided sufficiently attractive travel times and frequencies to encourage use.

This is because they have been based on the use of slow trains, limited track upgrades and have not been able to reach Britomart Station because of its capacity constraints.

For rail to be successful, it will require a substantial investment programme that includes:

- new, faster trains
- completion of the City Rail Link to enable use of Britomart Station by regional trains
- track upgrades within Auckland (including a third or fourth main line on busy sections of track) to separate fast inter-regional trains from commuter trains
- rail electrification to (and potentially beyond) Pukekohe
- track and station upgrades outside Auckland.

A high level investigation into inter-city passenger rail is under way.

See Figure 28 - Rapid regional rail network proposed by central government

Data sources

Statistics New Zealand. (2013). 2013 census data[161] accessed 31 October 2017

Statistics New Zealand. (2016). Regional gross domestic product: year ended March 2016,[162] accessed 31 October 2017

Statistics New Zealand. (2016). Subnational population projections 2013 base to 2043 update (released 2016),[163] accessed 31 October 2017

Figure 28 - Rapid regional rail network proposed by central government
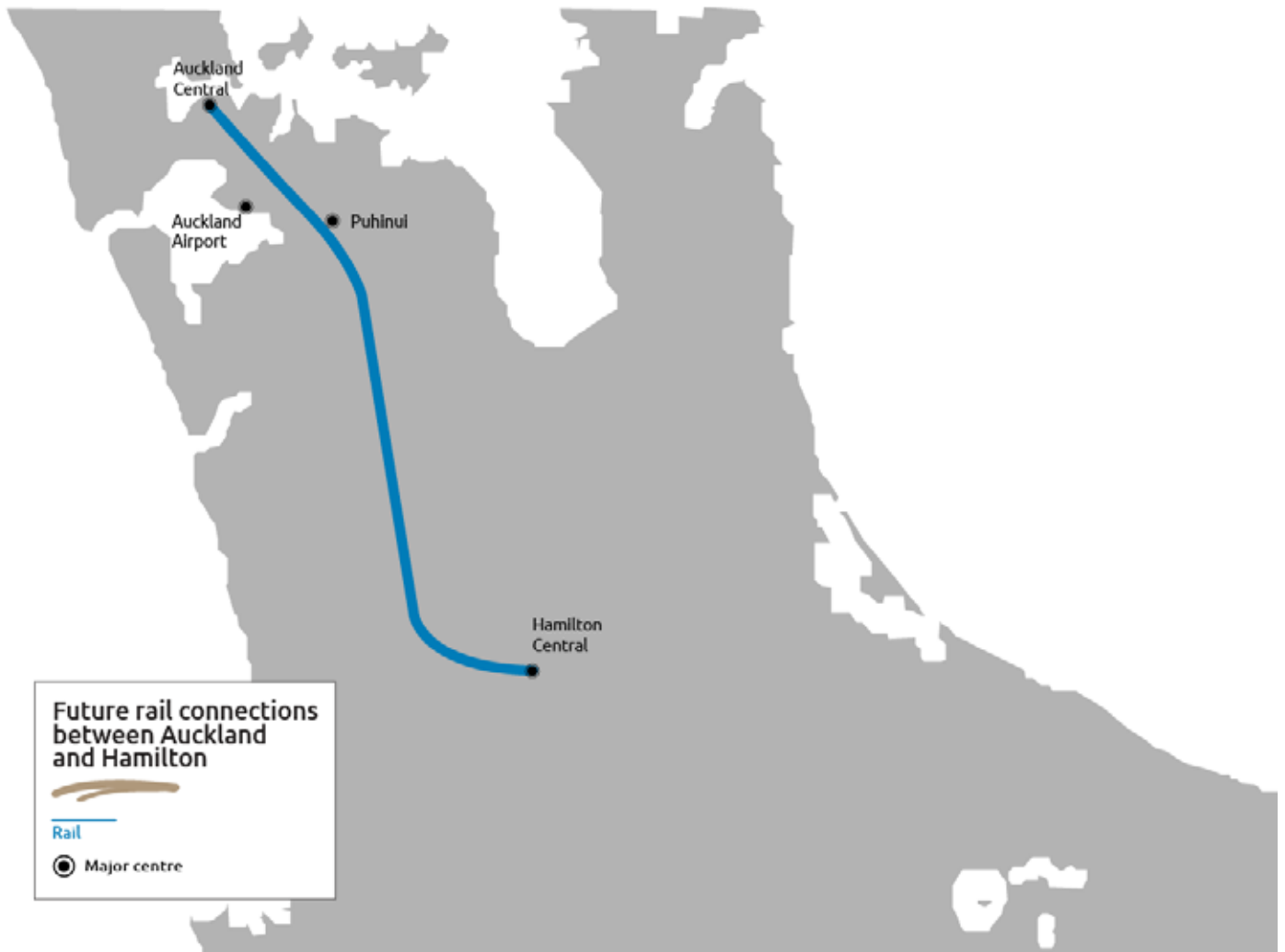
Equitable transport access across Auckland

Auckland's growth is forecast to create major challenges in getting around, especially commuting to and from work. For many people, work will be a long distance away from home, meaning long journeys.

Housing growth is expected to take place across Auckland, including in new greenfield areas on the urban periphery. At the same time, the ongoing evolution of Auckland's economy means job growth is expected to cluster in major centres.

What this means

Without major intervention, the way Auckland is expected to grow means many people (particularly those in the south and the west) may need to travel further to reach their jobs. This will put additional pressure on our transport networks and ultimately limit or reduce the number of jobs that can be reached within a reasonable commute time.

Improving access to employment is a key way of improving prosperity and lifting people out of poverty. So it is particularly concerning that the areas facing the greatest challenges in accessing employment are also some of the most economically deprived communities in Auckland.

Addressing this challenge will need to be an ongoing focus of transport and growth planning in Auckland.

What we can do about it

We need to focus on both improving the transport system and shaping the way Auckland grows. This includes:

- encouraging much stronger business growth and employment opportunities around Albany, Westgate and Manukau, so that people have more options to work or study close to where they live
- encouraging substantial housing growth in inner areas and along main transport routes
- making better use of existing transport networks, which includes increasing the share of travel by walking, cycling and public transport
- increasing opportunities to walk and cycle as low-cost travel options, particularly in areas of high socioeconomic deprivation
- targeting investment in new transport infrastructure to help ensure employment access improves over time.

See Map 8 - Access to Jobs (via Public Transport within 45 minutes) and Map 9 - Acces to Jobs (via Car with 30 minutes)
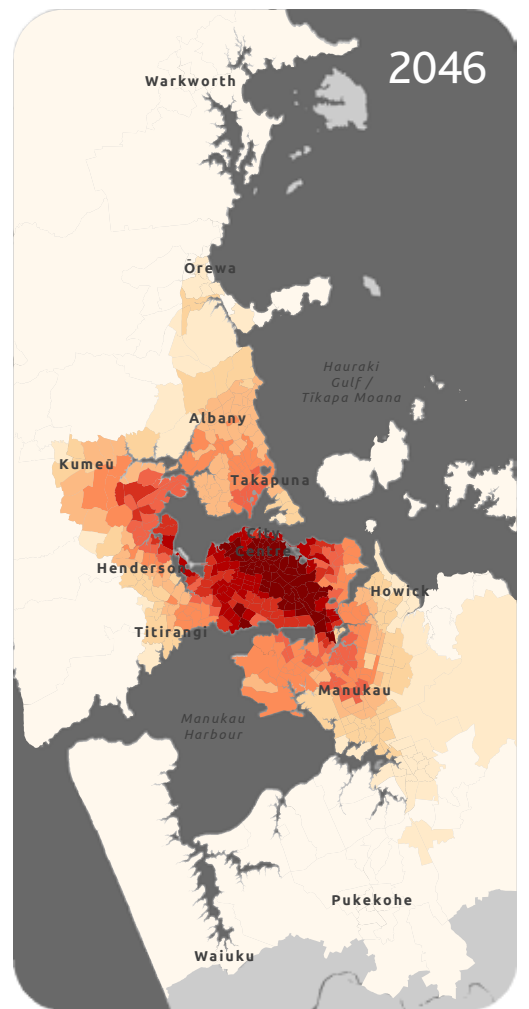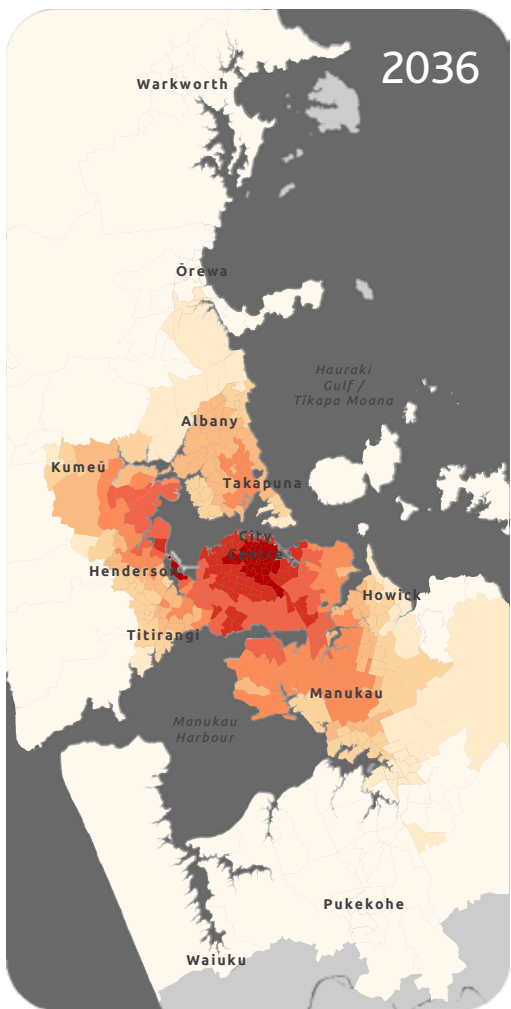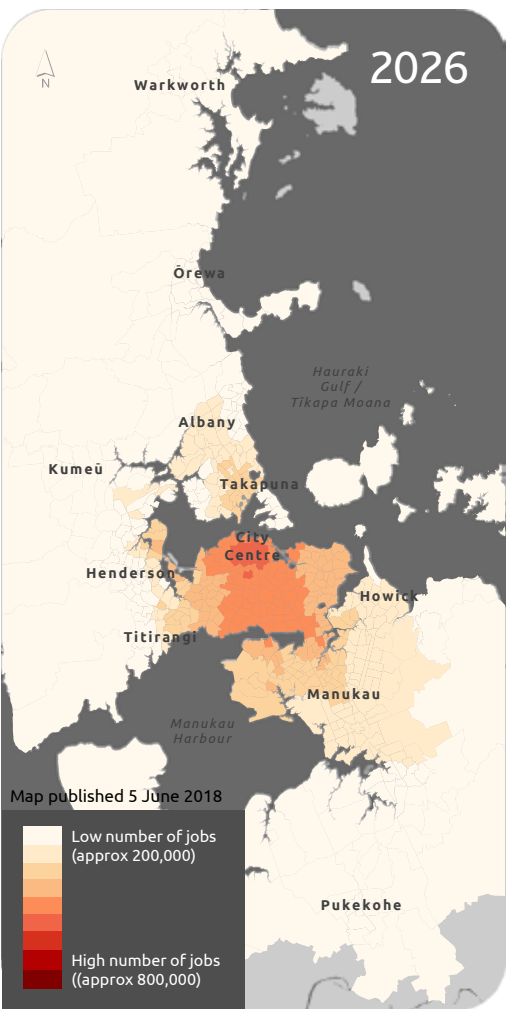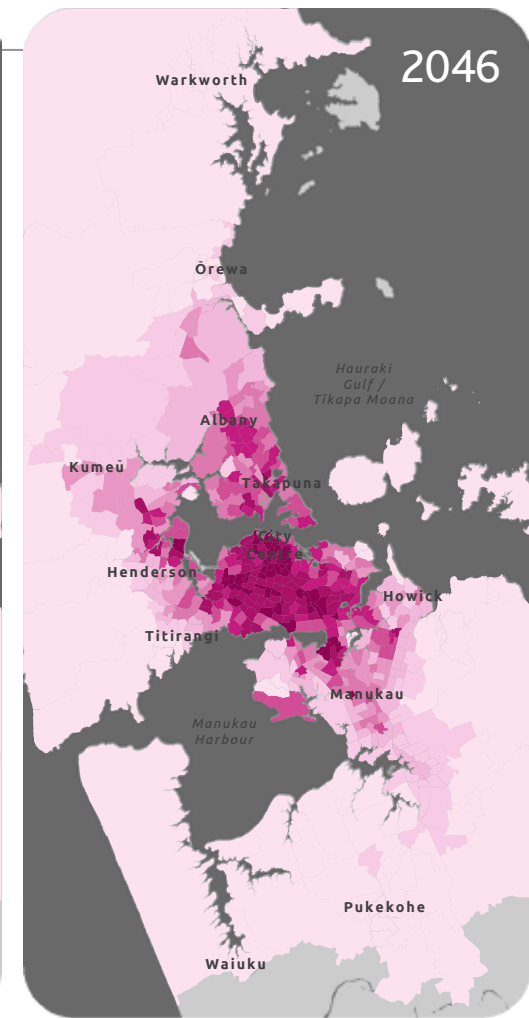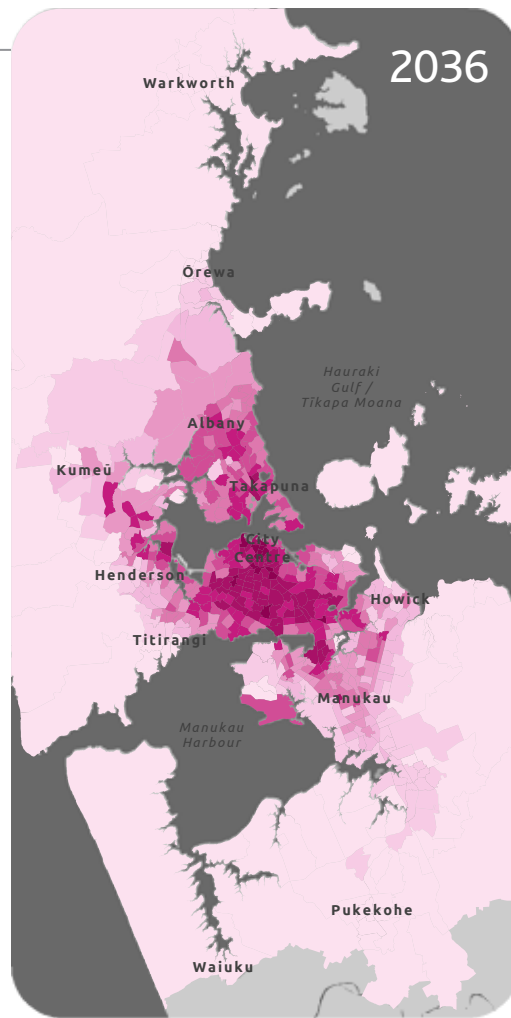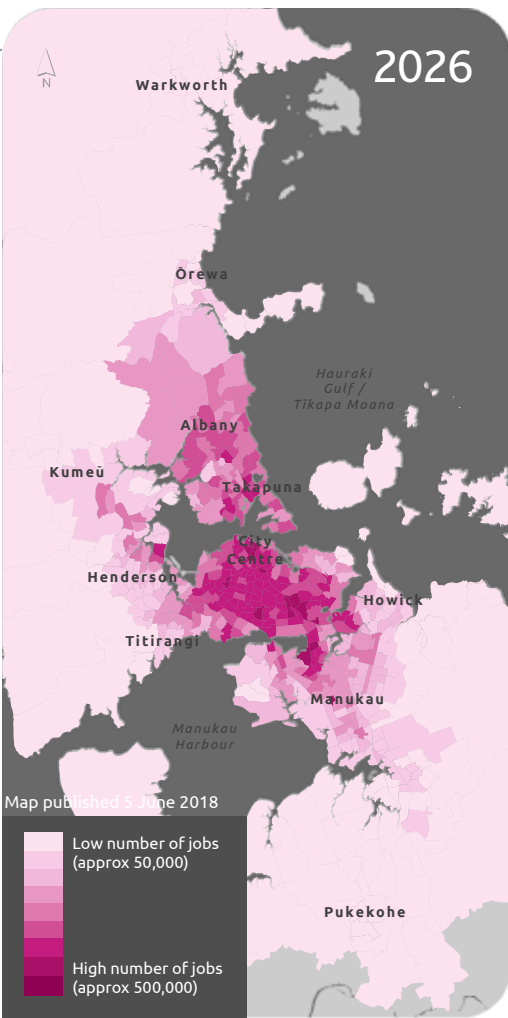
2026

2036

2046

Map published 5 June 2018

Low number of jobs
(approx 50,000)

High number of jobs
(approx 500,000)

2026

2036

2046

Map published 5 June 2018

Low number of jobs
(approx 200,000)

High number of jobs
((approx 800,000)

Environment and Cultural Heritage

Aucklanders preserve, protect and care for the natural environment as our shared cultural heritage, for its intrinsic value and for the benefit of present and future generations.

DIRECTION	FOCUS AREA
Direction 1	**Focus Area 1**
Ensure Auckland's natural environment and cultural heritage is valued and cared for	Encourage all Aucklanders to be stewards of the natural environment, and to make sustainable choices
Direction 2	**Focus Area 2**
Apply a Māori world view to treasure and protect our natural environment (taonga tuku iho)	Focus on restoring environments as Auckland grows
Direction 3	**Focus Area 3**
Use growth and development to protect and enhance Auckland's natural environment	Account fully for the past and future impacts of growth
Direction 4	**Focus Area 4**
Ensure Auckland's infrastructure is future-proofed	Protect Auckland's significant natural environments and cultural heritage from further loss
	Focus Area 5
	Adapt to a changing water future
	Focus Area 6
	Use green infrastructure to deliver greater resilience, long-term cost savings and quality environmental outcomes

Environment and Cultural Heritage explained

The natural environment is the basis for our existence. It supports and enables all aspects of our society, economy and culture.

The natural environment is inextricably connected to Aucklanders' sense of identity and place. It affects our health and wellbeing through the mental and physical interactions we have with it, and it provides the clean air we breathe and fresh water we drink.

The natural environment

Auckland's natural environment not only supports its people, but it is home to many special local ecosystems and is essential for the survival of both indigenous wildlife and species from across the world.

For example, the Kaipara Harbour, the Firth of Thames and the Manukau Harbour provide feeding and breeding grounds for many coastal and migratory birds, including threatened species such as the wrybill, bar-tailed godwit and New Zealand dotterel.

Some native species are not found outside New Zealand and are under threat of extinction, such as:

- birds on islands in the Hauraki Gulf
- kauri in the Waitākere and Hunua forests
- unique species in our marine and freshwater environment.

Twelve of the 59 different types of New Zealand's indigenous forest ecosystems are found in Auckland. Harataonga Bay, Aotea / Great Barrier Island has Auckland's most diverse forested area.

We have a responsibility to ensure the natural environment is protected and cared for, both for its intrinsic value and to sustain life for future generations.

Our cultural heritage

The natural environment is part of Auckland's shared cultural heritage.

This term is often used to describe that which we have inherited from past generations and are looking after for the benefit of future generations.

In this plan, the term is used to mean our collective heritage of:

- air, land, and water
- biodiversity
- significant landscapes
- historic features.

The environment and our shared cultural heritage provide an anchor for the sense of belonging that communities have to their place. These connections are addressed in the Belonging and Participation outcome.

The quality of the natural environment means that Auckland has always been a desirable place to be.

It has allowed people to survive and thrive, and has given rise to other aspects of cultural heritage such as stories, art, and knowledge as well as the strong connection to sites, landscapes and structures of significance. Auckland's built heritage is, for example, an important connection for some Aucklanders. This link and the specific role of built heritage in shaping our homes, places and spaces is explored in the Homes and Places outcome.

The natural environment and our shared cultural heritage have enticed people to invest in Auckland over hundreds of years. They continue to attract migrants and are one reason why so many people call Auckland home.

Environmental protection

Preserving and managing Auckland's diverse natural environments and protecting their quality is a complex and vital responsibility for all Aucklanders.

It is particularly complex in the context of a growing population and the requirements of the commercial, agricultural, and industrial activities that form part of our economy.

Despite past efforts to protect and enhance the natural environment, it has been significantly stressed by the impacts of human activity.

It continues to be negatively affected by the:

- consequences of past decisions
- inability of infrastructure to cope with current pressures
- day-to-day lifestyle decisions people make.

We continue to see negative environmental consequences from historic land use and infrastructure decisions such as:

- combined wastewater and stormwater networks – which now overflow into our harbours
- the prioritisation of private over public transport, leading to more vehicle emissions and more road runoff
- developments through natural water courses and within flood plains which cause downstream impacts and require engineered solutions to manage increased water flows
- ineffective on-site waste water treatment in some areas.

Find out more by reading The Health of Auckland's Natural Environment in 2015 report.[164]

Doing better in the future

As Auckland grows we must do things differently. We have to achieve better environmental results through our decision-making.

There are also new problems to address.

Heat waves, droughts and tropical storms are part of our lives. However, the climate change impacts we are now beginning to experience are likely to worsen, and will have major long-term effects on how we live.

Other threats are becoming more common too. Our kauri are under threat from kauri dieback, and our marine environments are under pressure from pest species. We can also expect more frequent threats to biosecurity as the climate changes. Activities on land continue to impact our rivers and marine environments, through contaminants like sediment, heavy metals and nutrients. Waste and litter continue to impact our natural environment as well, particularly our streams and harbours.

We must take action to reduce and mitigate these threats and minimise the impacts on Auckland's people and cultural heritage.

Protecting, restoring and enhancing the natural environment is critical to ensuring our future.

How we track progress

We will track progress against a set of measures.

The measures for this outcome are:

- the state and quality of locally, regionally and nationally significant environments
- marine and fresh water quality
- air quality and greenhouse gas emissions
- protection of the environment
- resilience to natural threats
- treasuring the environment

Figure 29 - Ecosystem services. Source: WWF's Living Planet report 2016
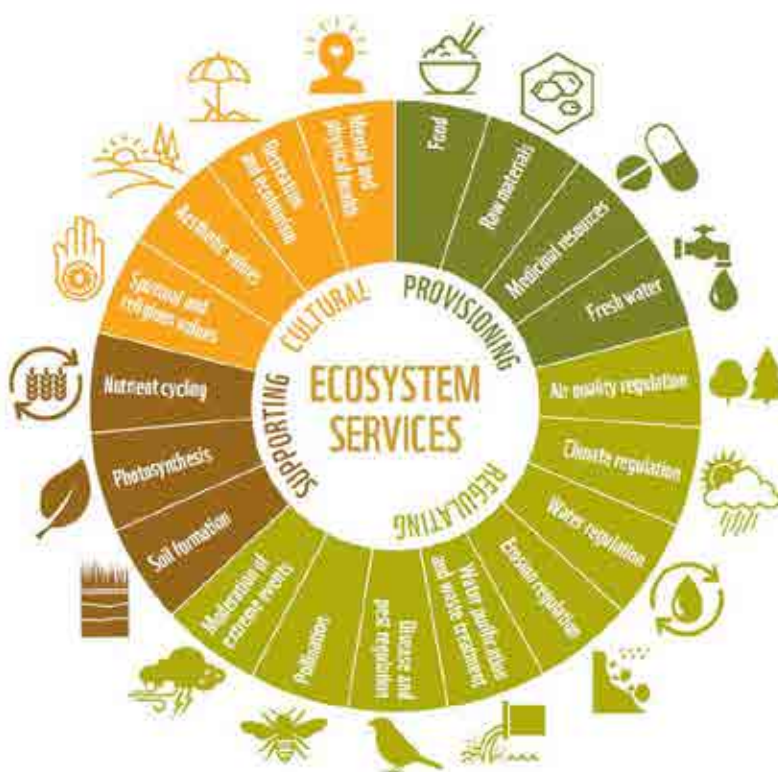
Ensure Auckland's natural environment and cultural heritage is valued and cared for

The natural environment supports and sustains us in many different ways.

It plays a critical role in delivering social, cultural, economic and environmental outcomes for Aucklanders.

It provides us with opportunities to diversify and strengthen our economy in sectors like tourism, agriculture and horticulture and green technology innovation.

It is also part of Auckland's shared cultural heritage and provides an anchor for the sense of belonging that communities have to their place.

The natural environment and our shared cultural heritage are central to attracting the visitors, skills and investment that help to drive our prosperity.

However, many of our treasured natural environments, ecosystems, indigenous species, and sites of cultural significance are already under significant pressure from human activity, and some are in decline.

To reverse this decline, all Aucklanders must play their part in ensuring that the natural environment and cultural heritage is valued and cared for.

We must better understand and recognise the life-sustaining benefits the natural environment provides as well as the critical role it plays in shaping and sustaining Auckland's future.

We must actively seek opportunities to protect and enhance these values through our short and long-term decisions.

Find out more by reading The Health of Auckland's Natural Environment in 2015 report.[165]

Apply a Māori world view to treasure and protect our natural environment (taonga tuku iho)

Te ao Māori concepts such as kaitiakitanga, rangatiratanga, whanaungatanga and manaakitanga offer Auckland an integrated approach to protecting and enhancing our treasured environments for ourselves, and for future generations.

Embedding these concepts into our thinking and decision-making supports a focus on the interrelationships between the natural environment and people.

Mana whenua have a unique relationship with the natural environment as kaitiaki.

They hold an enduring relationship with the land, marine and freshwater environments and have deep and valuable knowledge.

Their body of knowledge – both tangible and intangible – cultural practices and heritage are all linked to the whenua and its life.

Though te ao Māori in origin, these broader concepts, which acknowledge the interrelationship between the natural environment and people in how the world is viewed, can be adopted and practised by everyone.

Almost every environmental indicator is in steady decline.

This means that current approaches and practices are not working.

We have to change our way of thinking about the natural environment and make the links between what we value and our own behaviours and decisions.

Adopting a Māori world view as an approach provides us with a viable alternative.

Integrating this knowledge into our behaviours and decisions is essential to successful and sustainable environmental management, and ensuring we protect and enhance the mauri of the natural environment.

For more information read the Māori identity and wellbeing outcome.
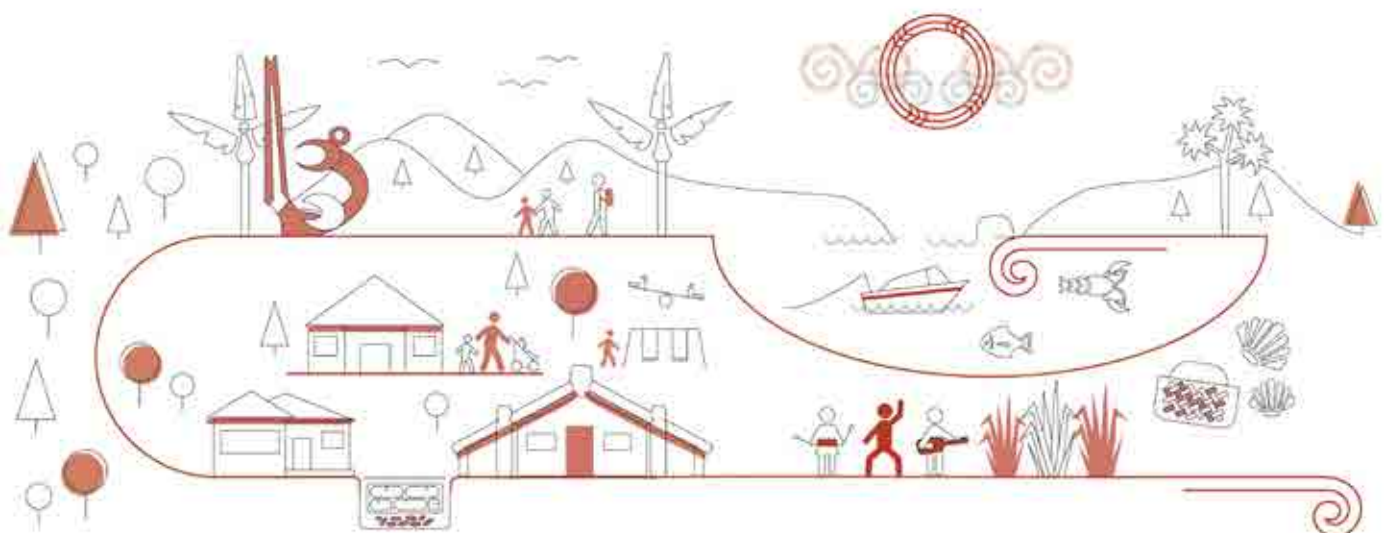
Use Auckland's growth and development to protect and enhance the natural environment

Continued population growth and urban development are likely to increase the severity and intensity of pressure on Auckland's already stressed environment.

However, with awareness and effort, and by doing things differently, future development can deliver significant environmental improvements.

Auckland must ensure that development is sustainable and has minimal negative impacts on the natural environment.

It can be done by embedding sustainable environmental practices in our buildings, infrastructure and places and spaces. For example:

- using resources efficiently and sustainably
- green infrastructure
- lowering emissions from transport and industry
- technological innovation in the construction and form of our buildings.

Auckland's future growth will bring greater levels of investment. Transport, stormwater and wastewater investments in particular will be some of the largest ever made in Auckland.

We can use these investments, and others, to not only perform their technical function but to protect or enhance the overall health of the environment and ecosystems.

As these investments have to be made to service growth, they provide ideal opportunities to make meaningful environmental gains.

This requires different expectations or minimum bottom lines from these investments, starting from their initial conception through to execution.

We can also create buildings that minimise their impacts and maximise the experiences of their inhabitants through the use of green building principles.

Our buildings can be used to generate electricity, food, heat and water, reducing pressure on our already scarce resources.

By embedding more sustainable design principles in the planning, design, construction and operation of our buildings, Auckland can take a whole-of-life approach to protecting and enhancing the natural environment.

See Map 12 - Risks and opportunties for more information on the infrastructure at risk to environmental change, areas of evironmental pressures and opportunties

Legend

— At Risk Infrastructure (Sea Level Rise) - Motorway

— At Risk Infrastructure (Sea Level Rise) - Major road

— Railway

Sea level rise and coastal erosion where low lying

Receiving Environment (Farm & Urban Runoff)

Environmental Pressure

Opportunities for Environmental Outcomes
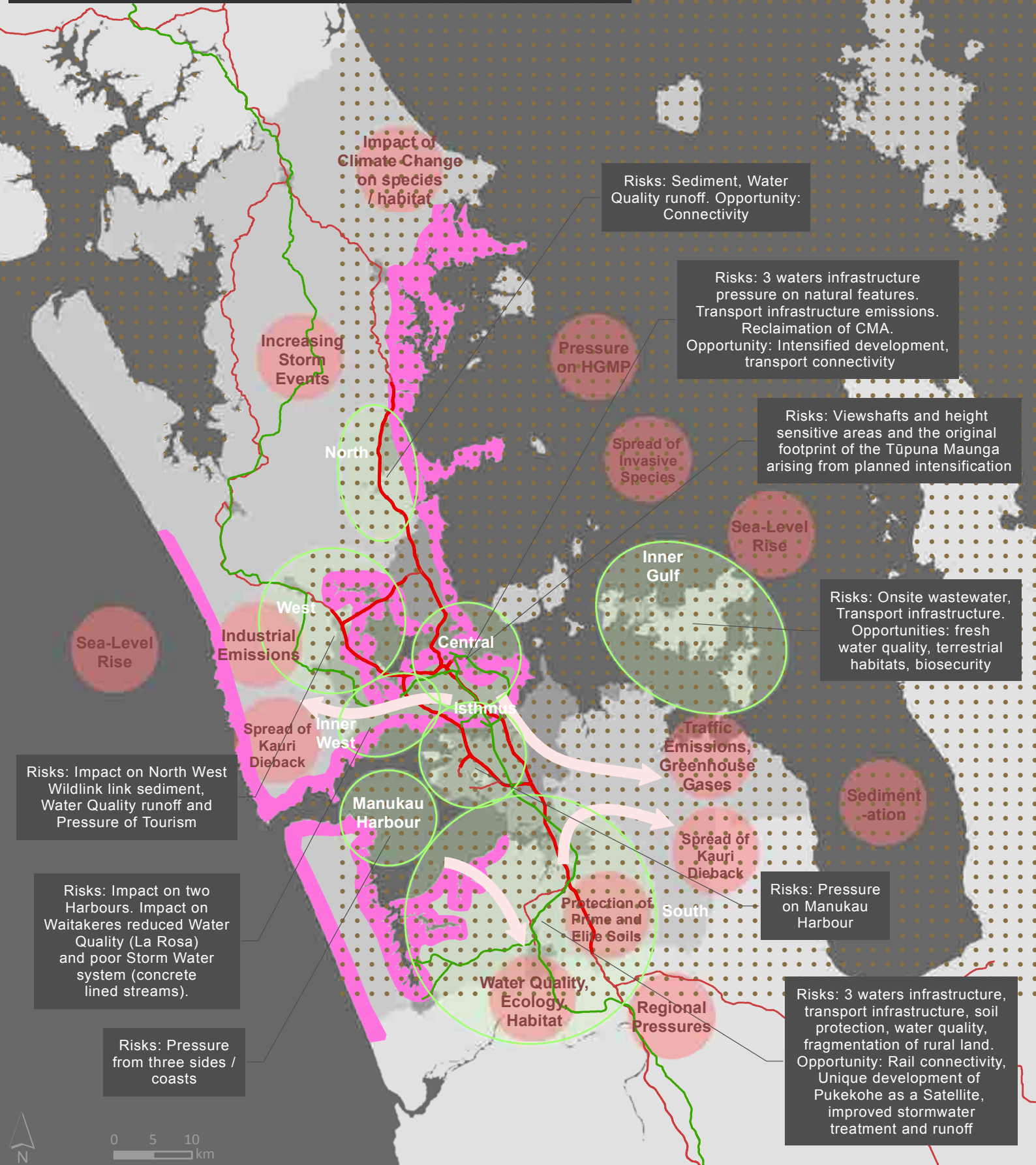
Impact of Climate Change on species / habitat

Increasing Storm Events

North

Pressure on HGMP

Spread of Invasive Species

Sea-Level Rise

Risks: Sediment, Water Quality runoff. Opportunity: Connectivity

Risks: 3 waters infrastructure pressure on natural features. Transport infrastructure emissions. Reclaimation of CMA. Opportunity: Intensified development, transport connectivity

Risks: Viewshafts and height sensitive areas and the original footprint of the Tūpuna Maunga arising from planned intensification

Inner Gulf

Central

Sea-Level Rise

West

Industrial Emissions

Isthmus

Risks: Onsite wastewater, Transport infrastructure. Opportunities: fresh water quality, terrestrial habitats, biosecurity

Spread of Kauri Dieback

Inner West

Traffic Emissions, Greenhouse Gases

Sediment -ation

Risks: Impact on North West Wildlink link sediment, Water Quality runoff and Pressure of Tourism

Manukau Harbour

Spread of Kauri Dieback

Risks: Impact on two Harbours. Impact on Waitakeres reduced Water Quality (La Rosa) and poor Storm Water system (concrete lined streams).

Protection of Prime and Elite Soils

South

Risks: Pressure on Manukau Harbour

Risks: Pressure from three sides / coasts

Water Quality, Ecology Habitat

Regional Pressures

Risks: 3 waters infrastructure, transport infrastructure, soil protection, water quality, fragmentation of rural land. Opportunity: Rail connectivity, Unique development of Pukekohe as a Satellite, improved stormwater treatment and runoff

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0 5 10
km

Ensure Auckland's infrastructure is future-proofed

It is essential that Auckland's infrastructure can withstand short-term shocks, such as flooding. It also needs to work well in the long-term, particularly in the face of longer-term climatic changes. Transport infrastructure can have harmful environmental impacts such as runoff from roads which pollutes waterways. This is addressed under the Transport and Access outcome.

Climate change will put additional strain on our infrastructure. New infrastructure will need to recognise future pressures, and be resilient and adaptable.

Much of our infrastructure such as water supply, wastewater and stormwater networks, and power supply networks, is ageing and does not always meet modern requirements or expectations.

This can have negative impacts such as:

- poor water quality from ageing wastewater networks with insufficient capacity
- increased greenhouse gas emissions from fossil fuel-dependent transport
- reduced resilience to climate change.

New infrastructure involves significant time and investment. We have to start now to create the systems and services we want in the future.

This means that:

- we need to build flexibility and adaptability into infrastructure design to ensure it is easier to modify and respond to changing needs
- we must reduce and potentially eliminate the impacts of inefficient infrastructure through retrofits and upgrades and finding alternative ways to deliver core services.

New ways of delivering core services can range from decentralising power supplies to recycling wastewater and turning waste into resources.

We also need to consider bolder initiatives, such as retreating from some coastal areas and avoiding flood inundation zones[166] to ensure development is sustainable over the long-term.

Photograph of a stormwater improvement project from above

Encourage all Aucklanders to be stewards of the natural environment, and to make sustainable choices

Aucklanders interact with the natural environment each and every day.

Early Māori expressed their culture and whakapapa in the natural environment. This included the meaning and significance of cultural practices, physical landscapes and their waahi tapu.

This continues with all people of New Zealand.

In our own ways we all value and enjoy the natural environment. We must therefore all engage in its protection and conservation and act as stewards of the natural environment. It also means we have to ensure our many interactions with the natural environment are sustainable.

As the impacts of climate change become clearer, this will become more and more important.

See Map 11 Environmental Assets - an interactive version of the map is available at aucklandplan.govt.nz

How this can be done

This approach needs to be part of our daily decisions, whether we are acting as individuals or as businesses and industries. As our population grows, so does our shared responsibility to take care of the natural environment.

Our choices and behaviours have a direct impact on the natural environment, whether they are, for example:

- the choices we make about the food and other products that we consume and use
- how we travel to work or school
- the products we use to construct and maintain our buildings
- the way we manage manufacturing processes
- how we deal with waste, by reusing or recycling resources.
- choosing to buy and use fewer non-recyclable products.

We all can, and must, shift from simply using and drawing on the natural environment to becoming active stewards of it.

Find out more about what you can do for the environment.[167]

See how we'll minimise and manage our waste.[168]

Regional Park
Wetland Management Area
Lake Management Area (Natural and Urban Lake)
High-Use Aquifer Management Area
Water Supply Management Area
Natural Stream Management Area
High-Use Stream Management Area
Hauraki Gulf Marine Park

Significant Ecological Area
Terrestrial
Marine 1
Marine 2
Walking
Surfing
Off Road Motor biking
Off Road Biking
Sailing / Boating
Bridle Trails
Coast to Coast Walkway

Te Araroa National Walkway
Hillary Trail

Maritime recreational use

LevelOfUse
High
Low
Tūpuna Maunga
Maunga or other volcanic feature
Beach

Outstanding Natural Feature
Outstanding Natural Landscape
Marine Reserves
Harbour
Department of Conservation (Aotea)
Southern Market Gardens & Aquifers
Significant Environmental Assets

Te Arai Point Regional Park
Pakiri Regional Park Land
Atiu Regional Park
Goat Island
Tawharanui Regional Park
Scandrett Regional Park
Mahurangi Regional Park
Te Rau Puriri Regional Park
Te Muri Regional Park
Wenderholm Regional Park
Shakespear Regional Park
Tiritiri Matangi Island
Long Bay Regional Park
Muriwai Regional Park
Rangitoto Island
Waiheke and Ponui Islands
Glenfern Regional Park
Aotea and Hauturu Islands
Whakanewha Regional Park
Omana Regional Park
Duder Regional Park
Waitakere West Regional Park
Waitakere North Regional Park
Hamlins Hill Regional Park
Ambury Regional Park
Waitawa Regional Park
Orere Point Regional Park
Tawhitokino Regional Park
Botanic Gardens Regional Park
Waitakere Central Regional Park
Tapapakanga Regional Park
Waharau Regional Park
Waitakere South Regional Park
Hunua Ranges Regional Park
Awhitu Regional Park
Whakatiwai Regional Park

0 5 10 km
N

Note: The best way to view the data presented here, is by using the interactive map on the Auckland Council website. It has different layers that become visible at different zoom levels

Focus on restoring environments as Auckland grows

Auckland can use the processes of development and redevelopment to restore degraded ecosystems and places of cultural significance where appropriate. This is a key contributor to protecting and enhancing the environment.

Consistent population growth, and development to support this growth, has meant numerous areas and natural environments across Auckland have been degraded. Past activities or simple neglect has a lasting impact on the natural environment.

As growth and redevelopment happens in these areas opportunities arise to restore ecosystems and create new spaces for people to enjoy.

These opportunities need to be targeted, for example:

- remediate residual contamination - as described on the Ministry for the Environment website[169]
- enhance and restore existing ecological systems find out more at Auckland Growing Greener[170], Auckland Council's roles and commitments to deliver environmental outcomes for Auckland
- create new habitats for flora and fauna find out more about Auckland Council's Indigenous Biodiversity Strategy[171]
- identify local opportunities, like stream daylighting, revegetation, tree planting as part of development.

In turn, this can provide new natural environments for local communities to connect with and enjoy, further building and creating Auckland's shared cultural heritage.

See Map 13 - Open space

How this can be done

We can:

- better understand where and how our natural environments are degraded
- actively seek out opportunities to restore natural environments and ecosystems as growth and redevelopment happens
- set minimum expectations for new development and the contribution they have to make
- ensure the impacts and opportunities of our developments are integrated from the start, rather than having to invest further resource to fix up mistakes later.

Pakiri Coastal Dune Network

Wellsford

Warkworth

Mahurangi Coastal Network

Ōrewa

Kaipara Harbour

Helensville

Kumeū

Hauraki Gulf / Tīkapa Moana

Takapuna

Waitematā Harbour

City Centre

Henderson

Howick

Titirangi

Waitakere Ranges

Waiheke Island

Clevedon

Manukau

Te Ara Ruamoko

Manukau Harbour

Hunua Ranges

Barrier Islands Inset Map

Pukekohe

Waiuku

Legend
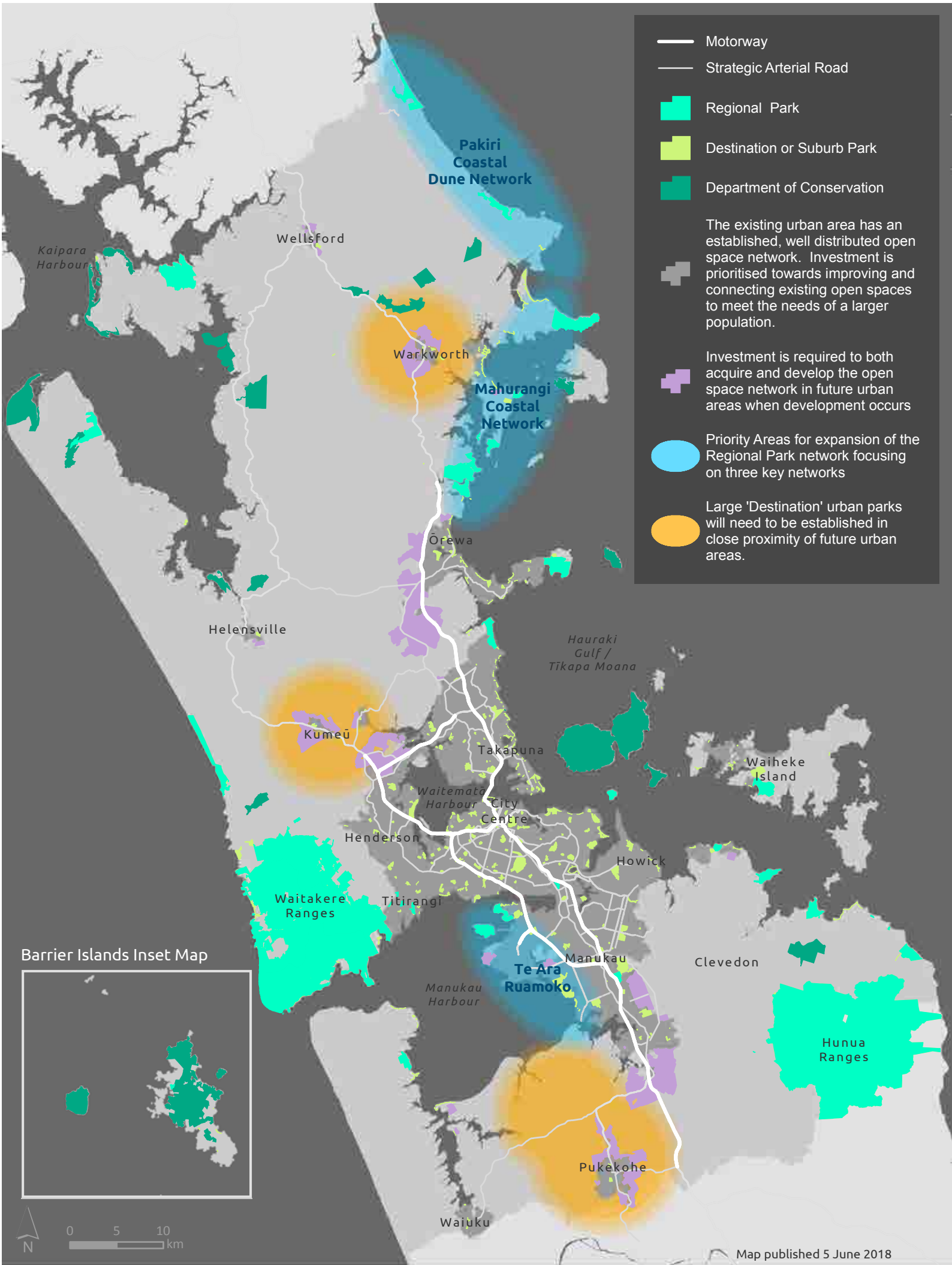
— Motorway

— Strategic Arterial Road

Regional Park

Destination or Suburb Park

Department of Conservation

The existing urban area has an established, well distributed open space network. Investment is prioritised towards improving and connecting existing open spaces to meet the needs of a larger population.

Investment is required to both acquire and develop the open space network in future urban areas when development occurs

Priority Areas for expansion of the Regional Park network focusing on three key networks

Large 'Destination' urban parks will need to be established in close proximity of future urban areas.

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km

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Map published 5 June 2018
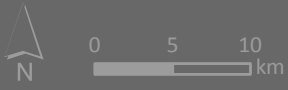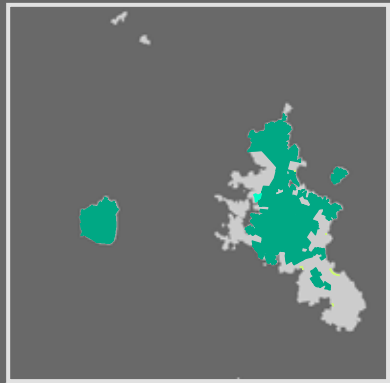
Account fully for the past and future impacts of growth

Auckland must learn from the past, and embed more sustainable approaches in any future developments. Auckland's consistently growing population will continue to put pressure on the natural environment.

Decision-making needs to fully account for the immediate and ongoing impacts of population and urban growth and its related projects.

Developments do not exist in isolation. They have effects beyond the immediate and cumulative small impacts may combine to generate significant larger issues.

Depending on how it is managed, growth can also exacerbate threats such as climate change or the spread of invasive species.

For example, development in areas already susceptible to flooding increases the risk and intensity of flood events by generating higher volumes of run-off.

We need to reverse environmental decline as well as eliminate ongoing impacts. We also need to avoid short term solutions that create long-term costs and consequences.

How this can be done

More sustainable practices could include:

- assessing future threats and integrating how we deal with them into the design of developments, for example by ensuring resilience to climate change impacts

- minimising greenhouse gas emissions from all phases of development, from construction and use through to deconstruction and disposal Find out more about Low Carbon Auckland[172]

- maximising the flexibility and adaptability of developments, both in terms of form and of function, for example by creating public open spaces that also assist with flood management, as described on De Urbanisten website[173]

- requiring an assessment of the long-term environmental, social and economic impacts of all developments and verifying these impacts post-construction.

Much of this is in the hands of decision-makers who set legislation, policy and regulation for growth and development in Auckland.

They must use the experiences of the past as well as new knowledge and research to account for the long-lasting effects of growth decisions.

This will contribute significantly to making more sustainable choices now.

Protect Auckland's significant natural environments and cultural heritage from further loss

Auckland is home to a number of diverse and unique natural environments that are significant both in New Zealand and internationally.

Find out more about protecting Auckland's marine environments later in this section.

Our marine environments, for example, provide unique habitats for species and places for Aucklanders to enjoy.

Many of these environments are threatened by how they are currently treated and, unless we actively protect them, are likely to decline further as Auckland's population grows.

Unique cultural sites, landscapes and sites of significance to Māori must be protected from the pressures of growth as well as other emerging threats and risks.

These sites and landscapes include the:

- extensive archaeological landscapes of Āwhitu Peninsula
- the Tūpuna Maunga and other Auckland Isthmus volcanic cones
- Ōtuataua stone fields
- Franklin volcanic fields.

See Map 14 - Historic Heritage

Maungakiekie / One Tree Hill. Photograph credit - Tūpuna Maunga Authority

How this can be done

Corridors such as the North-West Wildlink[174] create safe, connected and healthy habitats for native wildlife.

They must be recognised for their important role in providing interlinked spaces across Auckland where wildlife can breed safely and move between conservation hotspots. More links like this can be created.

Auckland's network of public spaces and parks also support conservation of habitats and species, while providing recreational and tourism opportunities.

As Auckland grows, additional pressure will be put on these spaces, and additional spaces will be needed.

Some of Auckland's cultural heritage sites, cultural landscapes and sites of significance to Māori are also under pressure from development, either directly or from incompatible uses or activities close by. The Tūpuna Maunga, in particular, are vulnerable to new development compromising people's enjoyment of them, and their long-term protection.

There needs to be greater awareness of, and more investment made into ensuring the long-term protection and integrity of our cultural heritage sites, cultural landscapes and sites of significance to Māori.

We must also take care to safeguard against loss of habitat and sites of cultural heritage in areas that are currently flourishing and protected.

Legend:

- Existing Urban Area
- NZ Archaeological Association (NZAA) Archaeological Sites
- Heritage New Zealand Listed Site
- Items identified within the Cultural Heritage Inventory
- Historic Heritage Overlay Place
- Historic Heritage Overlay Extent of Place
- Special Character Areas Overlay Residential and Business
- Waitakere Ranges Heritage Area
- Unitary Plan Precinct with heritage-related value

Great Barrier Island Inset

Kaipara Harbour

Wellsford

Warkworth

Hauraki Gulf / Tīkapa Moana

Helensville

Kumeu

Takapuna

Waitematā Harbour

Manukau Harbour

Manukau

Clevedon

Howick

Pukekohe

Waiuku

Hunua Ranges

0 5 10 km

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Map published 5 June 2018

Adapt to a changing water future

Auckland is surrounded by rich marine and freshwater environments.

They provide:

- clean drinking water
- opportunities for recreation
- habitat for diverse species
- flood resilience and natural treatment of run-off
- economic development through tourism.

Water quality and quantity are both significant issues that will escalate as the population grows and the impacts of climate change become increasingly apparent.

We must do things differently if we are to ensure wildlife, people, and rural and urban businesses have adequate clean water supplies.

In both urban and rural areas, water quality has declined and freshwater environments have been compromised. They are showing the stress of decades of pressure – which will continue to increase if we do not change what we do.

The reduction of water quality has also affected the marine environment. This has resulted in poor ecological and amenity outcomes and, in some areas, beaches where it is unsafe to swim due to wastewater overflows.

More extreme weather events, as a result of climate change, mean that at times there will be too much water in some places. That is, parts of Auckland may experience flooding and coastal inundation.

At other times there may not be enough water and we will become increasingly reliant on the resources of neighbouring regions – who will be facing the same problems.

How this can be done

Auckland needs to proactively adapt to this changing water future and develop long-term solutions.

We can:

- start working towards solutions for meeting Auckland's long-term drinking water requirements. This may include finding alternative supplies and will require reducing consumption
- minimise our negative effects on water quality and quantity, in both freshwater and marine environments
- actively work to improve swimmability across the region
- maintain and improve water quality in freshwater environments
- improve our ability to manage and respond to the water-related impacts of climate change such as flooding and droughts
- consider the impacts of a changing water future on the industries and activities that rely on water, such as agriculture, power generation and food processing.

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Use green infrastructure to deliver greater resilience, long-term cost savings and quality environmental outcomes

Infrastructure is a large part of any urbanised land. Using green infrastructure means replacing or supplementing traditional built infrastructure with natural and semi-natural systems.

For example, restored wetlands and roadside raingardens can be used to purify water, as well as minimise floods and erosion.

Increasing our urban forest by planting more trees can:

- reduce the urban heat island effect
- deliver enhanced air quality
- enhance people's mental and physical wellbeing.

These natural systems are often able to perform more effectively and efficiently than traditional 'hard' infrastructure solutions. They also provide opportunities to improve degraded natural environments, improve local amenity and enhance long-term environmental resilience.

As well as these benefits, the overall cost of green infrastructure can also be a fraction of constructed infrastructure solutions, due to lower ongoing maintenance costs.

These approaches help us to minimise the impacts of climate change, by improving our resilience and allowing infrastructure to adapt to change.

How this can be done

To realise the opportunities that green infrastructure can provide, we can:

- ensure our decision-making gives sufficient consideration and weight to the value of the natural environment and its role in delivering outcomes
- identify green infrastructure opportunities at the early stages of any development. This is important to ensure existing natural systems are enhanced rather than replaced, and to maximise the integration of other functions, such as public amenity and active transport opportunities
- engage with local communities to provide the strong sense of collective ownership that supports long-term usefulness.

Implementing the Environment and Cultural Heritage outcome

Implementation partners

Mana whenua, Auckland Council, central government, and community organisations are key partners in the ongoing protection and enhancement of Auckland's Environment and Cultural Heritage.

As kaitiaki, mana whenua have the responsibility of ensuring that the spiritual and cultural aspects of resources are maintained for future generations. This involves the ongoing protection of mauri from damage, destruction or modification.

Central government has several important functions. The Ministry for the Environment (MfE) has multiple implementation functions arising from a range of legislation including the Resource Management Act, Climate Change Response Act, and Environmental Reporting Act. MfE contributes to Auckland's environmental well-being through the following activities:

- provision of environmental management laws, regulations and national environmental standards
- national direction through national policy statements and strategies
- guidance and training on best practice
- information about the health of the environment.

In addition, central government is also involved in day-to-day environmental management activities in Auckland through the Department of Conservation's operational work programmes.

Auckland Council has several policy and regulatory levers, undertakes waste management and waste minimisation programmes, education and monitoring, and funding of grants for environmental enhancement.

Transport is a key contributor to the health of Auckland's environment. As Auckland Transport and the New Zealand Transport Agency make improvements to Auckland's transport system, there is an opportunity to deliver more sustainable options like low-emission vehicles, improved public transport frequency and green infrastructure approaches.

Wastewater and stormwater infrastructure play an important role in improving the quality of the environment. Watercare is a significant partner in ensuring Auckland's wastewater goals are met.

Non-governmental and community organisations involved in sustainability and environmental projects are important partners in delivering on-the-ground, local projects, such as working with businesses on sustainable practices, restoration planting and stream and beach clean-ups.

Individuals, businesses and developers can support the uptake of green technologies, like solar energy and better building technologies.

Auckland Council will develop an implementation approach for this outcome working alongside our key partners and stakeholders. This will be built on existing programmes and ensure all new elements introduced in the Auckland Plan 2050 are planned for.

Mechanisms used to work together

The Auckland Unitary Plan and structure planning process provide a framework and method for delivering positive environmental outcomes.

Environmentally sensitive approaches such as water-sensitive design, quality urban design and future-proofed infrastructure can be embedded in developments from the start, rather than retrofitting later or doing expensive restoration projects.

Collaboration between agencies, and the development of region-wide strategic approaches, can be achieved through fora such as the mana whenua Kaitiaki Forum, Hauraki Gulf Forum, and the Land and Water Forum.

Supporting strategies and plans

Auckland Growing Greener

Auckland Growing Greener[175] prepared by Auckland Council, is an ongoing initiative to restore and protect the environment while providing for the vitality and energy that a growing population brings. It has been developed in consultation with mana whenua, and anticipates a partnership model to develop and deliver identified commitments.

Low Carbon Auckland

Low Carbon Auckland[176] prepared by Auckland Council, together with key industries and partners, is a strategy for transitioning Auckland to a liveable, low carbon future.

Indigenous Biodiversity Strategy

The Indigenous Biodiversity Strategy[177] provides a framework for protecting and enhancing biodiversity, delivering on Auckland Council's statutory responsibilities.

Waste Management and Minimisation Plan

The Waste Management and Minimisation Plan[178] supports reducing waste, reusing and recycling more to achieve a zero waste goal by 2040.

Tūpuna Maunga Integrated Management Plan

The Tūpuna Maunga Integrated Management Plan[179] is a single integrated management plan to set the direction for maunga restoration, protection and management.

Asset Management Plans

- Auckland Council's Stormwater Asset Management Plan[180] determines how stormwater is managed, and supports the use of green infrastructure and minimisation of contaminants making it into the environment.
- The Watercare Asset Management Plan[181] plays a critical role in setting the framework for a safe and resilient Auckland water supply.
- The Open Space Strategic Asset Management Plan[182] recognises that as the city grows, there will be increasing demands on our parks and open space networks.

Hauraki Gulf Marine Spatial Plan

The Hauraki Gulf, known by many as Tikapa Moana and by others as Te Moananui ā Toi, is rightly recognised as a national taonga. Sea Change – Tai Timu Tai Pari[183] is a marine spatial plan designed to safeguard this treasure.

Auckland Council's strategies, policies and plans have acted as an important input in the development of Auckland Plan 2050. With the adoption of the plan, the council will assess these documents to ensure they remain fit for purpose.

How to get involved

- Get involved with community environmental projects[184] co-ordinated by Auckland Council
- Find out about options to manage your waste[185]
- See what you can do for the environment[186] or find out how you can get involved with. freshwater projects[187]
- See how you can choose plants to support ecosystems[188]
- For businesses, get involved with organisations like the Sustainable Business Network[189] and Sustainable Business Council[190]

Supporting information

State of Environment Reporting[191] measures the quality of the environment using long-term Auckland-wide datasets covering air quality, marine, freshwater and terrestrial environments.

Auckland Council's assessment of potential impacts of different growth scenarios on Auckland's natural environment (2017) can be found on the Knowledge Auckland website.[192]

The Hauraki Gulf Forum[193] publishes an independent State of the Gulf report every three years.

Ministry for the Environment's long-term environmental goals[194]

For more information on the role, purpose, implementation activities and monitoring and reporting of Ministry for the Environment in relation to air, climate change, freshwater, marine environments, land, waste or the Resource Management Act go to the Ministry for the Environment website.[195]

Find out more about the Environmental Protection Authority.[196]

Supporting information

Green Infrastructure

Our cultural heritage

Climate change

Ridge to Reef: Auckland's marine environments and their relationship to the land

Green infrastructure

What is green infrastructure?

Green infrastructure can have many forms, such as:

- a widened and replanted stream bank that helps to manage floodwater
- a permeable paved path that reduces the amount of stormwater entering the piped system
- a row of street trees or a whole urban forest
- a green roof or vertical wall
- a rain garden or an urban farm.

Broadly, the term refers to any system that fuses natural and built environments to reduce the environmental impact of core infrastructure and the built environment.

Further information on green infrastructure is available at:

United States Environmental Protection Agency website[197]

ESRI Living Atlas of the World website[198]

Examples of green infrastructure

Green roof and swale at the Auckland Botanic Gardens

The Auckland Botanic Gardens has planted native plants on the roof of its public toilet facilities, that absorb and treat rainwater.

This 'living roof' is combined with a vegetated swale - an area designed to manage water runoff - which further

Green roof and swale at the Auckland Botanic Gardens

slows down and filters the flow of water, delivering relatively clean water to lakes in the gardens.

The swale works by increasing the time available for large sediment particles and contaminants to settle and be absorbed by the soils and plants.

Read more on the Auckland Botanic Gardens website.[199]

Natural stormwater solution, Te Auaunga Awa/Oakley Creek

Significant flooding issues affected a 1.3 kilometre section of Te Auaunga Awa/Oakley Creek[200] in Mt Roskill and Mt Albert. To overcome these issues, Auckland Council replaced the existing concrete channel with a wider, naturalised stream channel.

The use of natural plants – native trees, ferns and flaxes – increased the water-carrying capacity of the watercourse and provided greater potential for stormwater to naturally soak into the ground.

This had several effects:

- reduced the effects of flooding on surrounding areas
- provided natural filtration and cleaning of collected stormwater
- reduced the pressure on stormwater systems further downstream.

The landscaping and planting was designed to support the rehabilitation and restoration of native ecosystems in the area. It also established an accessible river park for the local communities.

By using a natural stormwater solution with greater and more flexible carrying capacity, the potential for climate change and population growth to increase the rate and intensity of flooding events was also alleviated.

The project involved:

- increasing the stream capacity by removing the existing concrete channel and providing a wider naturalised stream channel
- rehabilitating of Te Auaunga Awa / Oakley Creek through landscaping, planting and water quality improvement
- replacing Beagle Ave and Richardson Road culverts with new bridges to improve stormwater capacity
- constructing two new pedestrian bridges across the stream
- upgrading the park, including new paths and cycleways, an outdoor classroom and adventure playground and traditional Māori play elements.

Urban forests

Green infrastructure is often thought of as specific and isolated things, such as a green roof, or a rain garden. However, bigger systems can also support green infrastructure objectives.

For example, urban forest initiatives that focus on increasing the overall tree canopy cover of cities also deliver a range of benefits to the environment and local communities. Increasing the tree canopy can reduce the urban heat island effect, deliver better air quality and improve residents' mental and physical wellbeing.

The Auckland Mayor's Million Trees Programme[201] aims to plant a million trees across Auckland over a three year period.

Auckland Council is also currently developing an Urban Forest Strategy that seeks to:

- green urban Auckland
- offset carbon emissions
- protect water quality by planting along rivers and coastlines
- improve our living environment.

Our cultural heritage

What is cultural heritage?

Cultural heritage is the term used to describe the ways of living developed by a community and passed on from generation to generation.

These include:

- customs
- practices
- places
- objects
- artistic expressions
- values.

It is also the legacy of knowledge, things and intangible attributes of a group or society passed from generation to generation. Cultural heritage includes:

- tangible culture such as buildings, monuments, landscapes, books, works of art, and artifacts
- intangible culture such as folklore, traditions, language, and knowledge
- natural heritage including culturally significant landscapes and biodiversity.

Auckland's cultural heritage

Auckland's cultural heritage is rich and diverse and includes Māori and non-Māori heritage.

It includes the Auckland War Memorial Museum/Tāmaki Paenga Hira and the Auckland Domain/Pukekawa.

It encompasses the extensive archaeological landscapes of

- Āwhitu Peninsula
- the Tūpuna Maunga and other Auckland Isthmus maunga
- Ōtuataua stone fields
- Franklin volcanic fields.

It includes post-war architecture such as the Group Architect houses, engineering feats such as the Grafton Bridge, and our Victorian and Edwardian buildings.

Our cultural heritage places comprise sites, features, areas, townscapes, streetscapes, landscapes, settlements, and other historical places.

Why is our cultural heritage important?

Many Aucklanders are passionate about our cultural heritage.

Our cultural heritage adds to the richness of our lives by reinforcing our sense of history and identity, and helps define what is distinctive about Auckland.

It enriches our environment, provides authenticity to our spaces, and continuity in our communities. Our cultural heritage is a source of pride.

Cultural heritage is of fundamental importance to tangata whenua, their culture and traditions.

How is cultural heritage addressed in the plan?

Cultural heritage is addressed in a number of parts of the Auckland Plan 2050.

Recognising the value of our cultural heritage and the importance of its protection is a core component of the Environment and Cultural Heritage outcome.

The key role that our shared cultural heritage plays in building cohesive and connected communities is addressed in the Belonging and Participation outcome. The specific role of built heritage in shaping our homes, places and spaces is addressed in the Homes and Places outcome.

How is cultural heritage managed?

Managing heritage comprises three key phases:

Understanding and sharing:

- providing a robust information base
- identifying, protecting and conserving our significant places – locally, regionally, nationally, and internationally
- encouraging greater understanding and enjoyment.

Investing:

- informing development, investment, and regeneration
- inspiring high quality and responsive design
- recognising and reinforcing the contribution to the character, quality, authenticity, and sustainability of our homes and places
- promoting economic development, including through appropriate use of existing heritage places.

Empowering collective stewardship:

- empowering the community and tangata whenua in active kaitiakitanga.
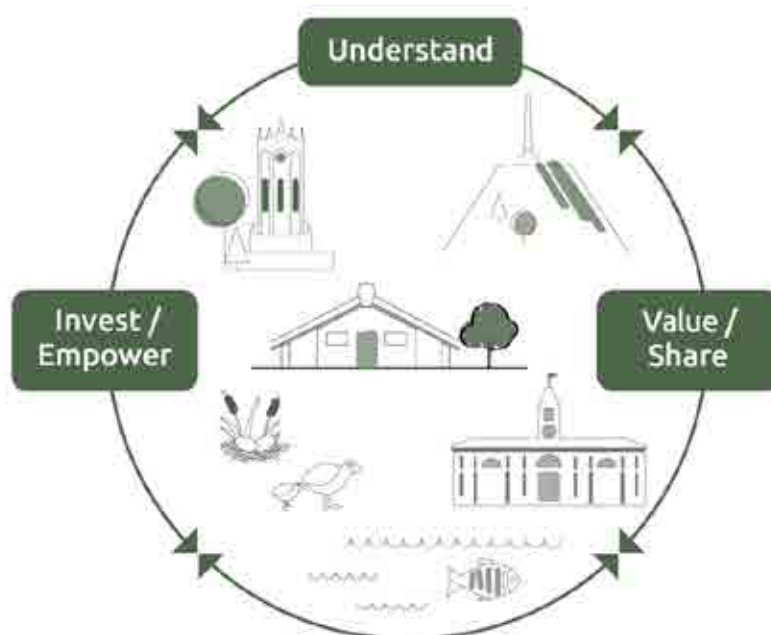
Climate change

Overview

Auckland faces climate-related risks such as heat waves, droughts and tropical storms.

The climate is constantly changing as a result of natural processes, and there is strong scientific consensus that greenhouse gas emissions (GHG), particularly from the use of fossil fuels, are causing the climate to change at unprecedented rates.

While the effects of climate change will become more severe and pronounced, local and global records for rainfall and temperature are already being broken on a regular basis.

How we address the implications of climate change will affect Auckland and Aucklanders for decades to come.

We must:

- tackle climate change by making significant reductions in global GHG emissions and moving to a low carbon economy
- develop ways to protect and increase our ability to withstand and recover from the adverse effects of a changing climate.

Mitigating and adapting to climate change is a challenge.

It means doing things that will have wider positive effects, such as reducing the environmental impact of transport, creating more green space, planting more street trees, and having cheaper and more reliable electricity and water.

Auckland needs to be committed to a low emissions and a low carbon future to realise long-term economic, social and environmental benefits. This requires multi-sector collaboration.

Key climate-related risks for Auckland include:

- our natural and human made systems won't work as well as a result of changing climate conditions or damaging extreme events
- direct impacts on biodiversity, cultural heritage, productivity or changes in market demands for goods and services
- unequal distribution of impacts, with those such as the elderly, the very young, those living in poverty or with chronic health issues more likely to be negatively affected.

Key climate-related opportunities for Auckland include:

- innovation and savings through the transition to a low carbon economy but also significant risks to our competitiveness if we are left behind
- significant cost savings from embedding long-term climate change considerations into planning decisions
- significant cost-savings from reducing the need for major retrofitting or land-use changes as impacts become more frequent and severe.
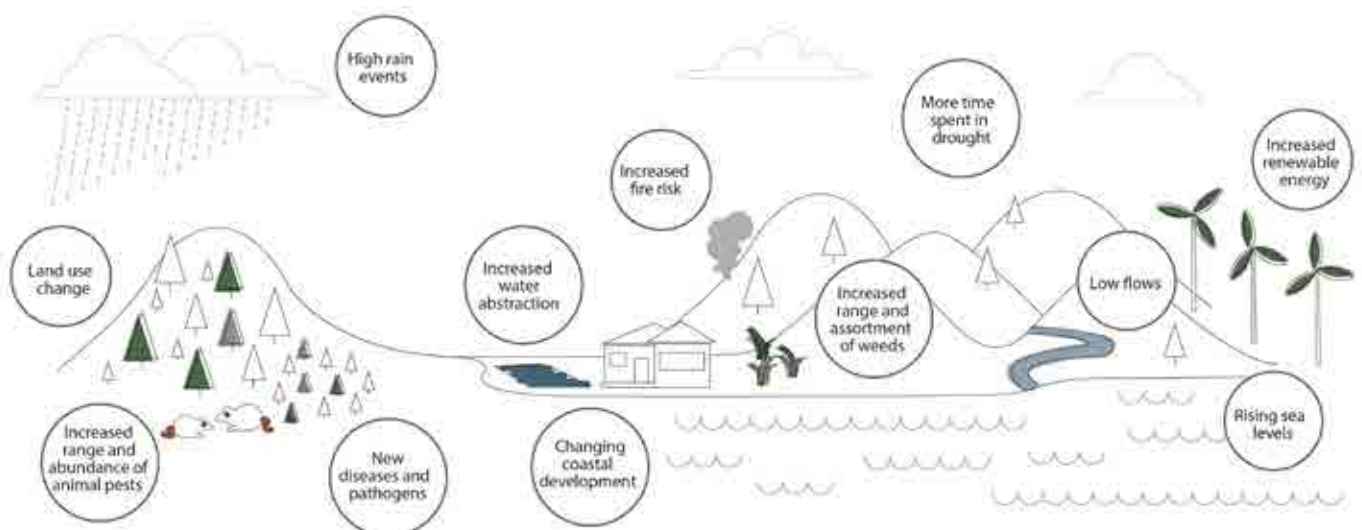
The international context

Increasingly stringent international climate change policy affects New Zealand, and may reduce our ability to sell products and services in important economic sectors and export industries including tourism and agriculture.

For example, there is a risk that rising climate change awareness could undermine the willingness of people overseas to buy New Zealand produce, due to issues such as an increase in conscious consumerism, awareness of water quality impacts of dairying as well as concerns around 'food miles'. It may also reduce the viability of New Zealand as a tourist destination.

New Zealand and Auckland policy frameworks

New Zealand is a signatory to the United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement and has committed to reduce GHG emissions by 30 per cent below 2005 levels by 2030. Read more on the Ministry for the Environment website.[202]

Auckland became a member of the C40 Cities Climate Leadership Group in 2015, a strategic global network of over 90 cities working together to reduce GHG emissions and climate risks. Find out more on the C40 Cities website.[203]

Research and analysis by the C40 Group has identified the upper limit of carbon that cities can emit if the temperature rise scenarios in the Paris Agreement are to be achieved. This 'carbon budget' was divided amongst member cities.

For Auckland this means we must dramatically increase action to reduce emissions. Our current emissions, while starting to decrease in per capita terms, are still increasing overall along with that of New Zealand as a whole, demonstrating the need for a step up in ambition.

Auckland Council's energy resilience and low carbon action plan, Low Carbon Auckland[204] sets a target for Auckland to achieve a 40 per cent reduction in GHG emissions by 2040 (based on 1990 levels).

Urgency

The projected long-term effects of climate change are that they will become more severe.

However, the immediate effects already pose significant risks and opportunities.   Find out more about Auckland region climate change projections and impacts.[205]

The scientific and economic consensus, notably the Stern Review into The Economics of Climate Change[206], and research by the World Bank and by the New Zealand Treasury, show that the longer we delay reducing emissions, the more expensive and difficult it will become.

How Auckland can respond to climate change

Auckland's urban areas

In 2011 the United Nations estimated that cities account for 70 per cent of global GHG emissions. They are also strongly affected by climate change. Read more on the ZDNet website.[207]

Over 90 per cent of all urban areas are coastal, putting most of them at risk of flooding from rising sea levels and powerful storms. In response, cities around the world are leading the way in moving to a low-carbon future.

While Auckland's membership of the C40 Group supports actions in our urban area, we also need to be conscious of the role of our rural areas in combatting climate change.

Auckland's rural areas

Only six per cent of Auckland's GHG emissions come from agriculture. However, transforming forestry, agriculture and natural carbon assets are key opportunities to enhance Auckland's resilience to climate change and reduce our GHG emissions.

Opportunities include:

- growing the extent of our urban and regional forests
- turning forest and organic residues into energy
- enhancing local food production
- exploring the potential for coastal and marine areas to trap carbon.

Auckland Council's role

Auckland Council is committed to working with central government, business and local communities to ensure we are ready to deal with the risks, uncertainties and opportunities associated with critical climate change and energy issues.

Auckland Council has reduced energy, waste production and water use through its own operations, resulting in between $1.5 to $2 million annual savings.

For further information on Auckland Council's organisational GHG emissions reduction, see the Low Carbon Auckland updates[208] on the council website.

Inventory of Auckland's GHG emissions

Auckland Council has been monitoring and reporting on Auckland's GHG emissions through Low Carbon Auckland.[209]

The inventory provides guidance on Auckland's low carbon action investment priorities and tracks progress against our emissions reduction targets.

The emissions inventory shows that the vast majority of Auckland's GHG emissions arise from:

- transport
- burning fossil fuels for electricity generation and for other uses like domestic heating - so-called 'stationary energy' sources.

New Zealand already produces about 80 per cent of its electricity from renewable resources. We will need to maintain that percentage, at the very least, as our population grows and energy demands increase. Otherwise we will become increasingly reliant on imported fossil fuel supplies, and vulnerable to increases in the cost of energy.

Adapting to a changing climate

Adapting to a changing climate requires flexibility and adaptability in all our decisions.

For example, future development of land will need to be located away from coastal and low-lying areas vulnerable to sea-level rise, flooding and coastal erosion.

The risk and opportunities map shows the areas of land that may be affected by sea-level rise in the future

We may also need to design our buildings and infrastructure differently.

Other opportunities to embed climate change resilience include the use of green infrastructure and adapting to a changing water future.

Because of transport's contribution to GHG emissions, transforming how we travel is one of the key mechanisms to reduce the overall carbon footprint.

In addition, improving energy efficiency and accelerating the shift to renewable energy resources will help to address the stationary energy component of Auckland's emissions profile.

Whatever measures we take to reduce GHG emissions, some impacts are unavoidable due to emissions already in the atmosphere.

We therefore need to prepare, build understanding and increase resilience across our environment, economy and communities.

As the effects of climate change are still uncertain and subject to change over time, it will be necessary to monitor climate change impacts and projections and to gather local environmental data.

This will enable us to identify the most appropriate climate change responses in relation to the risks, costs and benefits involved, and to adapt plans as more information becomes available.

Low carbon economy

Evidence and economic modelling indicate that shifting to a low carbon economy – an economy which reduces the causes and effects of climate change – has numerous benefits.

There are many short-term challenges associated with this shift, yet it also has the potential to deliver long-term, resilient economic growth and increased productivity.

Many components of a low carbon economy – more sustainable and active transport choices, cleaner energy, greater public green space provision, and a higher-quality and safer built environment – also deliver improved economic and social wellbeing outcomes.

A low carbon economy reduces energy insecurity and potential increases in the cost of power. This is particularly important since many low-income families spend a disproportionate percentage of income on energy.

There are also well-documented air quality and health costs associated with the burning of fossil fuels.

What the shift to a low carbon economy means for jobs is not certain.

Some sectors may see job losses and affected workers may need training and new skills. Some new industries will be created. Others will survive and do better.

Overall, the investment in more resilient infrastructure is almost certain to drive both job creation and growth in our gross domestic product as well as stimulate growth and innovation throughout the economy.

Circular economy

The concept of a circular economy is one that focuses on restoring and recapturing value within a product's lifecycle.

A circular economy finds new ways to reduce waste. It places more emphasis on building linkages between businesses delivering better outcomes for people and planet as well as profit for businesses.

A circular economy can also be defined partly by what it is not – it's not an inefficient and wasteful linear economy that simply extracts, consumes, and disposes.

Like any economy, a circular economy can exist at any scale, starting locally and expanding into organisational supply chains and the global economy. True circularity maintains strong local roots to deliver enduring local benefits and value.

Economic and environmental opportunities from creating a more circular economy are clear and enticing. The globally-recognised Club of Rome found that countries from France to Finland can simultaneously grow jobs and reduce carbon emissions.

For instance, Finland could cut up to 70 per cent of its carbon emissions, France could gain half a million jobs, and Sweden could drop emissions by two thirds while adding jobs at three per cent of the labour force.

Read more on the Club of Rome website[210]

Figure 30 - Circular economy
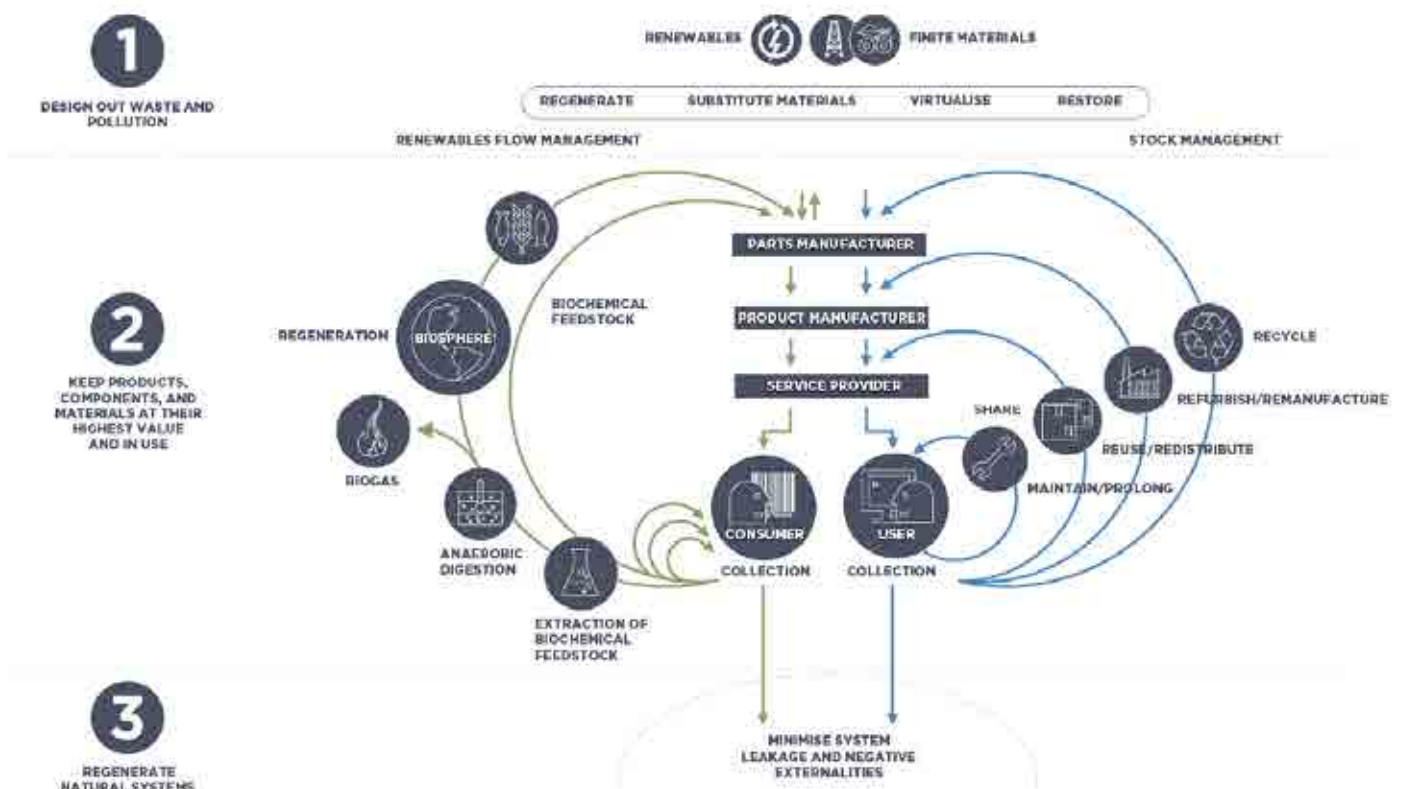
Ridge to Reef: Auckland's marine environments and their relationship to the land

Auckland is defined by its three large harbours - the Hauraki Gulf, the Kaipara and Manukau harbours.

Smaller harbours, such as the Mahurangi and Whangateau harbours contribute further to Auckland's coastal setting.

Our marine environments are taonga. They are valued by Aucklanders for the range of uses they support, and for their intrinsic value as unique environments, which contribute to Auckland's identity.

They support a range of uses that include:

- habitat for unique species
- recreation
- fishing
- transport
- marine farming.

Marine environments are, however, under pressure from what happens in and on the water and, very importantly, what happens on the land. Our land and marine environments are connected, and depend on each other. All on-land activities have downstream impacts on our harbours.

Climate change will impact marine environments, which will in turn impact the land. We can expect more frequent storm events, increased risk of coastal erosion, and sea-level rise, which will impact on-land activities near the coast.

Read more at Knowledge Auckland[211]

How on-land activities impact our harbours

Stormwater, wastewater, litter, sediment and heavy metals all eventually end up in the harbours, and impact on their ecology. This compromises the things we value about the marine environment, like clean beaches, safe water for swimming and abundant kaimoana.

Sediment runoff from the land has a significant impact on streams and on the marine environment. Excessive sediment generation blankets important habitats, like seagrass meadows and shellfish beds. Sediment also affects water clarity, making it less pleasant for swimming and affecting plant growth.

Nutrients, especially nitrogen and phosphorus which are key components of fertiliser, have serious impacts as they can increase algae growth.

Impervious surfaces in our urban environments, like roads and carparks, collect heavy metals such as lead, nickel and zinc, which are quickly washed into streams and stormwater systems and then into the marine environment when it rains. Heavy metals are toxic to both people and animals, even at relatively low concentrations.

Even the relatively low population density across Auckland, and the infrastructure that supports it, has had a significant effect on our marine environment. As the city grows, develops and intensifies, we need to embed new ways of managing its impacts.

In some cases, growth is a great opportunity to improve the downstream impacts of land uses choices, for example, by improving how we manage and treat stormwater and wastewater.

In other cases, it creates additional pressure, with increased sediment generated during development, and more impervious surfaces resulting in more contaminants being washed into waterways.

Waste from urban areas also has an impact on marine environments.

Just like other contaminants, waste such as plastic bottles and packaging are easily transported downstream, eventually ending up in the sea. This waste affects many species, including birds, fish and marine mammals. It also reduces people's enjoyment of the marine environment.

To protect and enhance these special places we need to take a 'ridge to reef' approach, recognising that everything that happens on the land has a downstream impact.

Hauraki Gulf and Waitematā Harbour

Auckland's east coast is defined by the Hauraki Gulf and Waitematā Harbour. The Hauraki Gulf is internationally recognised as a significant marine environment.

In 2000, the Gulf's importance and diversity of uses was recognised by the creation of the Hauraki Gulf Marine Park. The marine park designation is for the protection of nationally and internationally important environments and recognises the Hauraki Gulf's quality as a habitat for species unique to New Zealand. Read more about the Hauraki Gulf Marine Park Act 2000 on the New Zealand Legislation website.[212]

The Hauraki Gulf supports diverse uses from aquaculture to tourism and recreation. Some of its islands, in particular Waiheke, support high levels of tourism, and some, such as Hauturu / Little Barrier, provide pest-free habitat for threatened species. The islands are treasured icons of the region.

The Gulf's beaches are loved as places to swim, surf and walk.

The range of habitats, from intertidal zones to open sea, provide habitat for species as diverse as shellfish, snapper, dolphins and whales, and the Gulf is an internationally significant seabird habitat.

Four marine reserves in the Hauraki Gulf also protect habitats and provide recreational opportunities, such as snorkelling at Goat Island in the Cape Rodney – Okakari Point marine reserve. Find out more on the Department of Conservation website.[213]

Auckland Council monitoring and research has tracked the impact of urban areas on the marine environment. The upper Waitematā, in particular, shows the stress of years of urban run-off, particularly through heavy metals in sediment, increased muddiness and high levels of *E*.coli bacteria at beaches, making them unsafe for swimming. Some beaches are now permanently closed for swimming. Find out more by reading Wai Ora-Healthy Waterways[214] and is your beach safe for swimming.[215]

Kaipara Harbour

Auckland's west coast, home to rugged black sand beaches, is also home to the Kaipara and Manukau harbours. The Kaipara is New Zealand's largest harbour, with over 800 km of coastline. Auckland Council and the Northland Regional Council share responsibility for the harbour.

The Kaipara is formed from a system of drowned river valleys, and is broad and shallow, famous for its unpredictable currents, shifting sands and treacherous entrance.

The Kaipara is home to diverse habitats, like seagrass in the shallow, upper reaches that support young snapper, and high current environments at the entrance that attracts large predators.

The Kaipara's catchments are mostly rural, with agriculture and forestry land uses dominating. There are however, urban and future urban areas, like Kumeu, Huapai and Helensville within the catchment.

These towns are forecast to grow and expand over the next 30 years. The key pressures on the Kaipara are sediment accumulation, *E*.coli bacteria and nutrient run off.

Manukau Harbour

Further south, the Manukau Harbour shares lots of similarities with the Kaipara, such as a significant tidal range and shallow form.

The Manukau's catchment is significantly more developed, with urban and industrial land use affecting its quality.

The Manukau supports a range of habitats for shellfish, fish and seabirds, and is fringed on its north-west corner by the Waitakere Ranges regional park, a significant environmental and recreational asset for the region.

Managing the pressures on our marine environments

The health of the harbours is an important element to Auckland's overall success in protecting the environment.

The choices Auckland makes about where and how we develop on the land, has a direct impact on the health of our harbours. The Auckland Unitary Plan[216] seeks to protect and enhance the marine environments, through setting rules for what activities can occur where.

Alongside that, there are other programmes underway which aim to improve the health of our marine environments. Auckland Council's water quality programme[217] provides an overall framework for driving better water outcomes, for which a protected and enhanced marine environment is a key goal.

The following are some examples of programmes underway:

A collaborative Marine Spatial Plan for the Hauraki Gulf: SeaChange Tai Timu Tai Pari

This plan was produced by an independent working group, and released in December 2016.

SeaChange[218] is non-statutory and non-binding on any organisations. The plan sets an ambitious vision, aiming to ensure that the positive health of the Hauraki Gulf is the key planning objective for all activities in the gulf and in all its catchments. The objectives of the plan provide a basis for collaboration between organisations active in the Gulf.

The Wai Ora Healthy Waterways programme

The Wai Ora Healthy Waterways programme[219] was established to implement the National Policy Statement for Freshwater Management.

The programme's objectives are to support communities in caring for freshwater and coastal environments, address the complex water issues in Auckland and meet the Auckland Unitary Plan's water management requirements.

The approach recognises that what happens on the land has direct impacts on the marine environment.

Integrated watershed plans

These plans are developed in partnership by the Auckland Council and local communities. They are designed to improve both freshwater and marine environments.

The plans are based on assessing the current state of catchments, the values and goals that the community identifies for the catchment, and take into account their implementation cost.

Improving our freshwater environments has direct, downstream impacts on marine environments. The plans are being developed progressively for each watershed.

Improvements to infrastructure

Improved infrastructure delivers better outcomes for our marine environment. As Auckland's population has grown, there has been increasing pressure on wastewater and stormwater networks, resulting in the systems overflowing, severely reducing marine water quality, limiting the number of days it's safe to swim and affecting the safety of kaimoana.

These networks also struggle to cope with the volumes of litter they must trap.

Watercare's asset management plan

Watercare's asset management plan[220] details how it will upgrade the water and wastewater infrastructure to improve environmental impacts and to keep up with forecast population growth and urban spread. Auckland Council management of stormwater infrastructure is detailed in its Stormwater Asset Management Plan.[221]

Water sensitive design

This design places water quality and water conservation at the heart of urban design and development. The goal is to protect and enhance natural freshwater systems, sustainably managing freshwater resources and mimicking natural processes.

Implementing water sensitive design has benefits for freshwater and marine receiving environments. Water Sensitive Design is supported in the Auckland Design Manual.[222]

State of environment monitoring programmes

Auckland Council operates several long-term programmes that monitor the health of the Hauraki Gulf. These programmes report on a range of marine data, including water quality, ecology and sediment.

These marine water programmes are complemented by a freshwater monitoring programme, and data is reported regularly[223] The Hauraki Gulf Forum[224] publishes an integrated triennial report, which includes data from its member organisations, such as the Department of Conservation, Ministry of Primary Industries and local councils.

Safeswim monitoring programme

The Safeswim website[225] currently provides Aucklanders with water quality forecasts and up-to-date information on risks to health and safety at 84 beaches and 8 freshwater locations around Auckland.

Safeswim is a joint initiative between Auckland Council, Watercare, Surf Lifesaving Northern Region and the Auckland Regional Public Health Service. The programme is being upgraded to provide improved real-time information, and to integrate other information such as rainfall, tides and currents.

Opportunity and Prosperity

Auckland is prosperous with many opportunities and delivers a better standard of living for everyone.

DIRECTION	FOCUS AREA
Direction 1 Create the conditions for a resilient economy through innovation, employment growth and raised productivity	**Focus Area 1** Harness emerging technologies and ensure equitable access to high quality digital data and services
Direction 2 Attract and retain skills, talent and investment	**Focus Area 2** Ensure regulatory planning and other mechanisms support business, innovation and productivity growth
Direction 3 Develop skills and talent for the changing nature of work and lifelong achievement	**Focus Area 3** Advance Māori employment and support Māori business and iwi organisations to be significant drivers of Auckland's economy
	Focus Area 4 Leverage Auckland's position to support growth in exports
	Focus Area 5 Increase educational achievement, lifelong learning and training, with a focus on those most in need

Opportunity and Prosperity explained

Auckland's economy needs to be constantly agile and innovative. This is particularly important in an age of rapid technological change.

International connectivity is also critical to Auckland's economy and success. We must deliver products and services to markets across the globe in timely and sustainable ways.

In recent decades there has been an increase in Asia's prosperity. Auckland's proximity to Asia provides multiple opportunities for developing trade and economic engagement, as described on the Tripartite Economic Alliance page.

We also have immense potential in the growing numbers of young people living in Auckland who will need to play a significant role as future innovators and entrepreneurs within the economy.

Disruption and a changing world

Technology is already disrupting business models, employment opportunities and consumer behaviour. The predicted scale of change is so great it has been described as the fourth industrial revolution.

This revolution will continue to alter both labour participation and productivity. The scale and rate of change, although difficult to quantify, will affect many industries in different ways and at different speeds.

Innovation among enterprises of all sizes can provide Auckland with the resilience to adapt in a rapidly changing world.

The potentially high-quality employment opportunities that come from innovation must however be connected across Auckland by good transport and digital networks.

Changes for individuals and organisations will be both positive and negative as new jobs are created and existing jobs disappear.

It is often predicted that automation will disproportionately affect low skilled jobs, yet recent developments in artificial intelligence indicate that jobs of all types and levels are likely to be affected.

Therefore, while some of the most vulnerable in society and those least able to adapt to change may be affected first, technological developments will affect everyone.

Education, training and skills

To prepare Aucklanders for these shifts, we need to develop timely training and re-training opportunities. Targeted investment in education, training and skill development for all ages is vitally important.

Higher levels of literacy, numeracy, and other skills along with educational achievement allow for more people to participate in the economy, to find quality work and to raise their income levels.

Children and young people in particular need access to first-rate formal and informal education to set a solid foundation for development throughout their lives.

Having the right skills for the future requires everyone involved to work together to provide appropriate skill development in innovation areas. These include the creative and information technology sectors.

We must also fill skill gaps such as those in the construction sector and in core public services such as nursing and teaching.

Culture and practices need to change to ensure learning opportunities are available, starting in early childhood and extending throughout life, so that continuous learning becomes second nature.

This will provide people with the life skills they need to be fulfilled and to thrive in their families, communities and in their work.

How we will measure progress

We will track progress against a set of measures.

The measures for this outcome are:

- labour productivity
- Aucklanders' average wages
- employment in advanced industries
- zoned industrial land
- level of unemployment
- use of internet in the home relative to income
- educational achievement of young people.

Create the conditions for a resilient economy through innovation, employment growth and raised productivity

Auckland already has a strong economic sector. However, it has a strong focus on domestic consumption, and productivity levels are low.

Innovation and entrepreneurship will strengthen Auckland's economy in a globally competitive environment, enabling the economy to better meet the needs of our growing population.

Innovation is a means of lifting productivity that leads to increased wages and the creation of new jobs, even as existing ones disappear.

See Map 6 - Jobs in advanced industries

It is about new ideas and new ways of doing things in response to opportunities. In an economic sense, industry sectors, businesses and entrepreneurs innovate in a number of ways:

- introducing a new or improved product, service or process
- opening up a new market
- adopting a new technology
- changing the way they organise themselves.

The creative sector contributes to innovation and growth in other sectors as it generates creative capacity in business and services across Auckland as a whole.

For more on this, read the Creative Sector 2017: Industry Snapshot for Auckland[226].

Innovative business practices and technological advances can create the economy of the future. Competitive entrepreneurial activity can drive economic progress, but to be truly successful Auckland needs sustainable prosperity that puts people and the environment at the centre of economic progress.

To do this we need a socially responsible and environmentally sustainable economy that enables increased profit, productivity, resilience and job growth. Such an economy reduces environmental risks, supports green technology and mitigates the potential impacts of growth and development.

The ability to innovate becomes even more important if Auckland is to compete globally. Creating the conditions for innovation, employment growth and raised productivity requires collaboration between all stakeholders, including our neighbouring regions.

A big factor in raising productivity is the sophistication of the business sector. Visit the World Economic Forum website, The Global Competitiveness Report 2016-2017.[227]

One of the other ways both productivity and resilience can be improved is through how we plan for business locations.

The city centre is expected to remain the primary business centre for Auckland. However, the Development Strategy's multi-nodal approach emphasises three other 'nodes' as major business assets.

These nodes will provide flexibility and choice for business across the region by providing business opportunities and business land in close proximity to deep labour pools with an interconnected transport network.

This has the potential to make more jobs and educational opportunities accessible to more people.

Though of a much smaller scale, job creation and economic performance is equally important at a local level. Initiatives to support this are often driven by local boards.

For more information read Local Board Plans[228].

Businesses and entrepreneurs ultimately determine the levels of innovation. Central government, and to a lesser degree local government, need to ensure the regulatory environment is straightforward, flexible and responsive so firms can take advantage of emerging opportunities. Strategic alignment between local and central government policy is particularly important to create the conditions for enabling economic growth in Auckland.

Most importantly, Aucklanders need to be poised to take advantage of these conditions and be ready to participate in the economy as employers, as entrepreneurs, and as workers.

Local board areas

Number of jobs

< 1000

1,001 - 3,000

3,001 - 10,000

10,001 - 40,000

Great Barrier Island Inset

43

Orewa

1316

Helensville

637

Hauraki Gulf / Tikapa Moana

Kumeu

8036

3351

Takapuna

2435

92

Waiheke Island

Waitemata Harbour

1963

38289

5831

1947

Henderson

Howick

307

2954

857

12471

8207

Waitakere Ranges

Titirangi

3726

3550

Manukau

Clevedon

1675

Manukau Harbour

738

Hunua Ranges

946

Waiuku

Map published 5 June 2018

'Advanced Industries' are key to sustaining Auckland's broader economic growth and enhancing its competitiveness internationally and will support new employment opportunities for Aucklanders.

They include:
• Knowledge intensive services (e.g Scientific research & analysis)
• High-tech manufacturing
• Medium-high tech manufacturing

0   5   10
km

Attract and retain skills, talent, and investment

Auckland is competing globally for investment and talent. This is challenging given talented people are internationally mobile and actively sought after across the world.

The combination of our Māori identity, population diversity, Pacific connections and beautiful natural environment, creates a vibrancy and an authenticity that Aucklanders value and which attracts people from around the world.

A creative city rich in arts and culture also helps to attract people to Auckland and makes them want to stay. This results in a more vibrant city that delivers benefits which can be shared by all Aucklanders.

Read the Toi Whītiki Arts and Culture Strategic Action Plan for more information.[229]

Growing awareness of Auckland's attractiveness as a dynamic cosmopolitan centre attracts talent, in particular young people with talent, to move and stay here. This will help to off-set the impacts of an ageing population and workforce.

A diverse, energetic and environmentally aware Auckland will continue to entice creative people with an entrepreneurial spirit who will lead innovation in the years to come.

As well as talent, Auckland needs to attract 'smart' capital, meaning capital that comes with associated skills, knowledge and capability. Access to smart capital helps to break down the barriers to growth that result from our size and distance from important markets.

New Zealand's regulatory settings, international reputation as relatively free from corruption and a good place to do business in, makes Auckland a good option for foreign investment.

However, we need to improve the cost of living, housing affordability, and infrastructure and connectivity – both physical and digital. This will create a better quality of life for existing residents and make Auckland a more internationally attractive business proposition.
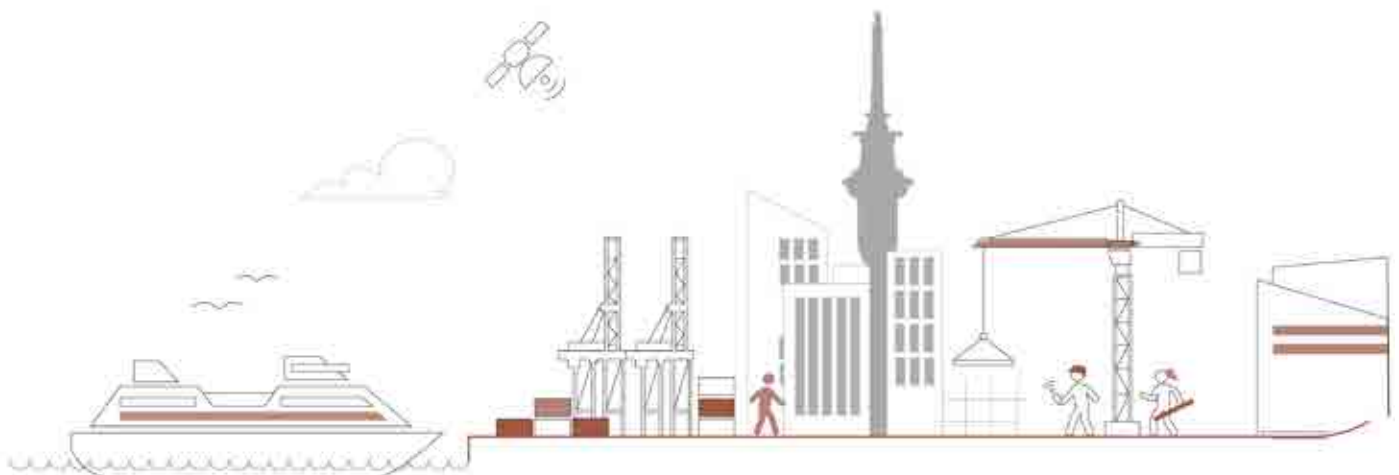
Develop skills and talent for the changing nature of work and lifelong achievement

The way we work, and the skills that Auckland's economy requires, is constantly evolving. It is crucial that current and future workers have the relevant tools to succeed.

This means ensuring:

- our younger generations are equipped with the skills of the future
- our current working population is ready for change.

Rapid technology growth is changing the nature of work and the structure of workplaces, and the rate of this change is expected to increase.

Technological advances have created new jobs, for example, in robotics, the development of software applications, animation and fashion influencing, and have eliminated other jobs such as book keepers and machinists.

See Map 6 - Jobs in advanced industries

Technological changes generate opportunities and challenges, requiring different business models and changes for workers.

We may have more flexibility and be able to:

- work part-time
- work digitally or from home
- be self-employed or have multiple jobs.

It is important to ensure this does not occur at the expense of a decent standard of living.

To flourish in this changing economic landscape, Aucklanders will have to continuously increase their skills, retrain on the job and develop throughout their lives.

We have to strengthen systems and opportunities to enable this continuous learning. Business, industry, and unions have important roles in proactively supporting their workforce to retrain and develop.

Industry and the education sector will need to work even more closely together to be responsive to this changing environment and to create opportunities for people to develop the right skills at the right time.

All sectors have a role to play. We need to create a system-wide approach that lifts employment for all Aucklanders across the spectrum of low to high skilled roles.

Workplaces need to build more flexible cultures that attract and best utilise the talents of older workers, younger workers and everyone in between. Greater emphasis needs to be given to those who experience sustained poor employment outcomes such as disabled Aucklanders. As technology becomes faster,

Figure 31 - Jobs in the US from 1980 – 2012 requiring social skills and math skills . Data for this chart was sourced from The World Economic Forum (2016). New vision for education: fostering social and emotional learning through technology [230]

more affordable and accessible, it will enable more employment opportunities for people of all abilities.

Over the next 30 years, it can be assumed that many current jobs will be automated, or replaced by artificial intelligence, and there will be new jobs requiring new skills. In future, soft and creative skills are likely to become more valuable than at present.

See Figure 31 - Jobs in the US from 1980 – 2012 requiring social skills and math skills .

Learning and developing skills do more than improve labour market outcomes; they improve many socio-economic outcomes for individuals and families. By building soft skills and creative and technical skills, as well as general knowledge, throughout our lives, Aucklanders will develop the resilience necessary to meet this changing future.

Harness emerging technologies and ensure equitable access to high quality digital data and services

The rapid rate of change and disruption that will occur in businesses means that Auckland's economy is vulnerable if it fails to adopt new technologies and innovate accordingly.

Adopting new technologies and business practices is also a way to create a much needed lift in productivity.

Auckland is well positioned to take advantage of opportunities presented through technology as it:

- has a relatively high-skilled labour market
- has strong educational institutions
- is a place that can attract talent based on its lifestyle offer.

High quality digital services are fundamental to advancing technology uptake for current and growing business and for the long term development and growth of skills required for the future.

Homes, schools and businesses need access to high speed internet to keep up with the modern economy. Meeting the challenge of providing affordable access to the internet and quality digital services to all Aucklanders means removing barriers, including:

- inadequate internet connectivity and the slow rate of expansion of high speed connectivity to rural areas
- low household incomes that make internet services and devices unaffordable

- limited digital skills
- cybersecurity threats
- lack of awareness of the opportunities and risks of digital services.

How this can be done

The focus should be on how people and businesses get the most benefit from technological change. The fast pace of the digital revolution needs to be matched by ensuring everyone can make the most of online opportunities.

There needs to be affordable and accessible digital infrastructure and plentiful opportunities for people to continuously develop their digital literacy.

Formal education at all levels must respond to the digital new environment. This includes enhancing the entrepreneurial, science, technology, engineering and mathematics offer for all ages.

Ensure regulatory planning and other mechanisms support business, innovation and productivity growth

Innovation needs a business-friendly, supportive environment. It requires strong connections between the individuals and organisations involved in developing new and improved products, services, processes and markets.

Although most innovation occurs in business, a range of other organisations have knowledge, skills, ideas and technology that can improve the chances of innovation being successful, or help a business avoid wasting resources in the process. They include:

- universities and research institutes
- innovation hubs
- government agencies
- industry associations
- financiers.

For example, a dynamic creative sector can be an incubator for future entrepreneurs and innovators. Or research and development, when coupled with the commercialisation of ideas, can significantly increase the success of an innovative product.

How this can be done

Regulatory and policy settings need to promote innovation and help business. Regulatory processes should see rules applied consistently, without distracting innovative enterprise with unnecessary time and costs.

Laws and regulations regarding copyright, intellectual property rights, and transport regulation should all contribute to a socially responsible and innovation-friendly business environment.

The Development Strategy addresses the supply of business land and supporting infrastructure as one means of enabling innovative businesses to set up and benefit from co-location.

On the other hand, some digital industries and many start-ups can operate successfully anywhere. We must be sure that development and regulation supports both approaches.

Figure 32- Environment for business innovation, ATEED

Advance Māori employment and support Māori business and iwi organisations to be significant drivers of Auckland's economy

A prosperous Auckland economy will include more opportunities for Māori, especially rangatahi, to gain the essential skills to increase their employment and income levels and to help drive Auckland's economic growth.

Tāmaki Makaurau presents Māori with economic opportunities across many sectors. There is potential for innovation, entrepreneurship and increasing international business opportunities.

Māori business leaders, iwi, Māori collectives, local government and others in the private sector need to work together to take up commercial and digital opportunities.

Support systems for Māori business owners need to be more accessible and well-coordinated, and enable the Māori business ecosystem to flourish.

Māori businesses have a Māori way of doing business with an emphasis on Māori values, joint ventures and enduring relationships.

They are commercially driven with well-defined long-term goals that promote a 'quadruple bottom line' and grow the Māori asset base, creating direct benefits back to iwi. This embeds a process that both empowers communities and cultivates an untapped part of the economy.

A visible thriving Māori economy creates unique opportunities for Auckland. Greater Māori economic success will have benefits for all Aucklanders and contribute to the further development of an internationally attractive Auckland economy. Globally, consumers are increasingly interested in sustainable and responsible business practices and products.

This interest aligns well with Māori values, and provides an opportunity for Māori to continue to apply a te ao Māori approach that is of growing value to the world.

How this can be done

Areas that could be looked at include:

- supporting Māori business development
- boosting rangatahi participation in education and training
- increasing Māori employment and wages
- supporting collaboration of iwi and Māori collectives to share lessons and maximise economic value
- supporting a te ao Māori approach to Māori enterprise development
- supporting Māori entrepreneurial initiatives
- continuing partnerships between council and iwi.
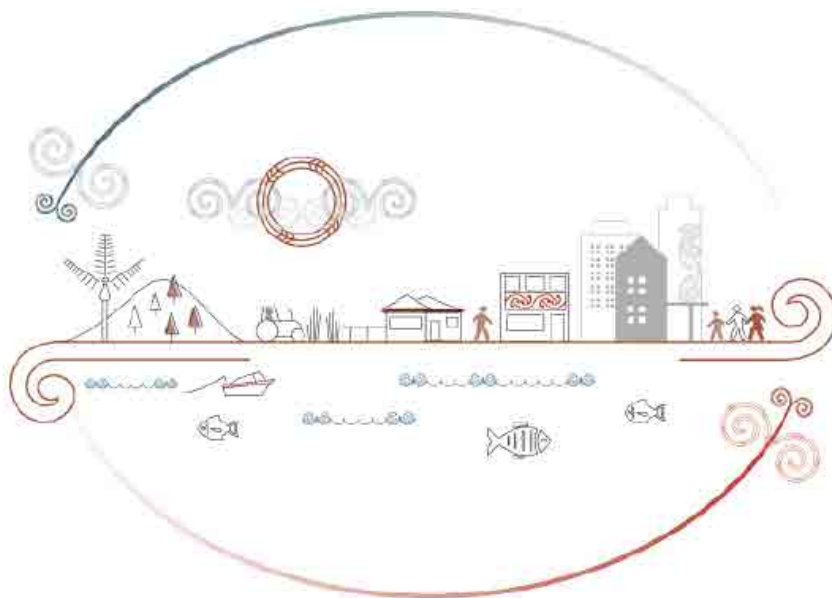
Leverage Auckland's position to support growth in exports

Auckland has an important role as New Zealand's main connection point for international and domestic markets. We need to use this role to increase exports.

Opportunities available in Auckland due to its scale, facilities and diverse population include:

- diverse and more specialised labour markets
- scope for specialised production, which increases trade between firms
- access to international markets which provides more scope for firms to benefit from scale economies
- opportunities to stimulate the development and spread of new ideas, technologies and ways of doing business
- business contacts in migrants' countries of origin
- a variety of specialised cultural and recreation opportunities.

Auckland however still has a primarily inwardly-focused economy driven by consumption, real estate, and domestically-focused services.

Figure 33 - The image below shows the top five New Zealand export markets in 2017.

How this can be done

We need to move into creating and exporting a wide range of sustainably developed products, and more knowledge-intensive goods and services based on innovation and productivity growth.

Focusing on a broader mix of exports will mean a wider spread of innovation opportunities, and will require a wider range of skills.

There are a number of emerging and evolving economic sectors including:

- tourism, for more information read Destination AKL2025[231]
- food and beverage
- high technology
- marine
- screen and creative industries
- finance
- tertiary education and training.

Encouraging these export-linked new sectors will increase the resilience of Auckland's economy and also make New Zealand less vulnerable to fluctuations in commodity prices.

We also need to ensure the ongoing sustainable growth of sectors that are already internationally competitive, as described in The Tripartite Economic Alliance later in this section.

Increase educational achievement, lifelong learning and training, with a focus on those most in need

Learning begins in the home. A solid foundation of early childhood learning and development that builds linguistic, social, emotional and physical skills is a prerequisite for success.

When followed by quality formal education and plentiful informal learning opportunities, this benefits people throughout their lives.

See Figure 34 - Highest qualifications for the 15 year and over usually resident population.

All our young people need the fundamental skills and creative thinking capabilities to develop the adaptability and resilience they will need in the future.

The Southern Initiative[232] is an example of a place-based initiative that aims to set children up for life with the best start and a pathway for further education and training.

For Auckland to succeed, attention needs to be focused not only on creating excellent learning opportunities for all our children and young people, but also on preparing everyone for a changing economic environment that will require continuous upskilling.

Whether in school, in the home, at work or within the community, it will be even more important to acquire knowledge, master methods of learning and build social skills.

These skills assist individuals to gain and keep good employment, to be personally fulfilled and to participate fully in the wider society.

Some Aucklanders are thriving but others are not - read Educational achievement of Auckland's children and young people for more information later in this section.

Particular focus is required to lift educational achievement and skill development of those most in need, which includes groups who consistently experience poorer education and employment outcomes.

Trades training, apprenticeships and retraining options will continue to play an essential role in people getting the right skills to succeed. There needs to be a variety of development opportunities, that will reduce barriers to achieving meaningful employment and high wage jobs, at every stage of life.

All Aucklanders deserve the chance to achieve great things.

We must ensure that all of our people have the tools they need to build a bright future, through a mix of informal learning options, paired with quality formal education and general personal development.

See Map 7 - Proximity to Education

Figure 34 - Highest qualifications for the 15 year and over usually resident population. Source: Census 2013.

Highest qualifications
for 15 years and older

European | Asian | Middle Eastern Latin American African | Māori | Pacific peoples

Degree / Post graduate
Level 5 and level 6
Overseas secondary school qualification
Level 3 and level 4
Level 1 and level 2
No qualification

Legend
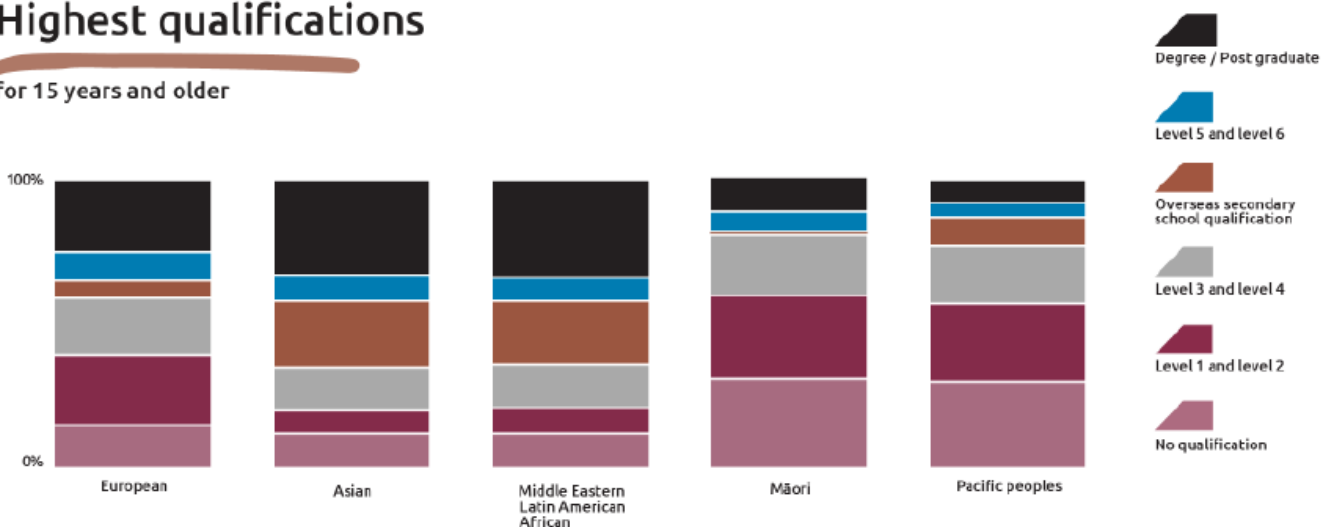
- Tertiary Institute Cluster
- Tertiary Institute
- Secondary School
  (State Schools only)

Population Density
Children 0 - 14 years

High

Low

Orewa

Hauraki
Gulf /
Tīkapa Moana

Kumeū

Takapuna

Waiheke
Island

Waitematā
Harbour

Henderson

Howick

Waitakere
Ranges

Titirangi

Manukau

Clevedon

Manukau
Harbour
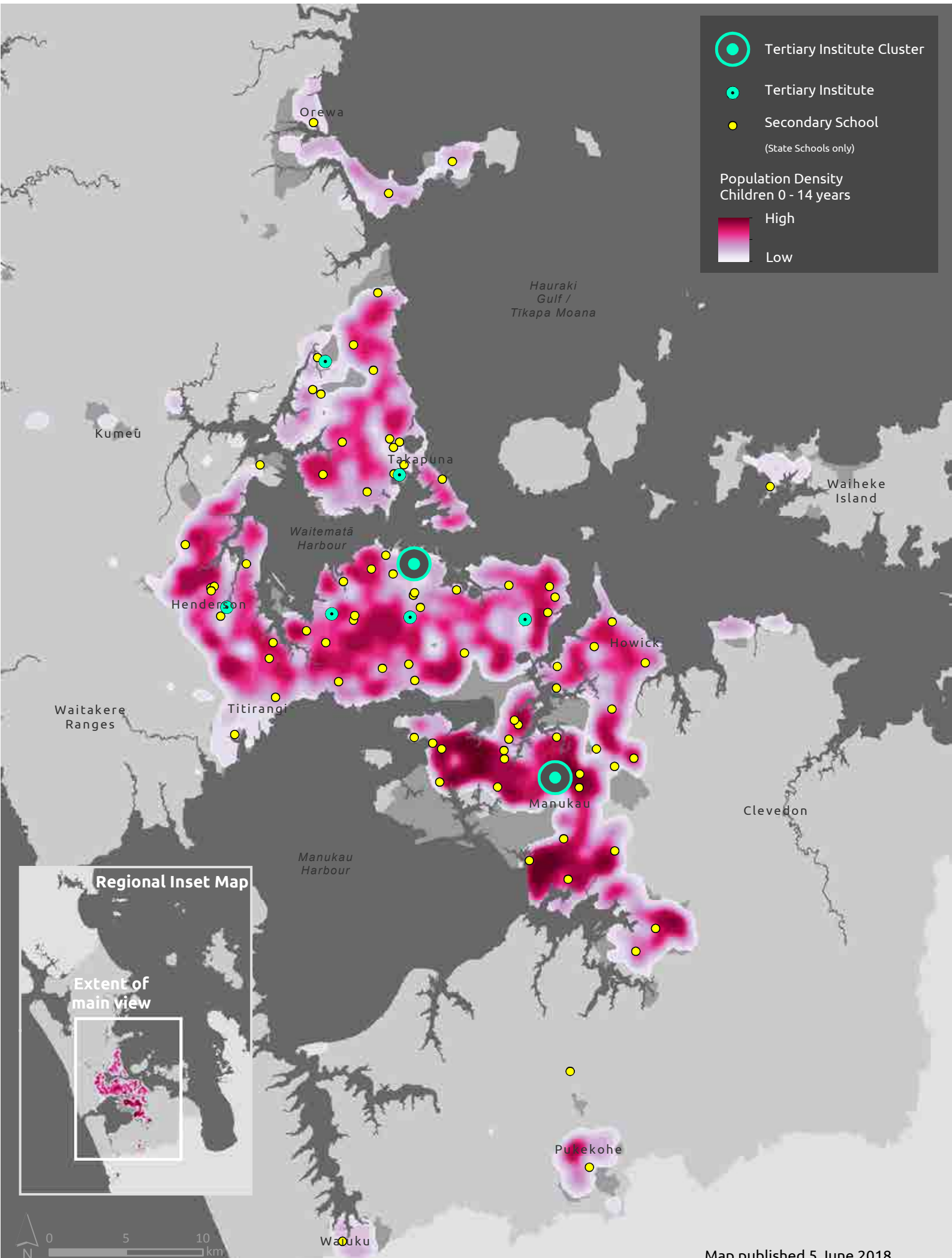
Regional Inset Map

Extent of main view

Pukekohe

Waiuku

0   5   10
km

N

Map published 5 June 2018
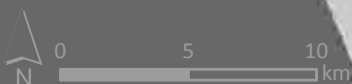
How this can be done

We can do this through:

- training and education initiatives focused on those most in need
- encouraging a culture and practice of lifelong learning and skill development
- supporting early childhood learning
- enabling opportunities to build soft skills
- supporting education-to-work pathways, apprenticeship and internship programmes
- providing appropriate education infrastructure
- retraining opportunities and digital literacy programmes.

Implementing the Opportunity and Prosperity outcome

Implementation partners

Auckland's businesses are the backbone of Auckland's economic future.

Central government sets the legislative framework for businesses to operate in and provides leadership through its different policy settings.

Auckland Council has set a strategic vision for Auckland's economy through Auckland's Economic Development Strategy. Auckland Tourism, Events and Economic Development (ATEED), a council-controlled organisation, works with partners to deliver multiple objectives, from growing Auckland's innovation culture and key economic sectors to attracting foreign direct investment, international events and visitors from around the world.

Through the supply of adequate infrastructure, central and local government help create the physical environment within which enterprise can thrive.

Several partners collaborate to create the learning environment of the future, including education and training agencies and organisations, research institutes, and COMET Auckland (a community education charitable trust).

Auckland Council will develop an implementation approach for this outcome working alongside our key partners and stakeholders. This will be built on existing programmes and ensure all new elements introduced in the Auckland Plan 2050 are planned for.

Mechanisms used to work together

Auckland businesses are represented by a range of national and regional advocacy groups and professional bodies, each with specific priorities and work programmes.

Businesses engage with central government through these groups, and with each other through a range of networks.

Business and the education sector will need to work collaboratively for their mutual benefit, to create opportunities for individuals to develop the right skills and potentially to deliver innovative commercial products.

There is an ongoing need for stakeholders involved in the creation of positive learning environments in schools, tertiary institutes, and in the workplace to work together in order to deliver coherent actions on the ground. This may involve Auckland-wide strategic approaches that align planning and monitoring and define collaborative action.

Advanced industries are critical to the future of Auckland's economy as they rely on innovation and add high value through bringing capital and jobs into New Zealand.

Auckland has a multi-agency approach to grow advanced industries that involves: attracting investment, research and development activities, providing supporting infrastructure, addressing skills shortages to secure a talent pipeline, and supporting the growth of international trading relationships to increase export revenues.

Supporting strategies and plans

Auckland's Economic Development Strategy

The strategic vision for Auckland's economy that sets out the tangible steps to make Auckland an internationally competitive, prosperous economy where all Aucklanders can benefit.

Learn more about Auckland Economic Development Strategy.[233]

Learning environment

Government agencies such as the Ministry of Education and the Tertiary Education Commission have a range of strategies and plans that will contribute to creating a high quality learning environment in Auckland. Some of the key strategies include:

- Ka Hikitia – Accelerating Success[234]
- Pasifika Operational Strategy 2017–2020[235]
- International student wellbeing strategy[236]
- Tertiary Education Strategy 2014–2019[237]
- Auckland Innovation Plan[238] - The Auckland Innovation Plan outlines the priorities and actions identified by ATEED to build a culture of innovation and entrepreneurship in Auckland

- Toi Whītiki - Arts and Culture Strategic Action Plan[239]- The plan's overall goal is to enable arts and culture to be integrated into our everyday lives, and create a culturally rich and creative Auckland. One of its six goals is to build a flourishing creative economy. It is a ten-year plan, delivered by Auckland Council in partnership with the creative sector.

- I Am Auckland - the Children and Young People's Strategic Action Plan[240] - This plan sets out the strategic direction for Auckland Council to help children and young people reach their full potential. It contains seven key strategic goals, including opportunities to access learning, development and pathways to employment.

Auckland Council's strategies, policies and plans have acted as an important input in the development of Auckland Plan 2050. With the adoption of the plan, the council will assess these documents to ensure they remain fit for purpose.

How to get involved

- Information about Auckland's Jobs and Skills Hubs –
    o City centre,[241]
    o Tāmaki[242] and
    o Ara[243] at the airport.
- ATEED has more information about building young talent on the ATEED website.[244]
- Find out about activities as champions and connectors within the Auckland education and skills system on COMET Auckland's website.[245]
- Information about grants and help for new businesses is available on the business.govt.nz[246] website.

Supporting information

Information about the initiatives that ATEED delivers across business growth and innovation, business attraction and investment, tourism, international education, film and major events can be found on the ATEED website.

Supporting Information

The Fourth Industrial Revolution

Impact of new technology

The Tripartite Economic Alliance

The importance of soft skills

Educational achievement of Auckland's children and young people

Why lifting productivity is important

Groups that experience poor education and employment outcomes

Māori and Pasifika Trades Training programme

The Fourth Industrial Revolution

Technology disruption is predicted to be of a scale so great that it is described as the fourth industrial revolution.

The following is taken from World Economic Forum, The Global Competitiveness Report, 2016-2017, Geneva, 2016.[247] It was adapted from Klaus Schwab's 2016 book titled The Fourth Industrial Revolution. Find out more on the World Economic Forum website.[248]

"We are at the beginning of a global transformation that is characterized by the convergence of digital, physical, and biological technologies in ways that are changing both the world around us and our very idea of what it means to be human. The changes are historic in terms of their size, speed, and scope.

This transformation – the Fourth Industrial Revolution – is not defined by any particular set of emerging technologies themselves, but rather by the transition to new systems that are built on the infrastructure of the digital revolution. As these individual technologies become ubiquitous, they will fundamentally alter the way we produce, consume, communicate, move, generate energy, and interact with one another.

And given the new powers in genetic engineering and neurotechnologies, they may directly impact who we are and how we think and behave. The fundamental and global nature of the revolution also poses new threats related to the disruptions it may cause – affecting labour markets and geopolitical security as well as social value systems and ethical frameworks."

Impact of new technology

Disruptive changes to business models will have a profound impact on the employment landscape over the coming years. Many of the major drivers of transformation currently affecting global industries are expected to have a significant impact on jobs, ranging from significant job creation to job displacement, and from heightened labour productivity to widening skills gaps. In many industries and countries, the most in-demand occupations or specialties did not exist 10 or even five years ago, and the pace of change is set to accelerate.[249]

We are on the cusp of a new 'automation age'. In a study of the scale of change that could be expected from recent developments in robotics, artificial intelligence, and machine learning, the McKinsey Global Institute developed a template for estimating the automation potential across 2000 work activities and more than 800 occupations within the United States.

Results are shown below. This summarises the potential impact of automation across the global economy.

Information for the chart below was sourced from McKinsey Global Institute (January 2017) A future that works: Automation, Employment, and Productivity – Executive Summary.

The X axis (horizontal) represents 820 (100 per cent) occupations, expressed as an overall percentage.

Those occupations have been broken down into a number of distinct activities based on a list of 2000 activities.

An occupation can share a number of common activities.

For example, data analysis is an activity undertaken by an economist, or a market researcher or a scientist, among others.

The Y axis (vertical) represents the proportion of each occupation that could be automated, based on the activities that make up that role. In other words, its technical automation potential.

As the chart shows, the McKinsey Global Institute study found that while less than five per cent of occupations are fully automatable, 60 per cent of all occupations have at least 30 per cent technically automatable activities.[250]

The study also looked at possible technology adoption scenarios. The modelling produced significantly different results.

In the earliest scenario, automation could account for more than 50 per cent of working hours in two-thirds of countries within just 20 years. In the latest scenario, more than half of all countries will have 50 per cent automation or more within 50 years.

These findings reflect uncertainty about the speed of take up of automation technologies across activities and sectors.

Regardless of the speed of adoption, the study concluded that the greatest impact will be experienced in a few advanced economies, especially Germany, Japan, and the United States. These countries have both high wages and industries with high potential for activities to be automated.
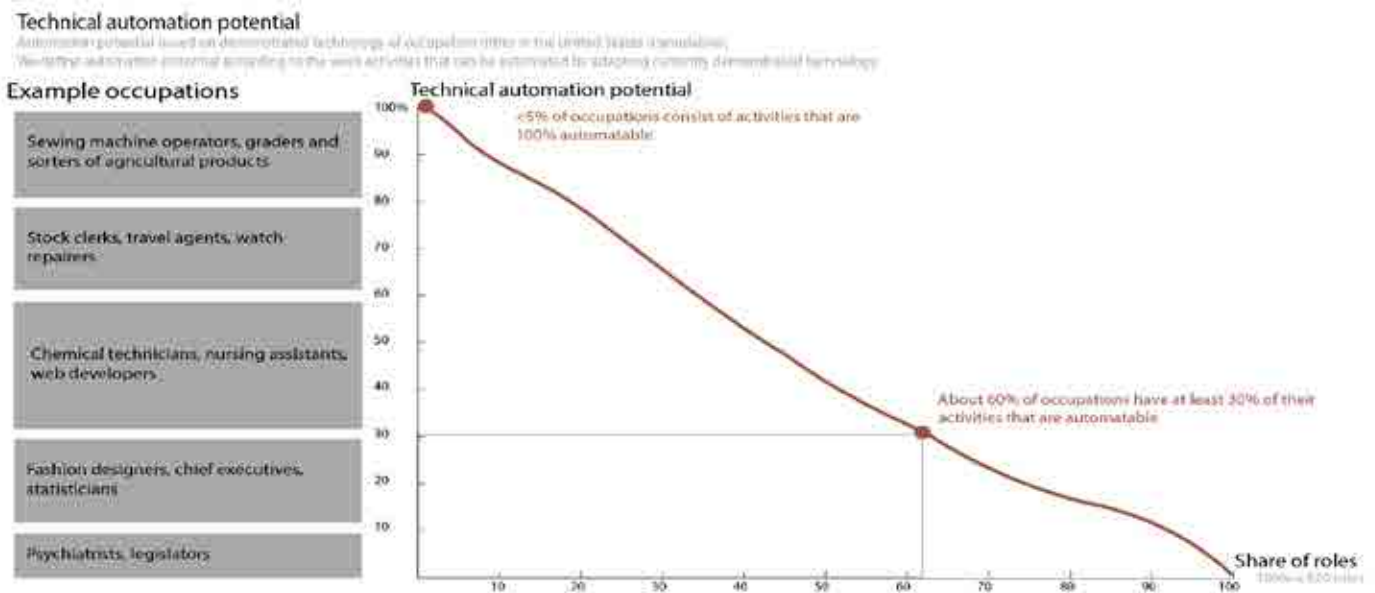
In all economies, including New Zealand, the decision when to automate will depend on the costs of integrating technology in the workplace relative to wages.

Other factors which will determine the speed of take up are the impact on production and service quality, and customer acceptance.

The Tripartite Economic Alliance

In 2014, the Tripartite Economic Alliance between Auckland, Guangzhou (GZ, China) and Los Angeles (LA, U.S.A.) was signed for a three year period.

The alliance is based on strong previous sister-city relationships. It focuses on increasing trade and investment between the three cities and their surrounding areas, and deepening political and civic engagement.

This is the first trilateral economic international agreement between cities, and sets a new benchmark for city engagement and collaboration. Under the alliance, there have been annual Tripartite Economic Summits. The intention is to implement specific tri-party initiatives and a work programme to meet the shared objective of increasing trade and economic engagement.

The Tripartite Economic Alliance creates a 'platform' and opens doors to meaningful and substantive economic, trade and investment opportunities for Auckland-based businesses, entrepreneurs, and investors. It also allows the parties to get increased benefits from existing people and cultural- focused relationships.

Progress since signing of the tripartite agreement

The tripartite has been a successful collaboration to date, deepening Auckland's connections and visibility with two important international partners and gaining national and international recognition.

Auckland Tourism Events and Economic Development (ATEED), a council-controlled organisation, estimates that opportunities from the Auckland summit have generated a number of potential deals for local companies. Given the time required for business deals to conclude, the commercial results from the LA and Auckland summits will continue to be tracked.

Other initiatives facilitated under the Tripartite Economic Alliance include substantive memoranda of understanding and strategic alliances between business and research institutions that cover ports, design and innovation.

Auckland, LA and Guangzhou have experienced significant interest in the model from cities around the world. It is therefore serving as a potential model for other international city relationships.

Collaboration between Auckland Council organisations and central government has also strengthened under this alliance. This collaboration was formalised through the signing of a memorandum of understanding to future-proof Auckland's working relationship with central government on global engagement.

The Tripartite Economic Alliance was extended by a further three years in November 2017 at the summit held in Guangzhou.

The importance of soft skills

The term 'soft skills' describes a range of personality traits, non-cognitive skills and abilities, character traits and socio-emotional skills.[251] People are not born with a fixed set of abilities and many of these skills are developed over their lifetime.

Soft skills include:

- critical thinking and problem solving
- creativity and curiosity
- communication and collaboration
- agreeableness
- conscientiousness
- persistence and self-motivation
- adaptability
- leadership
- social and cultural awareness
- enthusiasm.

These skills are important for individual development, academic performance and participation in society. They are also highly valued in the workplace.

Investment in children's soft skills

Early investment in developing children's social and emotional skills helps to:

- establish healthy brain architecture as the brain forms
- create a strong foundation on which higher-level skills can be built
- provide ongoing benefits throughout life[252]

Building these skills early can have a positive impact on all children, especially those in disadvantaged groups.

A recent longitudinal study in nine countries conducted by the Organisation for Economic Cooperation and Development has shown a balanced set of cognitive, social and emotional skills play a crucial role in improving children's economic and social outcomes later in life.[253]

The study found that in New Zealand, the impact of raising the social and emotional skills of an eight year old reduces self-reported behaviour problems (e.g. drinking, smoking, violence, fights) at 16 years old by 15 percentage points, while the impact of raising cognitive skills is statistically insignificant.

Soft skills for work

As our work environments evolve, soft skills are becoming increasingly important in a variety of workplaces.

The growing automation and globalisation of markets has seen:

- a decrease in the proportion of middle-skilled jobs
- an increase in the proportion of low-skilled jobs
- more demand for highly-skilled workers[254]

Employers are seeking people with a range of soft skills in both highly-skilled and low-skilled roles.

Figure 35 - Jobs in the US from 1980 – 2012 requiring social skills and math skills . Data for this chart was sourced from The World Economic Forum (2016). New vision for education: fostering social and emotional learning through technology[255]
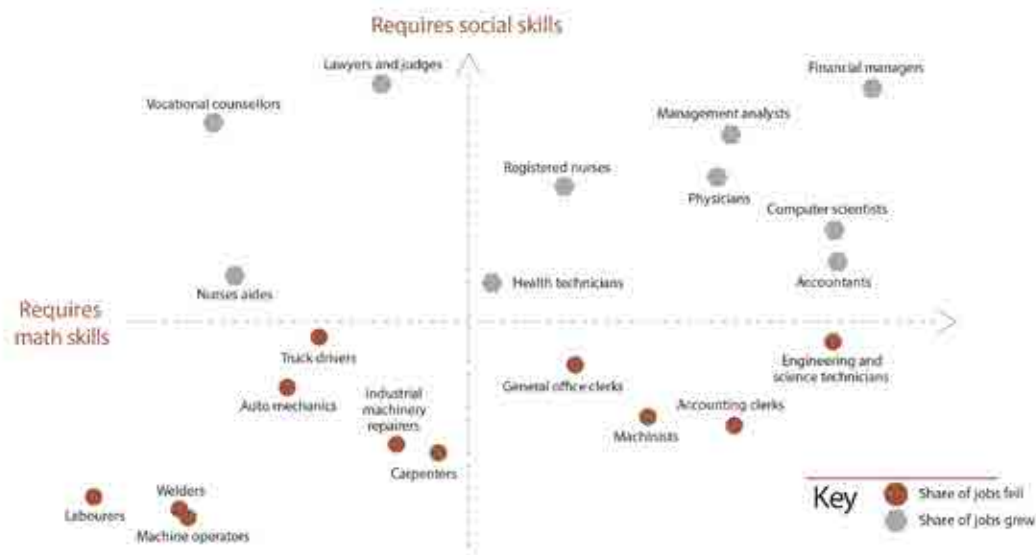
Research has shown that the bulk of job growth in the United States from 1980 to 2012 was in occupations that require high social skills such as managers, teachers, nurses, therapists, physicians and lawyers.

It has also been found that higher-paying jobs increasingly require social skills.[256]

Further to this, the United States Bureau of Labour Statistics projected employment to grow fastest in occupations that are difficult to automate, specifically within healthcare, construction, and science, technology, engineering and mathematics (STEM) occupations.[257]

There will be increasing demand for workers who have a comparative skills advantage. Even in highly technical roles a strong set of soft skills will provide that advantage.

There are skills gaps in many OECD countries that include technology and basic literacy skills. There is also a significant lack of soft skills.

Auckland employers surveyed in 2012 stated that soft skills (or non-cognitive skills) are becoming increasingly important when hiring[258] and expressed difficulties finding employees with adequate soft skills.

That study also found that some infrastructure firms reported that they could increase revenues and improve productivity more through enhanced non-cognitive skills amongst their engineers than through advances in technical skills.[259]

In 2017 a large number of business organisations, including Xero, ASB, Noel Leeming, Vector and Sky City, published an open letter[260] stating their intent to hire people without tertiary qualifications.

Their hiring process would instead focus on assessment of the necessary skills, attitudes, motivation and adaptability to join their organisations, in conjunction with previous experiences in and out of the workforce.

The possibilities that technology brings are being pushed further and further every day.

There are new occupations in fields that only recently would have been taken for science fiction, for example:

- cybersecurity
- cloud technologies
- robotics
- 'app' development
- social media management
- meta-data mining.

There is no certainty about the skills that will be required in this rapid changing environment. However, soft skills, particularly adaptability, creativity and critical thinking will be more advantageous as the world of work evolves.

For further information:

The World Economic Forum report on the new vision for education[261]

The Economist Intelligence Unit report on the learning curve[262]

The European Political Strategy Centre report on the future of work skills and resilience for a world of change[263]

Educational achievement of Auckland's children and young people

Auckland's child and youth population will continue to increase

Children and young people (aged 0 to 24 years old) represent over a third of Auckland's population (36 per cent in 2013).

Statistics New Zealand population projections (medium series) suggest that over the next 20 years, the number of children and young people in Auckland will continue to increase, possibly by another 26 per cent.

Population ageing will mean however that the proportion of Aucklanders who are children and young people will decrease.

Auckland will require more formal and informal learning environments, as well as services and infrastructure required for children and young people.

This includes:

• schools
• early childhood centres
• playgrounds and recreational opportunities
• health services.

Relatively high rates of participation in early childhood education

There is consistent evidence linking good quality education, especially early childhood education (ECE), with improved skills development and employment prospects.[264]

Participation in high quality ECE builds the foundation for children's lifelong learning.

The Ministry of Education reports that there have been steady rises in ECE participation rates in Auckland and across New Zealand since 2000.

In addition, the time that children spend in ECE per week has been increasing.[265]

In 2015, 95 per cent of children in Auckland took part in ECE. Although the rates for Pacific (90 per cent) and Māori (92 per cent) children are lower than for other groups, this is a significant improvement from 2012 participation rates.

In part, this may reflect the impact of programmes introduced to target specific local areas where ECE participation is low.[266]

The national ECE Participation Programme[267] was set up in 2010. It is made up of various initiatives that aim to support Māori, Pasifika, and low-income families to enrol their children in ECE.

Gradual increase in levels of formal educational achievement

A formal school qualification gives young adults the basic prerequisite to go on to higher education, training and many entry-level jobs.

The main qualification available to secondary school students is the National Certificate of Educational Achievement (NCEA), which encompasses a wide range of learning. Future educational and job prospects will be limited for those who leave school without Level 2 NCEA.

In 2014, of the total young people who left school in Auckland, 81.6 per cent had achieved NCEA Level 2 (or equivalent) or above – up 2.1 per cent from the previous year. Almost half (46.2 per cent) had attained University Entrance standard.

There has also been a gradual increase overall in the numbers and proportions of young people leaving school in Auckland with Level 3 or higher qualifications, including University Entrance.

Education has an intergenerational impact

In New Zealand, educational achievement persists between generations.

In 2012, the OECD noted that the chance that a young person whose parents have not attained an upper secondary education will attend higher education is limited, and they reported that tertiary students in New Zealand were more likely to have highly educated parents than in any other OECD country.[268]

Evidence shows very strong links between education and the transfer of income and other inequality across generations. For children in New Zealand, education is the main way to break the transmission of low incomes across generations.[269]

Socio-economic deprivation has a negative effect on educational achievement

Educational achievement is associated with socio-economic background.

The link between a parent's socio-economic status and a child's educational outcome is very high in New Zealand when compared internationally.[270]

Children whose parents do not have school qualifications and who live in a socio-economically deprived area have a higher probability of poor educational outcomes than other children in Auckland.

Auckland has a larger number of low decile schools.

Auckland has a disproportionate number of low decile schools, for example those rated 1, 2 or 3.

A third (32 per cent) of all decile 1 schools in New Zealand are found in Auckland, while only 21 per cent of New Zealand's schools are in Auckland.

The southern part of Auckland has a substantial concentration of decile 1, 2 or 3 secondary schools.

Māori and Pacific children are more likely than others to attend low-decile schools. As at 1 July 2015, approximately 71 per cent of Auckland's Pacific students and 50 per cent of Māori students attended decile 1, 2 or 3 primary and secondary schools, compared to only six per cent of European/Pākehā students.[271]

Read more about school deciles on the EDUCATION.govt.nz website.[272]

Some improvement in educational outcomes in The Southern Initiative area

Significant proportions of Auckland's Māori and Pacific school leavers are from schools in The Southern Initiative.

In 2014, over a third (38 per cent) of all Māori school leavers and almost half (47 per cent) of all Pacific school leavers (overall, 21 per cent of school leavers) were from schools in this area.

Relatively large proportions of Māori and Pacific young people in the Southern Initiative area are leaving school with low, or no, qualifications, when compared with other ethnic groups, and compared to school leavers from other areas. For example, in 2014, a third (33 per cent) of Māori school leavers left school without NCEA Level 1, as did 19 per cent of Pacific students.

These figures are however an improvement on previous years, particularly among Māori school leavers.

Figure 36 - Proportion of Auckland school leavers who had gained NCEA Level 2 or above, by ethnicity (2010 to 2014) Source: Ministry of Education, School leaver data

Note: Students could belong to more than one ethnic group so percentages may total more than 100.

Proportion of Auckland school leavers who had gained NCEA Level 2 or above, by ethnicity from 2010 to 2014
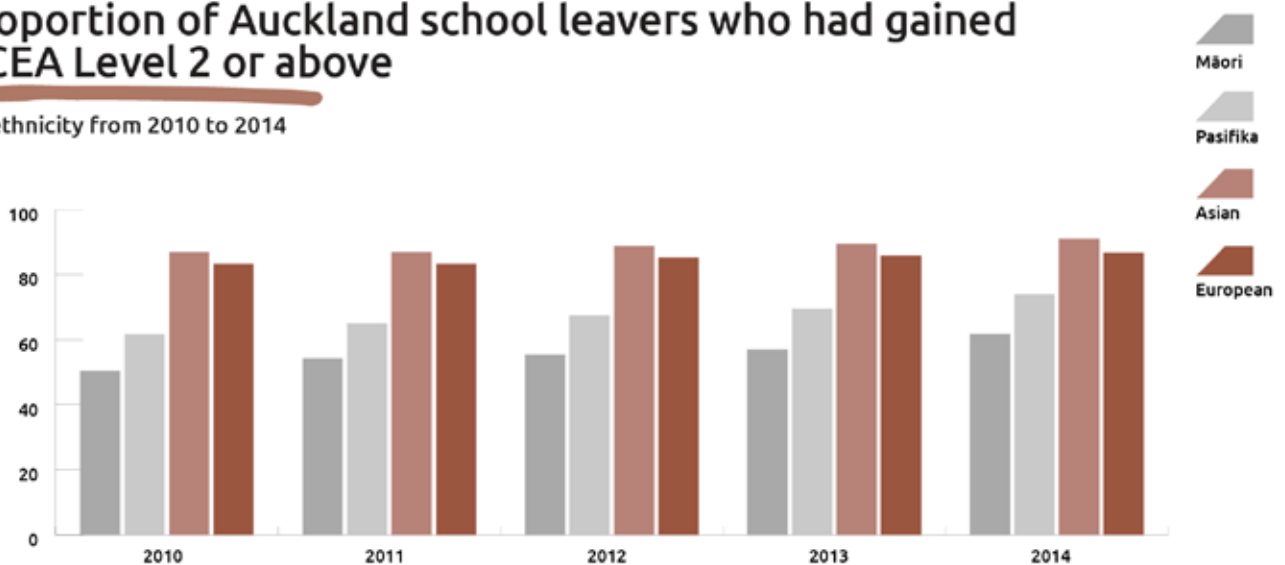
School leaver attainment among school leavers from schools in the Southern Initiative area, by ethnicity (2014)

	Below NCEA Level 1 (%)	Level 1 and working towards Level 2 (%)	NCEA Level 2 or above (%)
Māori	33	17	50
Pacific	19	12	69
Other ethnicities	11	10	79
Total	19	12	69

School leaver attainment among school leavers from schools in the rest of Auckland, by ethnicity (2014)

	Below NCEA Level 1 (%)	Level 1 and working towards Level 2 (%)	NCEA Level 2 or above (%)
Māori	20	13	67
Pacific	13	9	77
Other ethnicities	6	6	88
Total	8	7	85

Source: Wilson, Reid & Bishop (2016) using Ministry of Education data.[273]

Note: Students could belong to more than one ethnic group.

Māori and Pacific young people have poorer educational outcomes

Māori and Pacific young people make up more than a third of Auckland's young people and continue to experience higher levels of disparity in education outcomes than others.

The 2013 OECD economic survey of New Zealand reports that:

"Among the population lacking school qualifications, Māori have nearly double the incidence of people lacking school qualifications as Pakeha/Europeans and quadruple those of Asians, and conversely Māori show much lower rates of tertiary attainment."[274]

Although trends are improving across Auckland, there are significant educational disparities for Māori and Pacific children and young people.

Māori and Pacific young people's tertiary attainment rates, NCEA attainment and early childhood education participation rates have been rising, but they are not catching up to those of other ethnicities.[275]

There needs to be increased focus in these areas on creating positive outcomes for Māori and Pacific young people.

Focusing on equitable education outcomes

Auckland can create equitable outcomes for all its children and young people. To bring all Auckland's children and young people along on the journey of educational achievement, these indicators of inequitable education outcomes need to improve swiftly.

There needs to be focus in geographic areas with low levels of educational achievement, lower socio-economic areas and higher levels of Māori and Pacific young people.

A strong education system that focuses on creating positive outcomes for all, not just some of its learners, will benefit everyone.

Why lifting productivity is important

There are three main ways to achieve higher incomes:

- increase the number of people working
- increase the number of hours worked
- increase productivity.

New Zealand has traditionally relied on the first and second methods to boost national income, which has resulted in more people working longer hours and low real wage growth.

The Organisation for Economic Co-operation and Development (OECD) has highlighted that productivity in New Zealand remains well below that of leading OECD countries.[276]

Productivity is calculated as the ratio of the volume of outputs to the volume of inputs.

High productivity means that a large amount of output is produced with little input. Find out more about productivity on the Stats NZ website.[277]

Lifting productivity is an important goal as it has the greatest potential to improve quality of life and create broader more sustainable benefits. These include a more highly skilled workforce, higher wages, more efficient use of resources, and innovative and more resilient businesses.

Since 2000, the knowledge intensive service sector in Auckland has grown at an average annual rate of 3.9 per cent.[278]

This sector:

- covers firms providing finance, professional, scientific and technical services
- is supported by a highly skilled and knowledge-enabled labour force and is highly productive.

While Auckland seeks growth in those sectors that are highly productive it is also important to improve productivity across all businesses.

Innovation through new technologies and automation can drive the change required to lift productivity within firms and reshape existing business models.

Firms can lift productivity by:

- increasing research and development
- encouraging collaboration between industry and research institutions
- attracting skilled migrants
- improving infrastructure and land use settings that enable mass benefits.

Groups that experience poor education and employment outcomes

Over-representation in some groups

In Auckland some groups are over-represented among those with poor education and employment outcomes, including:

- young people (aged 15-24)
- Māori
- Pacific people
- disabled people
- women[279]
- long-term unemployed
- underemployed[280]
- those with low formal educational attainment.

Groups with lowest levels of participation in employment in New Zealand in 2015[281]

Group	Employment participation
Women	Higher rates of unemployment and underemployment
	Lower rates of labour force participation than men
Young Māori women aged 15 to 24	Unemployment rate of 24 per cent
Young Pacific women aged 15 to 24	Unemployment rate of 31 per cent
Māori	High unemployment rate at 13 per cent (compared to 6 per cent of all people)
	Lower rates of labour force participation at 66 per cent (compared to 68 per cent of all people)
Pacific people	High unemployment rate at 13 per cent
	Lowest labour force participation rate of all ethnicities at 61 per cent
Disabled women	46 per cent participation in the labour force (compared with 54 per cent of disabled men)

Youth unemployment

The unemployment rate of young people in Auckland has been higher than that of other age groups for some time.

In 2015, the employment situation for youth was beginning to improve from the peak of unemployment rates after the Global Financial Crisis, but these rates have not yet recovered as much as for other age groups.

Auckland youth with the highest unemployment rates in 2013

Group	Unemployment status[282]
Māori youth aged 20 to 24	23 per cent (compared with 15.2 per cent unemployment rate overall)
Pacific youth aged 20 to 24	25 per cent (compared with 15.2 per cent unemployment rate overall)

Note: Data on youth unemployment and NEET taken from a report into children and young people prepared by Auckland Council on the Knowledge Auckland website.[283]

Auckland youth who are not in education, employment or training (NEET)

For young people, unemployment is only a part of their story. Young people aged 15 to 19 tend to be completing secondary school qualifications and beginning tertiary study or training. Those who are seeking work at this age are unlikely to have qualifications, skills or much work experience, contributing to these relatively high unemployment levels and low labour force participation rates.[284]

Therefore, to better understand young people's employment outcomes, data is collected on young people who are not in education, employment or training (NEET).

The NEET rate is designed to capture a wider understanding of the proportion of young people who are excluded and/or disengaged from both work and education, than standard measures for adults such as unemployment. Young people aged 15-24 who are NEET tend to take a longer time to find employment and have difficulty maintaining employment.

Auckland youth with the highest not in education, employment or training (NEET) rates in 2015

Group	NEET status
Māori youth aged 20 to 24	26 per cent (compared to 13.4 per cent overall)
Pacific youth aged 20 to 24	27 per cent (compared to 13.4 per cent overall)

Data source: Stats NZ, Household Labour Force Survey.

Note: These figures need to be read with caution as there is a relatively high sampling error associated with estimating NEET rates by ethnicity and age, due to small sample sizes.

Further reading

A report on young people not in education, employment or training on the Scottish Government website.[285]

Figure 37 - Unemployment rate by age group in Auckland (September 2005 to 2015). Source: Stats NZ, Household Labour Force Survey

Unemployment rate by age group in Auckland
by age group from 2005 to 2015
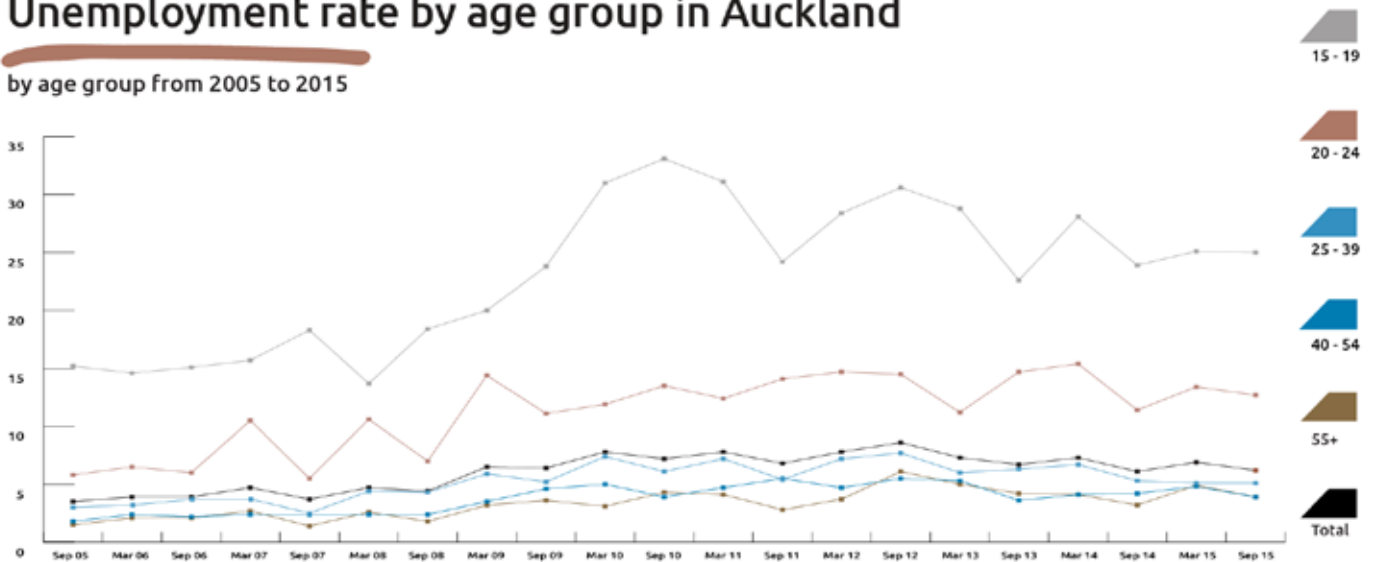
Māori and Pasifika Trades Training programme

Auckland is currently experiencing a demand for skilled tradespeople and that demand is expected to grow.

The Southern Initiative identified young Māori and Pasifika training and employment as a critical priority. To address this, it delivers the Māori and Pasifika Trades Training programme.

The programme is a central government initiative to assist Māori and Pasifika, aged 16 to 40, to:

- gain qualifications through training and apprenticeships
- secure sustainable employment with opportunities for progression.

The programme is based on close collaboration with an employer consortium and training providers to ensure trainees meet the needs and requirements of the industry.

The Southern Initiative coordinates training providers to deliver courses and recruit Māori and Pasifika people to take up trade training.

There is a focus on recruiting vulnerable young people not in education, training or employment, who are often challenging to reach.

Participants are recruited through Work and Income, community organisations, iwi and prisons.

Young people, who often have limited exposure to work, benefit particularly from the soft skills training that the programme provides. Moreover, young people enter into the programme with confidence that a clear path to sustainable employment is part of the programme.

Following the training participants receive assistance to find a job. They and their employer receive post-employment support to ensure that any challenges are managed.

In 2015, a majority of participants were offered full-time employment or apprenticeships following their training.

Employers are positive about the programme and value the contribution of the participants to their businesses.

Māori and Pasifika Trades Training is an example of organisations working together to empower young people and improve outcomes for some of Auckland's most vulnerable people.

Our Development Strategy

What will Auckland look like in the future?

The Development Strategy sets out how Auckland will grow and change over the next 30 years to become a place that Aucklanders love and are proud of, a place they want to stay in or return to, and a place that others want to visit, move to or invest in.

This is a revised Development Strategy

This is an update of the first Auckland Plan Development Strategy, which was released in 2012.

The initial Development Strategy set the direction for a quality compact approach to growth. There have been a few important changes since 2012 which are reflected in this updated Development Strategy.

One of the most important changes has been the release of the Auckland Unitary Plan in 2017, which sets out the planning rules for Auckland and creates adequate capacity for jobs and homes over the next 30 years.

Another important change is around Aucklanders' expectations of housing, transport and public spaces. We also live in a time of rapid technological advancement, which will have many impacts on Auckland's future growth.

Why we need a Development Strategy

Auckland is anticipated to grow significantly over the next 30 years. To make sure that we build on its strengths and hold on to the things that are dear to us during this growth, we need to plan for how and where Auckland will grow.

Around 1.66 million people currently live in Auckland.

Over the next 30 years this number could grow by another 720,000 people to reach 2.4 million. This means Auckland will need many more dwellings – possibly another 313,000, and room for extra jobs – possibly another 263,000.

Growth on this scale is significant, and requires us to work together and ensure we have a clear understanding of where and when investment in planning and infrastructure will be made – this is what the Development Strategy provides.

The National Policy Statement on Urban Development Capacity 2016 requires councils experiencing high growth to prepare a Future Development Strategy. This must demonstrate sufficient, feasible development capacity in the medium and long term. This Development Strategy serves as Auckland's Future Development Strategy.

Auckland's context

From the arrival of the first Māori settlers to its recent evolution into a modern international city with a substantial rural sector, Auckland's story has been one of constant growth and change.

While initial settlement by both Māori and European tended to cluster around the waterfront, development soon spread further afield in response to population growth.

By the early 1900s Auckland had become New Zealand's largest city and suburban development had extended to the central isthmus and parts of the North Shore.

However, it wasn't until the arrival of the motor car, particularly after World War Two, that Auckland's urban footprint really started to expand.

The resulting pattern of lower density suburbs, enabled by the motorway system and widespread car ownership, is still the dominant feature of Auckland's urban form to this day.

The urban area now covers approximately 20 per cent of Auckland's land mass. It is home to over 90 per cent of its residents, many of whom live along a narrow axis stretching from Ōrewa in the north to Drury in the south.

The urban area is surrounded by extensive rural areas, with numerous towns and villages, and an outstanding natural environment that includes:

- beaches
- harbours
- maunga
- the surrounding ranges.

Geography continues to shape and constrain Auckland's development.

Physical pinch points, particularly where the isthmus is at its narrowest, complicates development and the transport network.

It also complicates the flow of goods and services, including to and from the port and airport, Auckland's two international gateways.

Figure 38 - Multi-nodal model
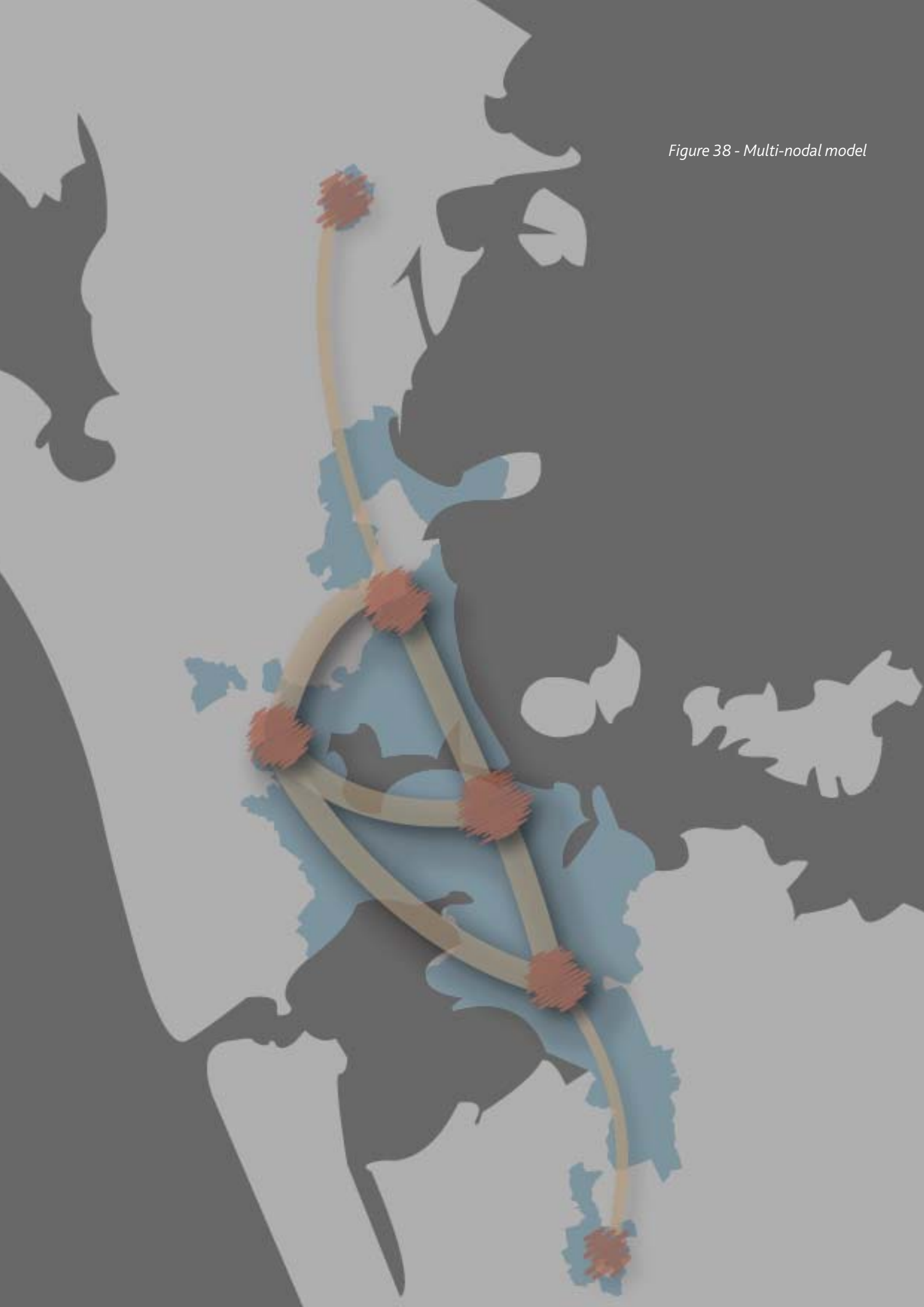
Supporting residential and business growth, while managing their impacts on the natural environment, will be one of the great challenges we face over the next 30 years.

Auckland will look very different in 30 years

Auckland's urban footprint will include:

- significant redevelopment and intensification in areas that are already developed
- newly established communities in the future urban areas.

There will also be a small amount of additional growth in rural areas outside of the urban footprint.

A multi-nodal model

Over the next 30 years, Auckland will move towards a multi-nodal model within the urban footprint.

The city centre will continue to be the focus of Auckland's business, tourism, educational, cultural and civic activities. It will continue to be an important residential centre as well.

But it won't be the only main centre in Auckland.

Albany, Westgate and Manukau, including their catchments, are nodes which are critical to growth across the region.

Over time, they will offer a broad range of:

- business and employment activity
- civic services
- residential options.

The nodes will:

- accommodate substantial growth in the north, north-west and south
- improve employment choice
- be interconnected by a range of efficient transport links.

In addition, the satellite towns of Warkworth and Pukekohe act as rural nodes.

They:

- service their surrounding rural communities
- are connected to urban Auckland through state highways and, in the case of Pukekohe, by rail
- will support significant business and residential growth.

See Figure 38 - Multi-nodal model

City centre

Auckland's city centre is critical to the success of Auckland and of New Zealand.

It is:

- Auckland's primary business area with its mix of commercial, education, employment, cultural and civic activities
- linked to the rest of Auckland by an extensive transport system.

Around a quarter of all jobs in Auckland are located in the city centre, and it contributes around seven per cent to national gross domestic product.

The residential population of the city centre and fringe areas has increased substantially over the past decade to around 80,000 residents.

Manukau

Manukau is an anchor for southern Auckland.

It has:

- a strong civic, academic, business and retail focus
- several Auckland-wide attractions
- integrated rail and bus stations.

The surrounding industrial area and proximity to Auckland Airport strengthen its role as a node.

Westgate

Westgate is an emerging node of northwest Auckland.

It is the centre for future urban development, including Red Hills, Whenuapai (which includes new business land) and Kumeū-Huapai.

Strategically located at the juncture of state highways 16 and 18 on the western ring route, it has road connections to the north, west and south.

Future transport infrastructure will transform Westgate into a major public transport interchange. This will support further mixed use intensification of the centre and the development of the surrounding business and residential areas.

Albany

Albany plays a strategic role as the node for the north. It will help support the future urban areas of Wainui East, Silverdale and Dairy Flat as they develop.

Albany will see significant residential and business growth and intensification.

Motorway access and the Northern Busway provide much needed transport connections for the area.

In time, and supported by industrial areas such as Rosedale, Albany will provide a diverse range of employment, housing, education, community and civic facilities.

Warkworth

The satellite town of Warkworth is the rural node in the north of Auckland.

It provides a range of services to the surrounding rural areas. Significant future employment growth is anticipated alongside residential growth.

Pukekohe

The satellite town of Pukekohe is the rural node at the southern extent of Auckland.

It is strategically located on the North Island Main Trunk railway line and is connected to Auckland via State Highway 22.

It serves a wide catchment, and is centred on rural production with some of New Zealand's most elite soils and prime agricultural land.

Pukekohe has the potential to function semi independently from the main urban area of Auckland. This can reduce the need for travel out of Pukekohe to access services, facilities and employment. An increase in business land will help achieve this aim.

How Auckland will grow and change - a quality compact approach

Auckland will take a quality compact approach to growth and development.

A compact Auckland means future development will be focused in existing and new urban areas within Auckland's urban footprint, limiting expansion into the rural hinterland.

By 2050, most growth will have occurred within this urban footprint, particularly focused in and around:

- the city centre
- the Albany node
- the Westgate node
- the Manukau node
- identified development areas
- future urban areas.

What quality means

The quality aspect of this approach means that:

- most development occurs in areas that are easily accessible by public transport, walking and cycling
- most development is within reasonable walking distance of services and facilities including centres, community facilities, employment opportunities and open space
- future development maximises efficient use of land
- delivery of necessary infrastructure is coordinated to support growth in the right place at the right time.

What compact means

The compact aspect of this approach means that:

- future development will be focused within Auckland's urban footprint, with most of that growth occurring in existing urban areas
- by 2050, most growth will have occurred within this urban footprint, limiting both expansion into the rural hinterland and rural land fragmentation.

This approach contributes to investment certainty by understanding where and when growth is likely to occur.

The benefits of a quality compact Auckland

The benefits of a quality compact approach to growth and development are:

- greater productivity and economic growth - a compact urban form increases economic productivity from the greater proximity between firms, workers and consumers
- better use of existing infrastructure - growing within existing urban areas makes more efficient use of existing assets. Providing physical and social infrastructure costs less per household, which results in a higher overall level of service
- improved transport outcomes - a compact urban form brings more people closer to their place of work. Greater population density supports faster, more frequent public transport services. Both reduce congestion on the road network and create a more efficient transport network overall
- rural productivity and character can be maintained - encouraging growth within urban areas helps to protect rural environments from urban encroachment, and maintain the productive capability of the land and its rural character
- enhanced environmental outcomes - adverse effects of urban activities are concentrated into fewer receiving environments. Growth creates more opportunities for environmental enhancement, particularly as part of infrastructure upgrades
- greater social and cultural vitality - concentrating activity into urban centres and neighbourhoods provides a wider variety of activities to meet the full range of people's needs. This brings diversity and vibrancy into the urban environment which in turn enhances interaction and social cohesion.

How this will be achieved

The quality compact approach to future development will be achieved by:

- ensuring sufficient capacity for growth across Auckland
- embedding good design in all development
- sequencing what gets delivered
- aligning the timing of infrastructure provision with development
- supporting rural production.

Ensuring sufficient capacity for growth across Auckland

An on-going supply of development capacity has to be maintained to meet demand.

The National Policy Statement on Urban Development Capacity requires Auckland Council to ensure that, at any one time, there is sufficient development capacity for housing and business growth.

This means:

- short term (1 – 3 years) development capacity must be feasible, zoned and serviced with development infrastructure
- medium term (4 – 10 years) development capacity must be feasible, zoned and either serviced with development infrastructure, or have funding identified in the council's Long-term Plan
- long term (11 – 30 years) development capacity must be feasible, identified in relevant plans and strategies, with the required development infrastructure identified in the council's Infrastructure Strategy.

Auckland's Unitary Plan[286] provides enabled capacity to build around one million additional dwellings. This is significantly more than the number of dwellings Auckland will need over the next 30 years.

Under current (mid 2017) market conditions, around 326,000 dwellings across Auckland are considered feasible. The scale and location of this feasible capacity will change over the lifetime of the plan as market conditions change.

Auckland Council needs to consider the feasible development capacity against anticipated housing demand.

To meet Auckland's demand for housing over the next 30 years, a minimum target of 408,300 dwellings has been set to provide sufficient feasible development capacity.

This target takes into account assumptions on the following:

- anticipated housing demand
- additional margin required as part of the National Policy Statement
- the 2016 shortage in housing (35,000 dwellings).

Based on this there is sufficient feasible development capacity provided over the short to medium term (1-10 years).   However, over the long term (11-30 years), based on these current assumptions, there is a shortfall of around 82,000 dwellings.

There will be regular monitoring of development and tracking of actual dwellings built (uptake). This will show what planning and infrastructure responses are needed to ensure well-functioning urban environments that meet future needs.

Read more about housing and business demand, including ways to address the long term capacity shortfall in Assessing demand later in this section.

Embedding good design in all development

Good design includes the attributes of:

- functionality
- attractiveness
- longevity
- innovation
- legibility.

Good design needs to be integrated at all scales of development. It includes the quality of the city structure, the design of public places and spaces as well as building and house design.

The quality of city design is integral to how it functions, which affects our overall wellbeing. Good design can contribute to making Auckland a sustainable, attractive, equitable and desirable place.

The quality and characteristics of successful places make them memorable. They result in people going there more often, staying longer, or choosing to live and work there.

The Auckland Design Manual website[287] provides guidance on good design and best practice examples.

Sequencing what gets delivered

Development capacity must be turned into real homes and businesses.

Planning and investment will be targeted to those areas where the greatest development capacity is taken up. This means existing urban areas where actual development of scale happens and providing new bulk infrastructure for future urban land.

This will provide certainty to the market regarding where supporting infrastructure and services will be located. It will also ensure value for money as infrastructure and service providers can target their investment in response to growth.

Areas for growth and development are sequenced.

In the existing urban area this is done through identifying nodes and development areas.

In greenfield areas, it is done through future urban areas.

Aligning the timing of infrastructure provision with development

Future growth and change will require a significant increase in the capacity and expansion of Auckland's infrastructure networks.

When infrastructure is provided, it needs to be co-ordinated with growth. This will minimise the costs of under-used assets, or the problems with over-stressed, congested networks.

Growth and infrastructure provision can be aligned by identifying the timing and location of:

- expansion of strategic transport and water networks
- servicing of future urban areas with infrastructure
- infrastructure investment that supports significant growth in existing urban areas.

Supporting rural production

Auckland's rural areas are valued for their:

- current and future productive uses
- rural landscape and character
- ecological areas
- recreational opportunities.

As part of the quality compact approach, future urban areas have been identified to provide for urbanisation. Residential growth in rural areas will be focused in the two rural nodes of Pukekohe and Warkworth. Some growth is anticipated in the smaller towns and villages.

Residential development in rural zones will be limited. Provision for residential growth will be focused in the existing countryside living zone.

Limiting residential growth in rural areas will maintain their values and support ongoing rural production.

Change in the existing urban area

Looking ahead 30 years, Auckland's urban area will grow and change.

Growth is enabled throughout most of Auckland's urban footprint, and all neighbourhoods are capable of accommodating growth to some extent.

However, some existing urban areas are likely to undergo significant growth - these are known in the Auckland Plan as nodes and development areas.

Incremental growth will happen across existing urban areas over the next 30 years as the upzoning provided by the Auckland Unitary Plan is taken up. Most growth should be focused in the existing urban area.

This level of growth can generally be accommodated through existing infrastructure capacity or through ongoing infrastructure renewal.

Growth in nodes and development areas

Some existing urban areas are however likely to be significantly redeveloped in the next 30 years, either through the private sector or through the intervention of agencies.

Redevelopment in these areas will be of a scale that will require substantial infrastructure and service investment.

There have been initiatives across urban Auckland where significant investment and sustained redevelopment effort has taken place.

Examples from various agencies include initiatives in Manukau, Tāmaki, and New Lynn. In other areas, such as the city fringe, the private sector has taken the lead.

To date, different approaches have been taken to identify and prioritise where significant housing and business growth are anticipated. Nodes and development areas provide a consistent approach.

Nodes

The city centre, together with Albany, Westgate and Manukau form the foundation for Auckland's future growth.

Development areas

Development areas are introduced as a comprehensive approach to servicing expected growth across the existing urban area.

See Map 15 - Existing Urban - - an interactive version of the map is available at aucklandplan.govt.nz

They are specific locations that are expected to undergo a significant amount of housing and business growth in the next 30 years. Planning and investment will be targeted and prioritised to these areas where the greatest development capacity is taken up.

Development areas are not a prediction of where large scale redevelopment will happen, but rather where it is most likely to happen. This gives infrastructure and service providers a basis from which they can do their own long-term planning.

Monitoring of actual, on-the-ground development is crucial. This will inform adjustments to development areas if needed, and subsequent adjustments to the long-term plans of providers.

Each development area will be different and will experience growth at varying rates and at different times. The investment required in these areas will focus on addressing the impacts of increased demand on infrastructure and services as development occurs. This will need a coordinated approach by agencies involved in implementation.

Characteristics of development areas

Development areas have a combination of the following characteristics:

- substantial capacity provided in the Auckland Unitary Plan for housing and business development
- access to a large number of jobs within a reasonable commuting time
- access to centres and the strategic public transport network within easy walking distance
- major public landholdings with intended or potential redevelopment
- current or planned infrastructure capacity that is likely to enable significant additional growth – for example, the expansion of the strategic transport network that improves connectivity
- market feasibility.

One or more of these characteristics can make an area attractive to market investment. This plays a critical role in determining the likely scale and pace of development.

Some areas in Auckland are currently market attractive and may require investment in infrastructure and services in the short to medium term.

Significant investment in an area can positively influence the market attractiveness, and create a spill-over effect into adjacent areas.

Also, planned future investment, such as new transport infrastructure, once built, can change an area that is currently not market attractive to one that is. These sorts of factors influence the expected timing, rather than the potential scale, of redevelopment.

Supporting investment will be prioritised for when development occurs.

Once significant growth has happened in an area, it will require further investment in amenity and community facilities to cater for the greater number of people living there.

Timeframes for development areas

Approximately 18 development areas are identified for targeted investment over the next 30 years. They are prioritised across three broad timeframes that align with the National Policy Statement on Urban Development Capacity.[288]

The criteria used to sequence development areas included:

- feasible development capacity
- regeneration opportunity and ability to optimise the use of existing or planned investments
- alignment with existing or planned infrastructure provision.

Areas that have already been identified through previous planning and with commitments to current projects are prioritised in the first three years.

Areas in the next 4 to 10 years generally rely on benefits from significant infrastructure projects such as the City Rail Link.

Beyond the next 11 years, there is less certainty about which areas will experience large scale growth.

Timeframes indicate when some of the investment in infrastructure and services may need to be made. It does not indicate that development will be completed or investment ceased at the end of the timeframe.

Years specified generally refer to 1 July of that year onwards.
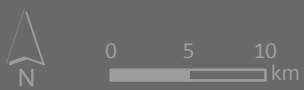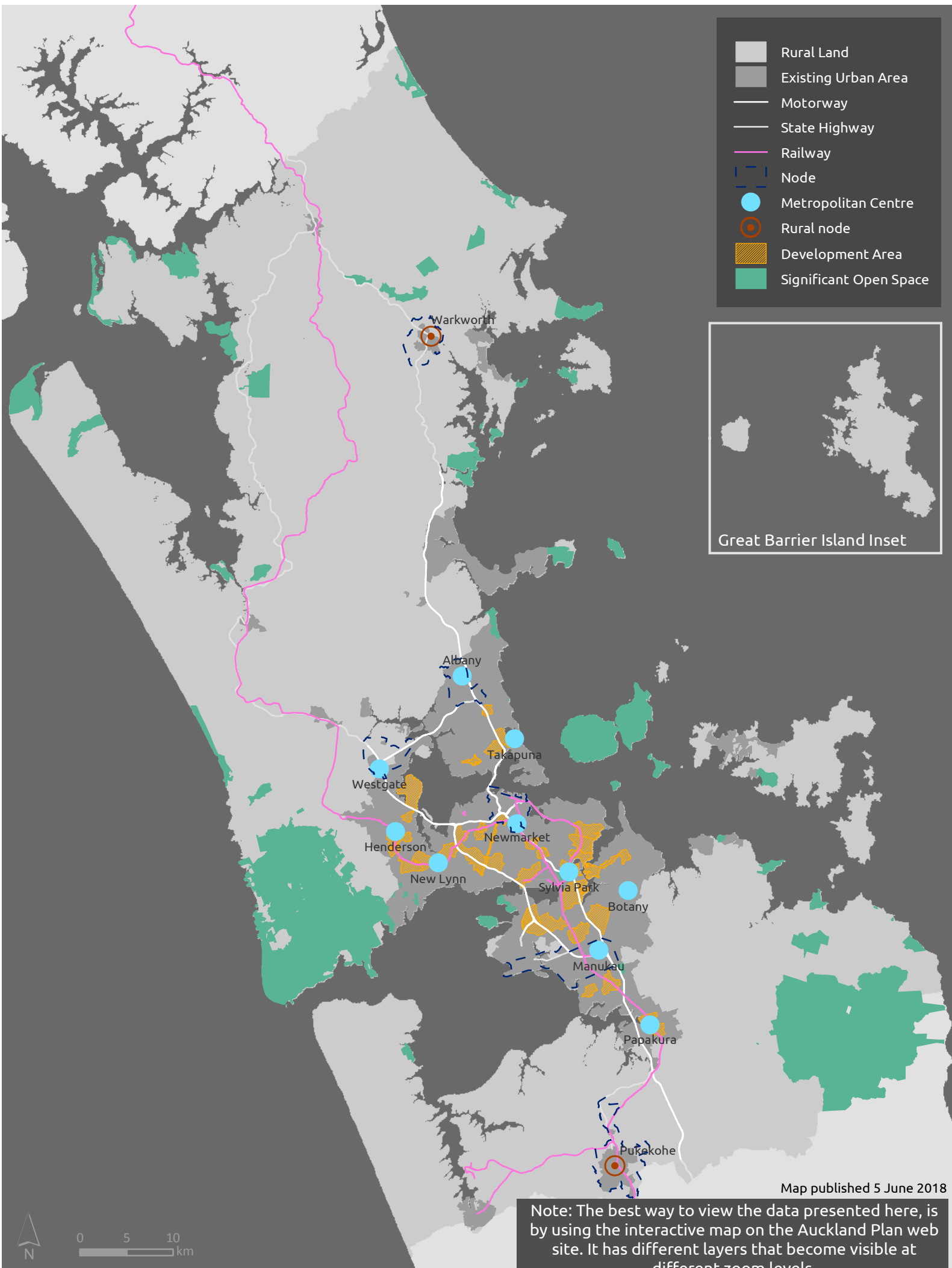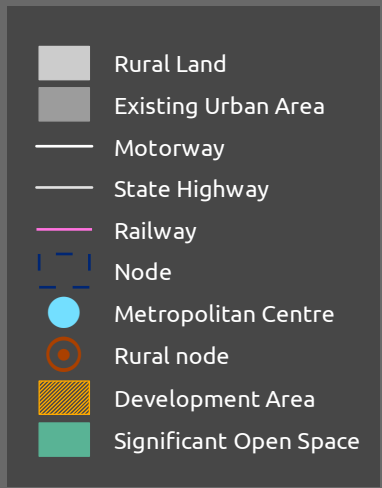
AUCKLAND
PLAN
2050

Development
Strategy

Existing Urban

Map 15

Legend

- Rural Land
- Existing Urban Area
- Motorway
- State Highway
- Railway
- Node
- Metropolitan Centre
- Rural node
- Development Area
- Significant Open Space

Great Barrier Island Inset

Warkworth

Albany

Takapuna

Westgate

Newmarket

Henderson

New Lynn

Sylvia Park

Botany

Manukau

Papakura

Pukekohe

0   5   10
km

N

Map published 5 June 2018

Note: The best way to view the data presented here, is by using the interactive map on the Auckland Plan web site. It has different layers that become visible at different zoom levels.

Building strong urban centres and neighbourhoods

In keeping with our commitment to a quality compact urban form, it will be essential that Auckland's centres and neighbourhoods are strong, connected and can flourish.

Centres

Over the next 30 years there will be considerable changes right across Auckland. Ensuring that Auckland creates and retains strong, thriving and resilient centres is vital. A network of centres serves communities from regional through to local level. This network is reflected in the Auckland Unitary Plan hierarchy of centres.

Centres are at the heart of neighbourhoods and are focal points for the surrounding community. They include a mix of activities and functions, such as retail, commercial and social services, as well as housing, recreation and community facilities.

Auckland's centres are supported by a surrounding (typically residential) area that is within an easy walking distance, usually thought of as 10 minutes.

Some of our centres currently provide opportunities to maximise investment in infrastructure and support the quality compact approach to urban development. For example, Mt Albert has access to rail and is close to Unitec.

Maximising investment can be achieved by creating higher-density clusters of employment and housing, supported by public transport and other critical services such as schools and hospitals.

Many of these centres are identified in nodes and development areas. They will be supported to develop and intensify, particularly those that have greater capacity for growth.

Neighbourhoods

Growth will happen in neighbourhoods too. The Auckland Unitary Plan enables growth throughout most of Auckland's existing urban footprint, and all neighbourhoods are capable of accommodating growth to some extent.

This might be in the form of subdivision, development of previously undeveloped urban land or the redevelopment of existing buildings at higher densities. All are workable options for increasing Auckland's housing stock.

However, there are areas in Auckland that have the potential to achieve higher levels of growth than others. These are identified as development areas. Together with future urban areas they play an important role in Auckland's future growth.

Figure 39 - Walkable catchment around a centre

10 minute walkable catchment for a centre

From civic, retail, commercial and mixed use .....   to more intensive residential .....   to lower density residential   800m
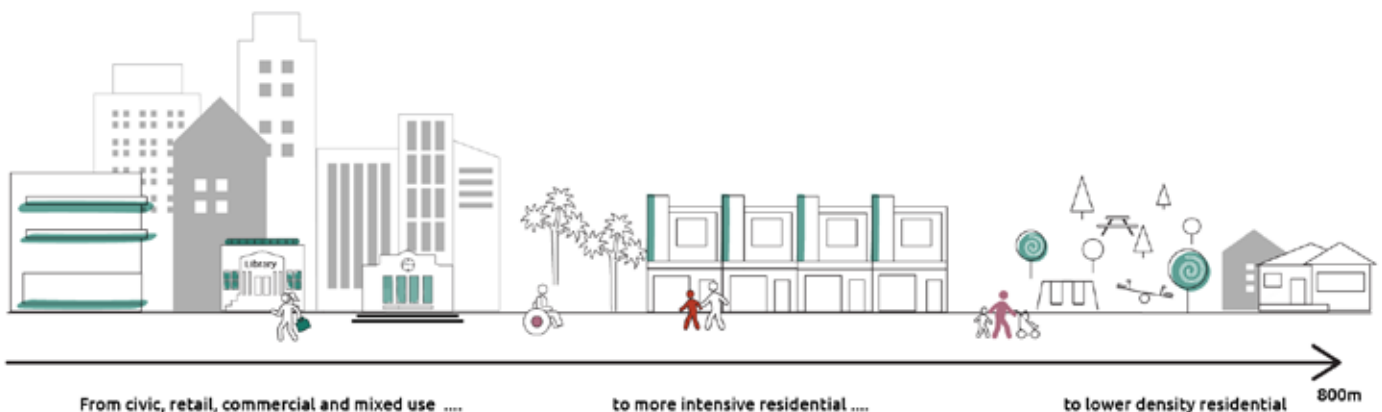
Managed expansion into future urban areas

In the next 30 years new communities will be established in future urban areas. These will be on the fringe of Auckland's existing urban area, and in rural and coastal settlements.

Forming new communities

Around 15,000 hectares of rural land and coastal areas that could accommodate approximately 137,000 homes and 67,000 jobs over the next 30 years have been identified as suitable for urban development.

Expansion into greenfield areas will be managed within the Rural Urban Boundary.

Development will be sequenced, and timed for when these areas will be 'live zoned' and the necessary bulk infrastructure is in place. The Future Urban Land Supply Strategy[289] outlines this approach in detail.

Areas that have already been zoned as urban in the Auckland Unitary Plan have been sequenced first. Other early sequencing priorities are areas with less infrastructure constraints - for example, Whenuapai.

See Map 16 - Future Urban -an interactive version of the map is available at aucklandplan.govt.nz

Areas that have significant infrastructure or environmental constraints are sequenced later in the 30 year timeframe - for example, Takanini.

What is needed to succeed

Because of the scale of growth envisaged in Auckland's future urban areas, and the housing and employment choices they can provide, it is crucial that they are developed in an efficient, cost-effective and sustainable way.

They also need to be vibrant places for the new communities who will live there. This requires a network of strong centres and neighbourhoods, integrated with good transport choices, and supported by a wide range of housing types and densities.

These areas will also require employment other than that provided in centres. Services and facilities such as schools and hospitals parks, sports fields and community facilities will also be required. Two additional hospital sites in the north and south will be needed in the future.

Challenges we face

There are many challenges to creating new urban areas, including environmental constraints and impacts:

- these areas are predominantly rural at present and have little or no infrastructure in place to cope with urban development
- providing the required bulk infrastructure (water, wastewater, storm water and transport) to these areas in the right place at the right time
- funding and delivery of significant infrastructure projects to these areas are key drivers of development timing.

Figure 40 -Integrated planning approach brings together the planning and infrastructure processes
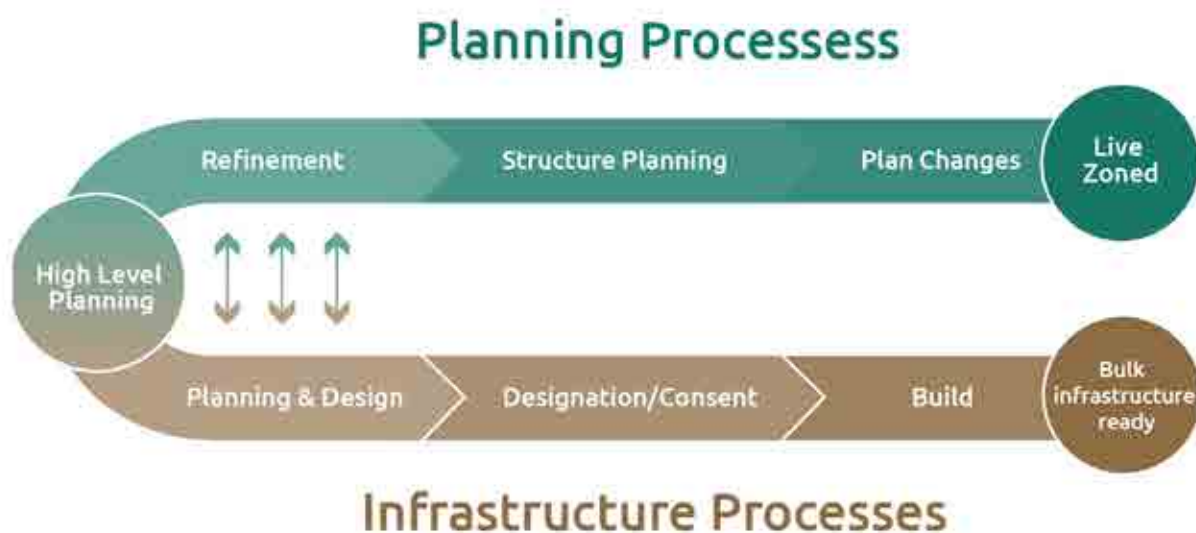
Note: The best way to view the data presented here, is by using the interactive map on the Auckland Plan web site. It has different layers that become visible at different zoom levels.

Map published 5 June 2018

Legend:
— Motorway
— Strategic Arterial Road
— Railway
— Rural Urban Boundary (RUB)
⊛ Proposed New Centre
⊛ Indicative Centre
▨ Indicative Future Urban Business Area
▨ Future Urban Area
▨ Existing Urban Area
▨ Rural
▨ Open Space

Great Barrier Island Inset

Kaipara Harbour

Wellsford

Warkworth

Orewa

Helensville

Kumeū

Hauraki Gulf / Tīkapa Moana

Takapuna

Waitematā Harbour

Waiheke Island

Henderson

Titirangi

Waitākere Ranges

Howick

Manukau

Clevedon

Manukau Harbour

Hunua Ranges

Pukekohe

Waiuku

N

0   5   10
km
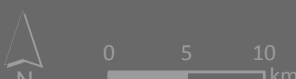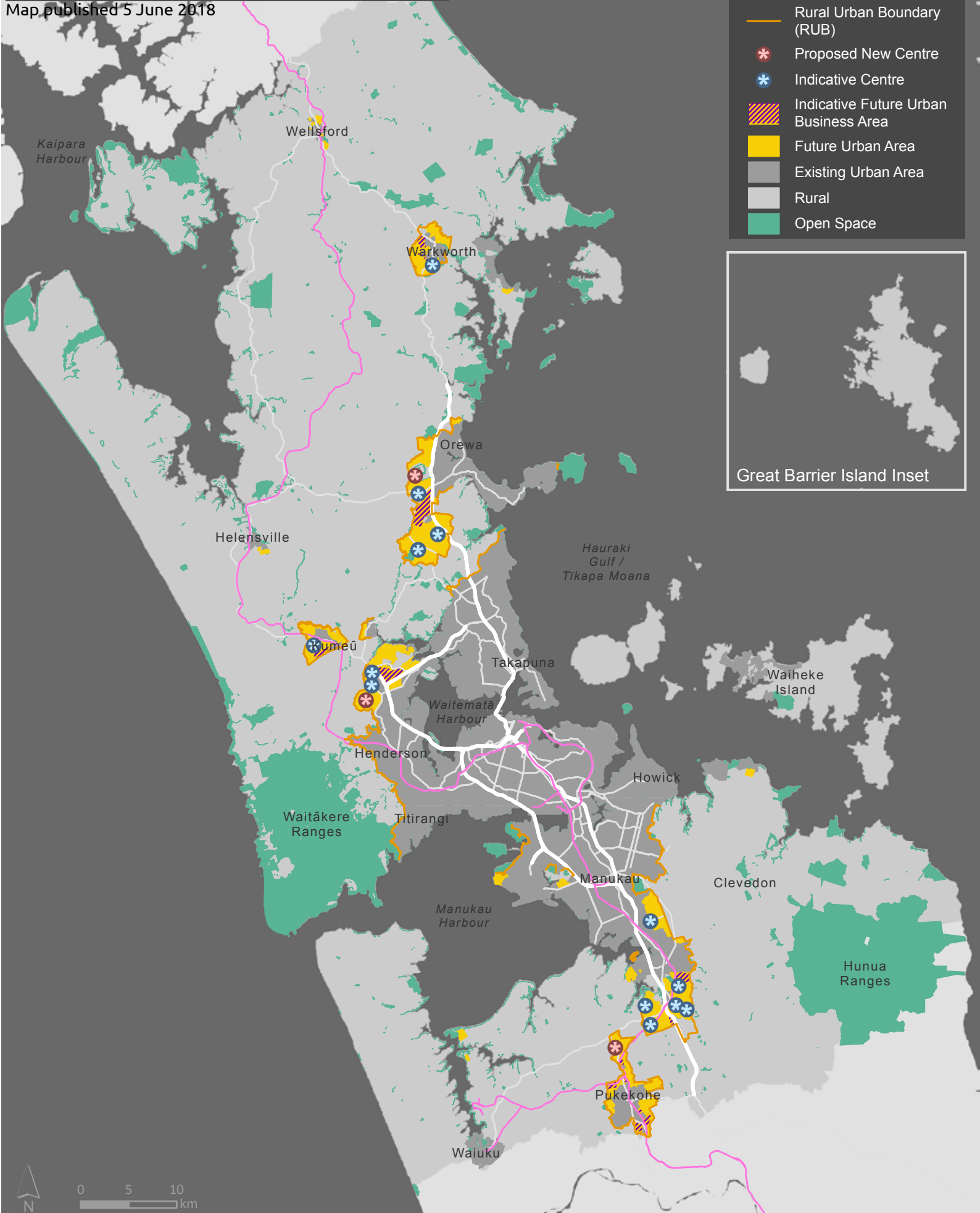
Auckland's capacity for growth

Recent growth patterns

Auckland's population has grown by 180,700 since the first Auckland Plan was adopted in 2012.

The rate of growth has remained high in recent years, and increased by 43,000 in 2016/2017.

In the past five years consents for new dwellings have increased from 5500 (2012/2013) to over 10,000 (2016/2017) per annum. If consents continue at this level, Auckland will be on track to consent around 100,000 new homes between 2012 and 2022.

Auckland is also delivering more attached housing than in previous years. This offers people greater housing choice. The proportion of attached dwellings has increased from 16 per cent of all dwellings consented in 2012/2013 to 43 per cent in 2016/2017.

See *Figure 42 -Proportion of consented dwellings, by dwelling type from 2012 to 2017 by financial year*

Furthermore, 80 per cent of all new dwellings consented in the last five years were located within the existing urban area. For further information see the 2016/2017 Development Strategy Annual Monitoring Update.[290]

See *Figure 43 -Proportion of consented dwellings inside and outside the 2010 Metropolitan Urban Limit type from 2012 to 2017 by financial year*

Monitoring is being improved to track both dwelling consents and completions to enable better understanding of delivery against targets.

Number of consented dwellings in Auckland (2012-2017)

Reporting year	Number of consented dwellings
Year 1 (2012/2013)	5501
Year 2 (2013/2014)	7078
Year 3 (2014/2015)	8398
Year 4 (2015/2016)	9381
Year 5 (2016/2017)	10,121
Total (2012 to 2017)	40,479

Urban development capacity

The Development Strategy provides the strategic direction for how, where and when urban growth is delivered over the life of the Auckland Plan 2050.

Sufficient, feasible development capacity must be provided over this period. The Development Strategy therefore identifies the expected location, timing, and sequence of future development capacity in the existing urban areas and future urban areas.

This is informed by:

- the Auckland Unitary Plan
- the Housing and Business Development Capacity Assessment[291]
- Auckland Council's Long term Plan (including the Infrastructure Strategy).

To meet Auckland's demand for housing over the next 30 years, a minimum target of 408,300 dwellings has been set to provide sufficient feasible development capacity. The diagram below (housing capacity in Auckland) illustrates the relationship between enabled capacity, feasible capacity and what the market actually delivers.

Enabled capacity

There are currently about 550,000 residential dwellings in Auckland. The Auckland Unitary Plan enables capacity for approximately one million additional residential dwellings. Only some of this enabled capacity will be realised each decade to meet Auckland's growth.

Enabled capacity will change over time as capacity is taken up, that is, as development happens. It will also change as the planning controls of the Auckland Unitary Plan change.

Figure 41 -Housing capacity in Auckland
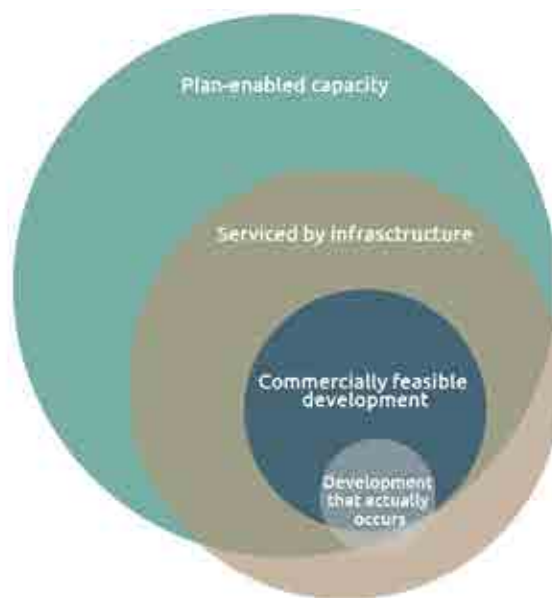
Figure 42 -Proportion of consented dwellings, by dwelling type from 2012 to 2017 by financial year

Proportion of consented dwellings

by type 2012 - 2017
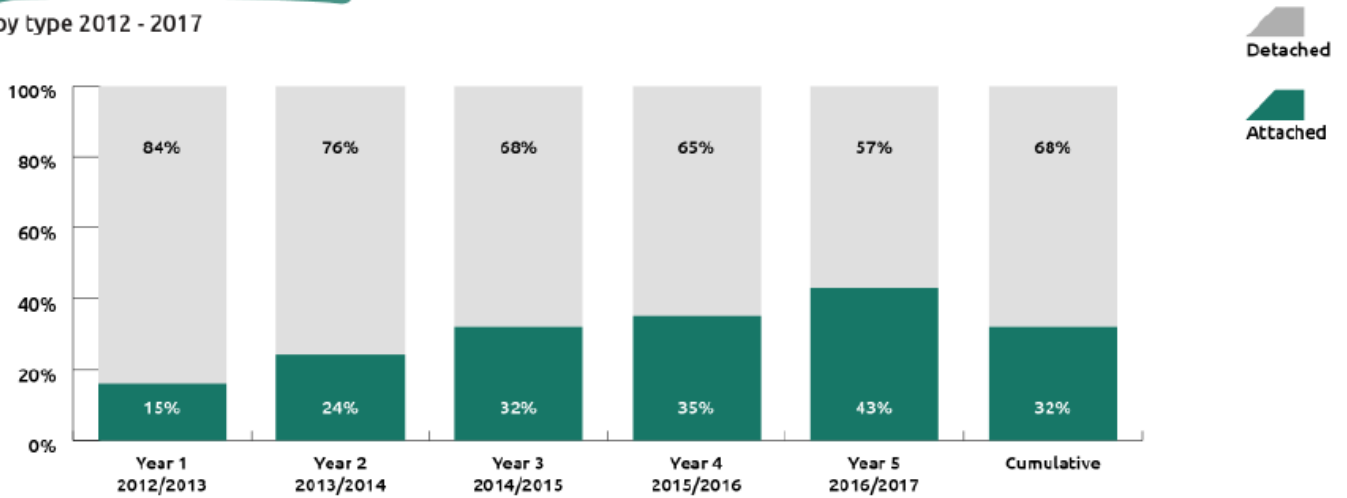
Figure 43 -Proportion of consented dwellings inside and outside the 2010 Metropolitan Urban Limit type from 2012 to 2017 by financial year

Proportion of consented dwellings 2012 - 2017

inside and outside 2010 Metropolitan Urban Limit (MUL)
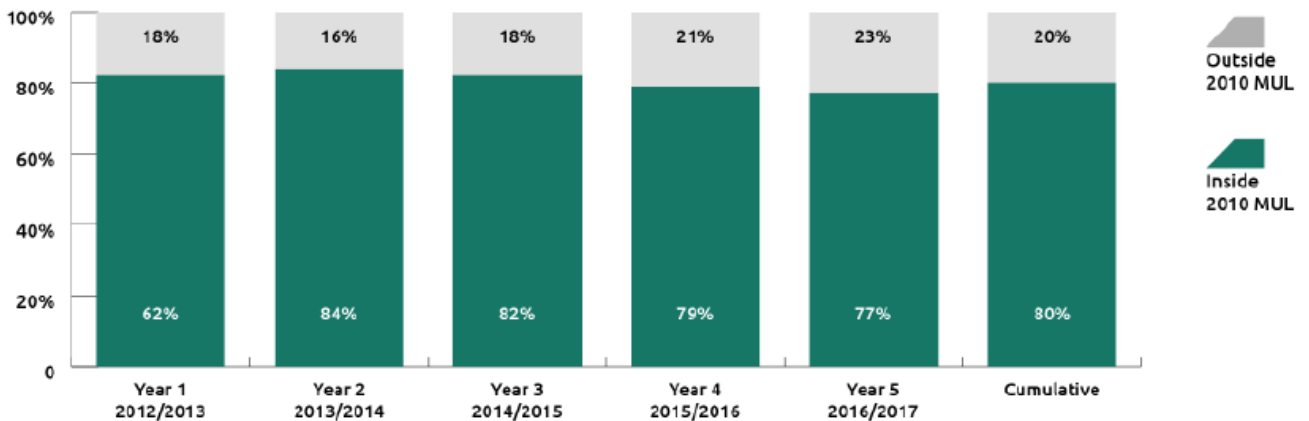
Feasible capacity

Feasible capacity is the amount of development that is commercially viable, taking into account current costs, revenue and yields.

It is a commercial 'filter' on enabled capacity, providing a 'snapshot' in time. It is not a forecast or projection of development, but does allow scenarios to be tested.

Feasible capacity is dynamic and changes subject to the housing and construction markets and economic conditions.

A range of development indicators will be monitored on a quarterly and annual basis, to ensure informed responses.

Auckland's dwelling growth to 2048

Auckland's anticipated population and dwelling growth over the next 30 years will occur across the region as shown in the table below.

Around 62 per cent of development over the next 30 years is anticipated to be within the existing urban area.

The remaining development is anticipated to occur in future urban areas (32 per cent) and in rural areas (6 per cent). The future urban areas will be urbanised in a managed, staged approach to ensure integration between land use planning and delivery of bulk infrastructure.

Anticipated dwelling growth by decade

Decade 1

The greatest amount of growth in residential dwelling supply is expected in the first decade of the plan. This reflects recent high population growth, which is expected to taper off and return to a more modest, long-term growth rate sometime during the first decade.

Less growth is anticipated in the future urban areas in this decade relative to other area categories. This reflects the time it will take to plan and service many of these areas with infrastructure. The build-out of these areas may take even longer, depending on:

- overall housing demand
- the ability of these areas to deliver smaller, more affordable housing options
- locational preferences.

See *Figure 44 - Anticipated dwelling growth 2018 to 2028*

Decades 2 and 3

Over the last two decades of the plan there will be less certainty about demand and supply of capacity that will be needed. Annual monitoring will enable planning to respond to changing trends.

Further growth in development areas is anticipated, with the advantages of greater accessibility of these areas through delivery of major transport projects likely to attract development.

In the future urban area more development is expected in decades two and three than in decade one, as infrastructure delivery is progressed.

See *Figure 45 - Anticipated dwelling growth 2028 to 2038 and Figure 46 - Anticipated dwelling growth 2038 to 2048*

Development Strategy measures

Auckland Council will monitor residential and business development against the Development Strategy to track progress on development capacity and delivery across Auckland.

This is intended to ensure planning and infrastructure funding decisions are well-informed, timely and responsive to growth demands.

Anticipated growth in population and dwellings (2018-2048)

	Population 2018	Population growth 2018 - 2048	Dwellings 2018	Dwelling growth 2018 - 2048	Feasible capacity 2017
Existing urban area	1,486,000	443,300	491,700	195,000	117,500
Future urban area	44,200	243,400	15,300	99,000	114,800
Rural area	126,400	33,400	47,100	19,100	53,700
Total	1,656,600	720,100	554,100	313,100	286,000

Anticipated dwelling growth

from 2018 to 2028

Anticipated dwelling growth

from 2028 to 2038

Anticipated dwelling growth

from 2038 to 2048
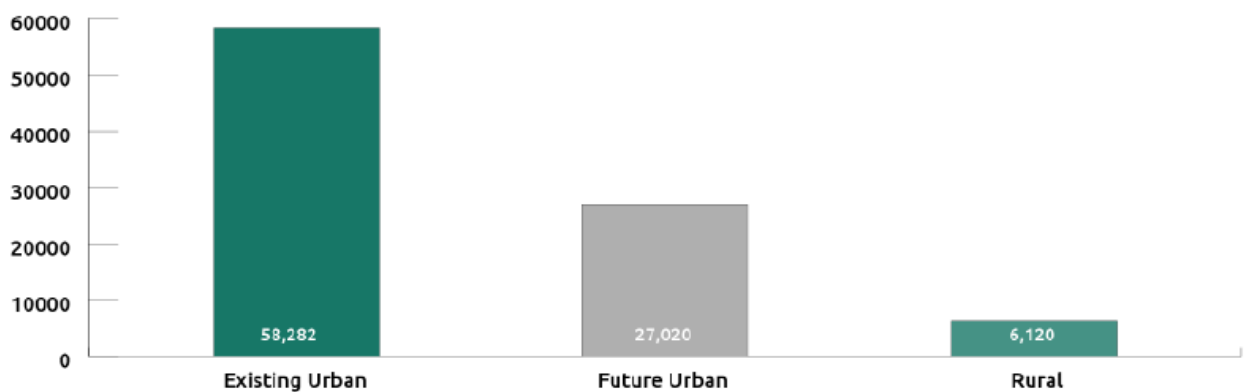
This will in turn ensure Auckland maintains a balanced supply of development capacity that is consistent with the strategic approach to managing Auckland's growth as set out in the Development Strategy.

Primary measures include:

- new dwellings consented
- location of new dwellings consented
- typology of new dwellings consented
- resident satisfaction with built environment at a neighbourhood level
- number of jobs accessible in the morning peak (within 30 minutes by car, 45 minutes by public transport)
- hectares of industrial zoned land.

These measures will be reported on at least annually, except for resident satisfaction which will be reported bi-annually.

A series of indicators, consistent with central government guidance on urban development capacity will also be monitored, including:

- prices and rents for housing, residential land and business land
- consents granted for urban development
- population growth
- housing affordability
- price efficiency in the land and development market.

Assessing demand

The following demand for business and housing is anticipated for Auckland over the next 30 years (2016-2046).[292]

Business land demand

Demand for business land and floorspace is an important consideration in planning for growth. The table below shows the anticipated medium and long term floorspace demand by location.

Modelling indicates that in the short to medium term the urban north gets close to capacity in consuming business floor space.

These figures do not account for the levels of business land anticipated in the future urban areas as these areas develop. This will add business land supply in the north, north-west and south.

Housing demand

The following demand for housing is anticipated over the next 30 years (2016-2046).

The current level of feasible development capacity exceeds demand in the medium term (1-10 years). However, over the long term (11-30 years), based on current assumptions, there is a shortfall of around 82,000 dwellings.

The long term shortfall is expected to be met in the following ways:

Housing New Zealand

Expect current levels of development on Housing New Zealand owned land to continue into decades two and three. This will provide 12,500 to 25,000 extra dwellings per decade.

Kiwibuild and later central government programmes

Estimate providing up to 25,000 extra dwellings per decade. The aim is to de-risk larger development sites and speed up delivery.

Panuku Development Auckland

Expect approximately 5000 additional dwellings per decade to result from direct development actions by Panuku.

In addition, other factors are expected to deliver additional dwellings.

Long term, land values are anticipated to appreciate at a faster rate than other building costs i.e. labour and materials. Existing developments are also expected to depreciate. This is expected to result in improved feasibility of more intensive redevelopment. This is particularly in locations well serviced by public transport.

The combined actions of council and central government, together with the market will deliver improved accessibility, amenity and new development. These are all expected to lead to further interest, market confidence and development opportunities.

Anticipated medium and long term business floor space demand

	City centre	Commercial zones	Light industry zones	Heavy industry zones
Medium Term (1-10 years) (floor space sqm)	871,000	3,381,000	1,830,000	710,000
Long Term (1-30 years) (floor space sqm)	1,504,000	6,098,000	3,600,000	1,397,000

Source: Housing and Business Development Capacity Assessment, Appendix C - Business land demand and supply, Market Economics, 2017, Figures 3-7 and 3-8)

Anticipated medium and long term housing demand

	Total (dwellings)	Demand (dwellings)	National Policy Statement margin (dwellings)	2017 shortage (dwellings)
Medium term (1-10 years)	189,800	129,000	25,800	35,000
Long term (1-30 years)	408,300	319,000	54,300	35,000

Source: Auckland Council 2018

Note: Within these tables medium term includes short and medium term. Long term combines short, medium and long term. This is consistent with guidance on calculating targets for the National Policy Statement on Urban Development Capacity.

Anticipated growth - where and when

Growth is enabled throughout most of Auckland's urban footprint. However, much of it is expected to be concentrated in the city centre, nodes, development areas and future urban areas.

Growth in these areas is expected to require substantial investment in infrastructure and services over a sustained period of time.

Development areas

Development areas are specific locations that are expected to undergo a significant amount of housing and business growth in the next 30 years.

Planning and investment will be targeted and prioritised to these areas where the greatest development capacity is taken up.

The timeframes for the development areas indicate when development is likely to happen at scale.

This estimated timing is based on market attractiveness, major committed or planned projects (refer to table below and infrastructure section), or each area's capacity to accommodate additional growth.

Development areas may require further planning and investment in amenity and community facilities, as growth occurs, to cater for the greater number of people living there.

This support is likely to continue over the medium to long term and, in many cases, beyond the timeframes indicated in the table below.

Future urban areas

New communities will be established in future urban areas on the fringe of Auckland's existing urban area and in rural and coastal settlements.

In future urban areas, the Future Urban Land Supply Strategy 2017[293] sequences when land will be live zoned, based on when necessary bulk infrastructure will be available.

Auckland Plan 2050 - Anticipated timeframe of development in existing urban area

	Decade 1 2018-2028		Decade 2 2028-2038 / Decade 3 2038-2048	Expected dwelling growth 2018-2048	Feasible development capacity 2017 (dwellings)
	Short term 2018-2021	Medium term 2021-2028	Long term 2028-2048		
Nodes					
City centre & city fringe	■	■	■	25,240	220
Albany*	■	■	■	5,750	990
Westgate*	■	■	■	33,190	41,190
Manukau	■	■	■	4,750	1,560
Nodes total *Includes a component of future urban				68,930	43,950
Development Areas					
Sunnynook			■	990	990
Takapuna	■			5,390	1,150
Northcote			■	1,450	880
Birkenhead			■	2,820	2,010
Te Atatū Peninsula		■		1,110	700
Te Atatū South			■	290	600
Glendene			■	0	390
Henderson		■		3,780	570
Sunnyvale			■	530	410
Avondale	■			2,440	980
New Lynn	■			6,850	280
Kelston			■	1,150	990
Glen Eden		■		1,550	1,270
Newton		■		2,980	30
Morningside		■		490	90
St Lukes		■		1,320	310
Mt Albert		■		1,190	230
Dominion Road corridor		■		1,980	300
Mt Roskill -Three Kings	■	■		6,240	2,600
Greenlane			■	1,570	200
Ellerslie			■	2,280	230
Glen Innes	■			3,600	3,420
Tāmaki	■			960	1,230
Panmure	■			1,780	1,080
Sylvia Park		■		5,210	1,520
Highland Park			■	1,380	2,900
Pakuranga Corridor			■	1,040	3,630
Pakuranga		■		1,700	2,890

	Decade 1 2018-2028		Decade 2 2028-2038	Decade 3 2038-2048	Expected dwelling growth 2018-2048	Feasible development capacity 2017 (dwellings)
	Short term 2018-2021	Medium term 2021-2028	Long term 2028-2048			
Development Areas						
Ōtāhuhu					2,250	2,870
Māngere					1,250	1,340
Māngere East					780	1,820
Ōtara					1,660	1,320
Papatoetoe-Hunters Corner					2,230	2,710
Manurewa					990	2,730
Clendon					660	1,570
Papakura					2,160	1,530
Development areas total					77,930	48,390

Note: Years specified generally refer to 1 July of that year onwards.

Auckland Plan 2050 - Anticipated development and employment capacities and timing for future urban areas

Proposed timing – development ready	Area^	Anticipated dwelling capacity for each area (approx.)	Anticipated dwelling capacity subtotals (approx.)	Anticipated Employment (jobs) (approx.)#
Actuals, contracted or planned 2012 - 2017	Live zoned areas and SHAs			
	Warkworth North	Business	31,590	15,350
	Wainui East	4,500		
	Whenuapai	1,150		
	Scott Point	2,600		
	Red Hills	3,600 (SHA) + 7,050 (live zone)		
	Puhinui	Business		
	Kumeū Huapai	1,400		
	Hingaia	3,070		
	Wesley (Paerata)	4,550		
	Belmont (Pukekohe)	720		
	Drury South	1,000		
	Bremner Rd (Drury West)	1,350		
	Bellfield Rd (Opaheke)	300		
	Walters Rd (Takanini)	300		
Decade One 1st half 2018 – 2022	Warkworth North*	2,300	14,300	27,250
	Paerata (remainder)	1,800		
	Whenuapai (Stage 1)	6,000		
	Silverdale West / Dairy Flat (business land)	Business		
	Drury West Stage 1*	4,200		
Decade One 2nd half 2023 – 2027	Pukekohe	7,200	7,700	
	Cosgrave Rd, Takanini	500		
Decade Two 1st half 2028 - 2032	Kumeū Huapai Riverhead	6,600	36,900	21,350
	Warkworth South	3,700		
	Whenuapai (Stage 2)	11,600		
	Drury West (Stage 2)	5,700		
	Opaheke Drury	7,900		
	Red Hills North	1,400		
	Puhinui	Business		
Decade Two 2nd half 2033 – 2037	Silverdale Dairy Flat (remainder)	20,400	29,400	
	Wainui East (remainder)	7,400		
	Warkworth North East	1,600		
Decade Three 1st half 2038 – 2042				50
Decade Three 2nd half 2043 – 2047	Takanini+ Yet to be determined new growth areas	4,500	4,500	
Total		124,390		64,000

^Refer sequencing maps for staging/areas

 # Anticipated employment figures do not include anticipated employment in centres

* Drury West (Stage 1) and Warkworth North development ready from 2022

+Significant flooding and geotech constraints – further technical investigations required

Further information: Refer Future Urban Land Supply Strategy (2017)[294]

Auckland Plan 2050 - Anticipated development and employment capacities and timing for rural settlements

Proposed timing – development ready	Area	Anticipated dwelling capacity for each area (approx.)	Anticipated dwelling capacity subtotals (approx.)	Anticipated Employment (jobs) (approx.)
Actuals, contracted or planned 2017	Live zoned areas and SHAs			
	Hatfields Beach 1	9	8,236	1,000
	Hibiscus Coast (Silverdale)	963		
	Hibiscus Coast (Red Beach)	570		
	Albany Village 1	4		
	Waimauku	231		
	Swanson	290		
	Maraetai 1	110		
	Ōruarangi 1	480		
	Clevedon Waterways	350		
	Clevedon	1041		
	Karaka North	744		
	Kingseat	1,842		
	Clarks Beach 1	650		
	Glenbrook Beach 1	843		
	Patumahoe	109		
Decade One 1st half 2018 – 2022	Ōruarangi 2	258	258	
Decade One 2nd half 2023 – 2027	Wellsford	832	2,717	2,100
	Algies Bay	455		
	Albany Village 2	450		
	Helensville 1	72		
	Clarks Beach 2	701		
	Glenbrook Beach 2	207		
Decade Two 1st half 2028 – 2032	Hatfields Beach 2	671	1,250	0
	Helensville 2	362		
	Maraetai 2	217		
Decade Two 2nd half 2033 – 2037				
Decade Three 1st half 2038 – 2042				
Decade Three 2nd half 2043 – 2047				
Total		12,461		3,100

Further information: Refer Future Urban Land Supply Strategy (2017)[295]

For more information: Development areas provide further detail on sequencing and timing of development areas.

Years 1 to 3 (2018 to 2021)

The areas where growth is expected in the first three years have been identified as those where there has been previous planning and commitments are in place.

In the case of the future urban areas, they have been given a 'live zone' in the Auckland Unitary Plan.

Years 4 to 10 (2021 to 2028)

A number of the areas identified in the one-to-three year period will continue into years 4 to 10.

New areas are likely to become more market attractive after the completion of the City Rail Link, which will improve accessibility to and from Auckland's west including Morningside, Mt Albert, and Henderson.

The completion of Auckland Manukau Eastern Transport Initiative will enable growth in Pakuranga.

Infrastructure projects in greenfield areas, including the state highway link that is currently under construction between Pūhoi and Warkworth, will enable growth in Warkworth north.

Wastewater upgrades will enable growth in Drury West and Pukekohe.

Years 11 to 30 (2028 to 2048)

In years 11 to 30 there will be continued support for projects already initiated in the first decade, but there is less certainty over when additional areas will undergo development.

Areas that are likely to commence significant development in this timeframe include those where accessibility to employment is improved through the City Rail Link and the Auckland Manukau Eastern Transport Initiative.

Investment in significant bulk infrastructure projects in future urban areas will enable development of remaining areas, including Warkworth, Whenuapai, Opaheke, Drury, Red Hills and Kumeū-Huapai-Riverhead.

Takanini has the most significant constraint and has been sequenced later in the 20 to 30 year timeframe.

For an Overview of sequencing (30 years from 2018 to 2048) see Map 28 - an interactive version of the map is available at aucklandplan.govt.nz

Timeframes for signigicant enabling infrastructure projects

Auckland's strategic infrastructure networks provide essential bulk services that enable the growth anticipated over the life of the Auckland Plan 2050. The following table identifies the timing of the significant projects that have been either committed or signalled.

Auckland Council projects identified in decade 1 are funded in the 10 -year Budget 2018 - 2028.

Council projects in years 11-30 are identified in Auckland's 30-year Infrastructure Strategy (2018).[296] It also shows the current 'most likely scenario' for infrastructure investment over the life of the Auckland Plan 2050.

New Zealand Transport Agency projects are subject to funding by central government.

The timing of these key projects helps to inform a broad understanding of when and where growth at scale is likely to occur.

Investment in stormwater infrastructure is not included in the table below due to the typically smaller scale and short lead-in time for investment needed to enable growth. Further information on planned investment in stormwater infrastructure is available in the 30-year Infrastructure Strategy.

Legend

— Motorway
— Strategic Arterial Road
---- Rural Urban Boundary (RUB)
Rural
Existing Urban Area
Node Years 1 - 30

Years 1 - 3
Future Urban Area 2018*
Development Area 2018-2021
Future Urban Area 2018-2022*

Years 4 - 10
Development Area 2021-2028
Future Urban Area from 2022*
Future Urban Area 2023-2027*

Years 11 - 30
Development Area 2028-2048
Future Urban Area 2028-2032*
Future Urban Area 2033-2037*
Future Urban Area 2043-2047*

* Refer to the Future Urban Land Supply Strategy (2017) as Auckland Council's policy for the sequencing and timing of future urban areas.

Map published 5 June 2018

Note: The best way to view the data presented here, is by using the interactive map on the Auckland Council website. It has different layers that become visible at different zoom levels

Warkworth

Warkworth North
Warkworth South

Map labels: Hatfields Beach, Upper Ōrewa, Wainui East, Silverdale West, Dairy Flat East, Dairy Flat, Helensville, Riverhead, Huapai, Kumeū, Whenuapai, Albany Village, Sunnynook, Takapuna, Northcote, Birkenhead, Westgate, Red Hills, Te Atatū Peninsula, Te Atatū South, Henderson, Glendene, Mt Albert, Morningside, Newton, Glen Innes, Tāmaki, Maraetai, Avondale, Sunnyvale, Kelston, St Lukes, Dominion Road Corridor, Greenlane, Ellerslie, Highland Park, Mt Roskill, New Lynn, Three Kings, Sylvia Park, Pakuranga, Glen Eden, Ōnehunga, Ōtāhuhu, Ōtara, Whitford, Ōruarangi, Māngere, Papatoetoe, Clevedon, Puhinui, Manurewa, Takanini, Clendon, Papakura, Hingaia, Opaheke / Drury, Karaka North, Drury West, Clarks Beach, Kingseat, Paerata, Glenbrook Beach, Pukekohe

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Auckland Plan 2050 - Anticipated timeframe of enabling infrastructure projects in Auckland

Strategic public transport network projects

Decade 1 (2018 - 2028)	Decade 2 (2028 – 2038)	Decade 3 (2038 - 2048)
• Pukekohe rail electrification • City centre to Mt Roskill light rail • Onehunga to Airport • Mt Roskill to Airport light rail • Northwest Rapid Transit (City centre to Kumeū/Huapai) • City Rail Link • Eastern Busway (Panmure to Botany) • Airport to Manukau bus improvements, including Puhinui interchange • Northern Busway (Constellation to Albany) • Lincoln Road bus improvements Stage 1 • Albany to Silverdale (bus shoulder lanes) • Third main - Wiri to Westfield	• New Lynn to Ōnehunga • Botany to Manukau • Lincoln Road bus improvements Stage 2 • Upper Harbour Rapid Transit (Westgate to Constellation)	• Northern Rapid Transit – City centre to Takapuna and Ōrewa • Ellerslie to Panmure

Strategic road network projects

Decade 1 (2018 - 2028)	Decade 2 (2028 – 2038)	Decade 3 (2038 - 2048)
• Southern motorway upgrade (Manukau-Drury) • Lincoln Road widening • East – West Link • SH20B upgrade (Airport to Puhinui) • Penlink • Mill Road - partial complete with details to follow • Pūhoi to Warkworth • SH16 Lincoln Road to Westgate • Northern Corridor (SH1 to SH18)	• Westgate to Kumeū corridor • Warkworth to Wellsford • Drury to Pukekohe corridor • SH16-18 interchange completion • Grafton Gully to Port	• Additional Waitematā Harbour crossing • SH20/20A improvements (Ōnehunga to Airport) • Northern motorway upgrade (Onewa to Constellation) (Albany to Silverdale) • Southern motorway upgrade (Drury to Bombay)

Wastewater projects

Decade 1 (2018 - 2028)	Decade 2 (2028 – 2038)	Decade 3 (2038 - 2048)
• Wellsford treatment plant upgrade • NE sub-regional wastewater treatment plant (Snells Beach) and network improvements • Army Bay treatment plant capacity and outfall • Rosedale Treatment Plant capacity • Northern Interceptor Stage 1 • Central Interceptor • Newmarket Gully • Howick diversion • Māngere Treatment Plant capacity • Southern Interceptor Augmentation Stage 1 • SW sub-regional wastewater treatment plant (Waiuku) and network improvements • Paerata – Pukekohe Wastewater Network • Pukekohe Treatment Plant capacity	• NE sub-regional treatment plant (Snells Beach) capacity • Army Bay treatment plant capacity • Hibiscus Coast wastewater network improvements • Rosedale Treatment Plant capacity • Northern Interceptor Stage 2 • Māngere Treatment Plant capacity • Southern Interceptor Augmentation Stage 2 • SW sub-regional wastewater treatment plant (Waiuku) capacity • Pukekohe Treatment Plant capacity	• NE sub-regional treatment plant (Snells Beach) capacity • Army Bay treatment plant capacity • Māngere Treatment Plant capacity • Southern Interceptor Augmentation Stage 3 • SW sub-regional treatment plant (Waiuku) capacity

Water supply projects

Decade 1 (2018-2028)	Decade 2 (2028 – 2038)	Decade 3 (2038 - 2048)
• Wellsford water supply capacity • Warkworth water supply capacity • Helensville water supply capacity • Albany to Pinehill watermain connection • North Harbour 2 watermain • Central reservoirs storage • Hunua 4 (Market Rd to Khyber Pass) • Huia water treatment plant capacity • Western reservoirs storage • Nihotupu 1 and Huia 1 watermains replacement • Ōrewa 1 replacement • Redoubt reservoirs storage • Pukekohe reservoir storage • Waiuku water supply capacity • Waikato treatment plant capacity	• Ōrewa 3 watermain • Waitākere 2 watermain • Waitākere treatment plant capacity • Western reservoirs storage • Redoubt reservoirs storage • Pukekohe reservoir storage • Waikato treatment plant capacity	• Warkworth water supply capacity • Snells Beach water supply capacity • Western reservoirs storage • Redoubt reservoirs storage • Waikato 2 watermain • Waikato treatment plant capacity • Waitematā Harbour Crossing (watermain)

Business areas

Flexible and adaptable business areas

As Auckland grows, it must offer capacity for new business growth. Around 263,000 new jobs may be needed over the next 30 years.

Business area trends

The concentration and location of Auckland's businesses in the urban areas has changed over time, and may continue to do so.

Heavy and light industrial uses are reducing their land areas or moving out towards the periphery and other, higher intensity uses are taking their place.

A more recent trend has been for advanced industries to concentrate in the city centre and in established industrial areas in the inner south.

Auckland's city centre plays a critical role in the success of Auckland's economy with a concentration of financial and commercial jobs.

A wide range of business activities are also clustered in major centres, industrial areas, and around the Ports of Auckland and Auckland International Airport.

The north-south State Highway 1 corridor has a concentration of businesses making use of this corridor to access other parts of Auckland and New Zealand.

Access to employment

Employment is currently concentrated in some parts of Auckland but is under-represented in the eastern and western parts of the urban area.

This imbalance, together with the 'pinch points' in the congested transport and infrastructure networks, creates greater disparities in access to education and employment between different communities.

Increasing business growth and employment opportunities around Albany, Westgate and Manukau will help address several of Auckland's current transport and employment challenges.

As these areas grow, there will be more options for people to work or study closer to home, and for greater benefits from business clustering and agglomeration.

Economic trends

Change in the make-up and distribution of Auckland's economy will continue over the medium to long term.

Most growth is expected in sectors that prefer to locate in commercial areas. However, the exact nature of economic changes and related business land needs are uncertain.

The impact of disruptive technologies and increasing automation are likely to lead to a growing share of jobs in advanced industries and further reductions in manufacturing jobs.

These changes have the potential to significantly affect the quantity, type and location of business land needed.

Given these uncertainties, the urban area needs flexibility to respond in a way that supports Auckland's future economic needs and ensures an ongoing supply of business land in appropriate locations.

Making the best use of existing business land

The quality compact approach to accommodating business growth in the future is to make the best use of existing business land, as well as create new business land in greenfield areas.

Making the best use of existing business land means repurposing and intensifying centres and business areas, especially those in accessible locations.

Existing business land, particularly important industrial areas, will be safeguarded. Once lost to other uses, such as housing, it is difficult to replace.

Business land in future urban areas

Approximately 1,400 hectares of business land is needed in greenfield areas. The Development Strategy identifies indicative locations for the provision of business land and centres.

The exact location and quantity required will be confirmed through structure planning and serviced in line with the sequence of the Future Urban Land Supply Strategy.[297]

See Map 17 - Business - an interactive version of the map is available at aucklandplan.govt.nz

Structure planning for these areas will ensure that a range of business uses are provided for and that land extensive business activities, such as manufacturing, storage and construction, are accommodated where appropriate.

This approach to making the best use of existing business land as well as developing new business land in future urban areas provides for a range of different types of business land, economic growth and employment across Auckland.

Safeguarding existing business land and managing the supply of a range of future business land ensures opportunity, flexibility and choice over the long term.

Note: The best way to view the data presented here, is by using the interactive map on the Auckland Plan web site. It has different layers that become visible at different zoom levels.

Map published 5 June 2018

Legend
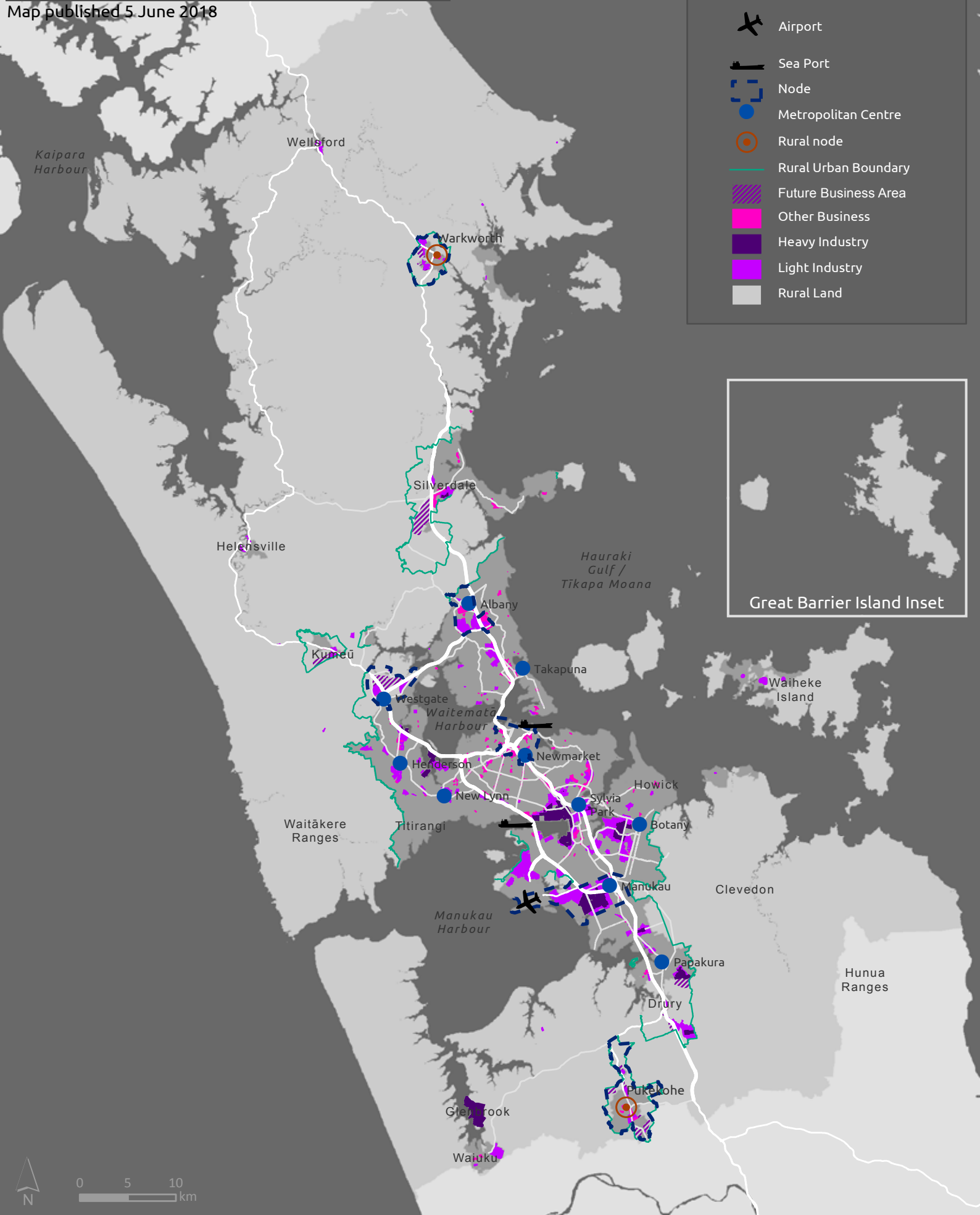
- Motorway
- Strategic Arterial Road
- ✈ Airport
- ⚓ Sea Port
- ▢ Node
- ● Metropolitan Centre
- ◉ Rural node
- Rural Urban Boundary
- Future Business Area
- Other Business
- Heavy Industry
- Light Industry
- Rural Land

Great Barrier Island Inset

Kaipara Harbour

Wellsford

Warkworth

Helensville

Silverdale

Hauraki Gulf / Tīkapa Moana

Albany

Kumeū

Waiheke Island

Takapuna

Westgate

Waitematā Harbour

Henderson

Newmarket

New Lynn

Howick

Waitākere Ranges

Titirangi

Sylvia Park

Botany

Manukau

Clevedon

Manukau Harbour

Papakura

Drury

Hunua Ranges

Glenbrook

Pukekohe

Waiuku

N

0   5   10
km

Rural Auckland

Auckland's rural areas are a mix of cultivated, natural and built environments that contribute significantly to Auckland's identity and character.

Rural Auckland is home to nationally and internationally significant environments and natural resources and hosts a diverse range of economic activities.

These activities include agriculture, forestry, horticulture, quarrying and the services that support them.

Auckland's rural environments vary

Auckland's rural areas consist of many different environments including:

- areas of rural production
- protected areas
- coastal areas
- countryside living areas
- towns and villages.

The southern rural area has a unique combination of temperate climate and frost-free fertile land, which enables a wider range of vegetables to be grown for longer periods than other areas of the country.

This makes a significant contribution to Auckland's and New Zealand's food supply.

The north and north-west has an increasing focus on rural tourism, vineyards and niche food production.

Rural towns and villages vary from small coastal settlements to the satellite towns of Warkworth and Pukekohe.

The types of infrastructure and community facilities needed to support rural Auckland vary in terms of place and community.

Challenges and opportunities

Changes in the broader Auckland and national context create a range of challenges as well as opportunities for rural Auckland.

Population growth, increased demand for rural living, stressed natural systems, and changing land values create pressures and tensions between different activities.

Conversely, the commercial production of locally-grown food, as well as tourism, recreation and productive activities are made possible by the proximity of urban Auckland.

Growth has contributed to:

- high levels of subdivision across rural areas
- fragmentation of productive land
- domestication and commercialisation of rural landscapes
- introduction of sensitive land uses into working environments
- changes in rural land use.

Figure 47 -Rural production property land use and area change 1996-2016, Core Logic (2017) – based on rural valuation categories.
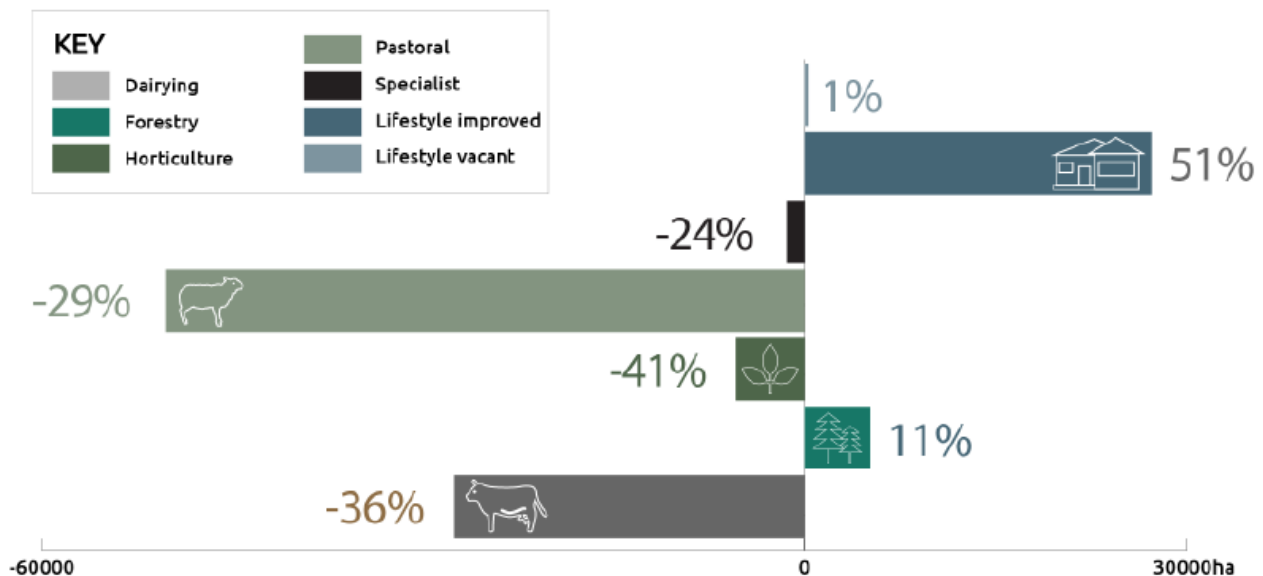
Growth in other regions and near Auckland's boundaries creates cross-boundary issues regarding alignment of respective development strategies, and the provision of transport, infrastructure, housing and community facilities.

In the south, settlements are growing closer together and rural production operates across boundaries.

In the north, the extension to the Road of National Significance to Wellsford will improve accessibility to urban Auckland and to Whangarei.

These growth factors have resulted in a decrease in the number of rural production properties, and an increase in the number of lifestyle properties.

For example, over the two decades from 1996 to 2016, the number of rural production properties decreased by around 40 per cent, which represents a 25 per cent loss in area, while the number of lifestyle properties increased by around 50 per cent (35 per cent in area).

Minerals are essential for Auckland's development. The demand for minerals in Auckland, particularly aggregates, is expected to increase from 10 million tonnes to 15 million tonnes per annum by 2041.

This increased demand is to support growth and development. Maintaining an accessible supply of aggregates is of regional importance.

Approach to rural growth

Residential growth in rural Auckland will be focused mainly in the towns which provide services for the wider rural area, particularly the rural nodes of Pukekohe and Warkworth.

Less growth is anticipated in the smaller towns and villages.

See Map 18 - Rural

Rural lifestyle growth will be focused into those areas zoned as 'countryside living', away from the most environmentally sensitive and economically productive areas.

Only a small amount of growth is anticipated in the wider rural area. This growth is likely to relate to environmental enhancement and existing vacant lots.

This will ensure that Auckland's rural, coastal, marine and natural environments can co-exist in a balanced way with the working activities (such as farming, forestry, fishing, tourism) that rely on them and help sustain the regional community.

To ensure that rural production can continue and develop, land fragmentation and reverse sensitivity must be minimised to safeguard Auckland's land and soil resources, particularly elite soils and prime soils.

This will also support the resources and production systems, including water supply, that underpin working rural land.

Legend
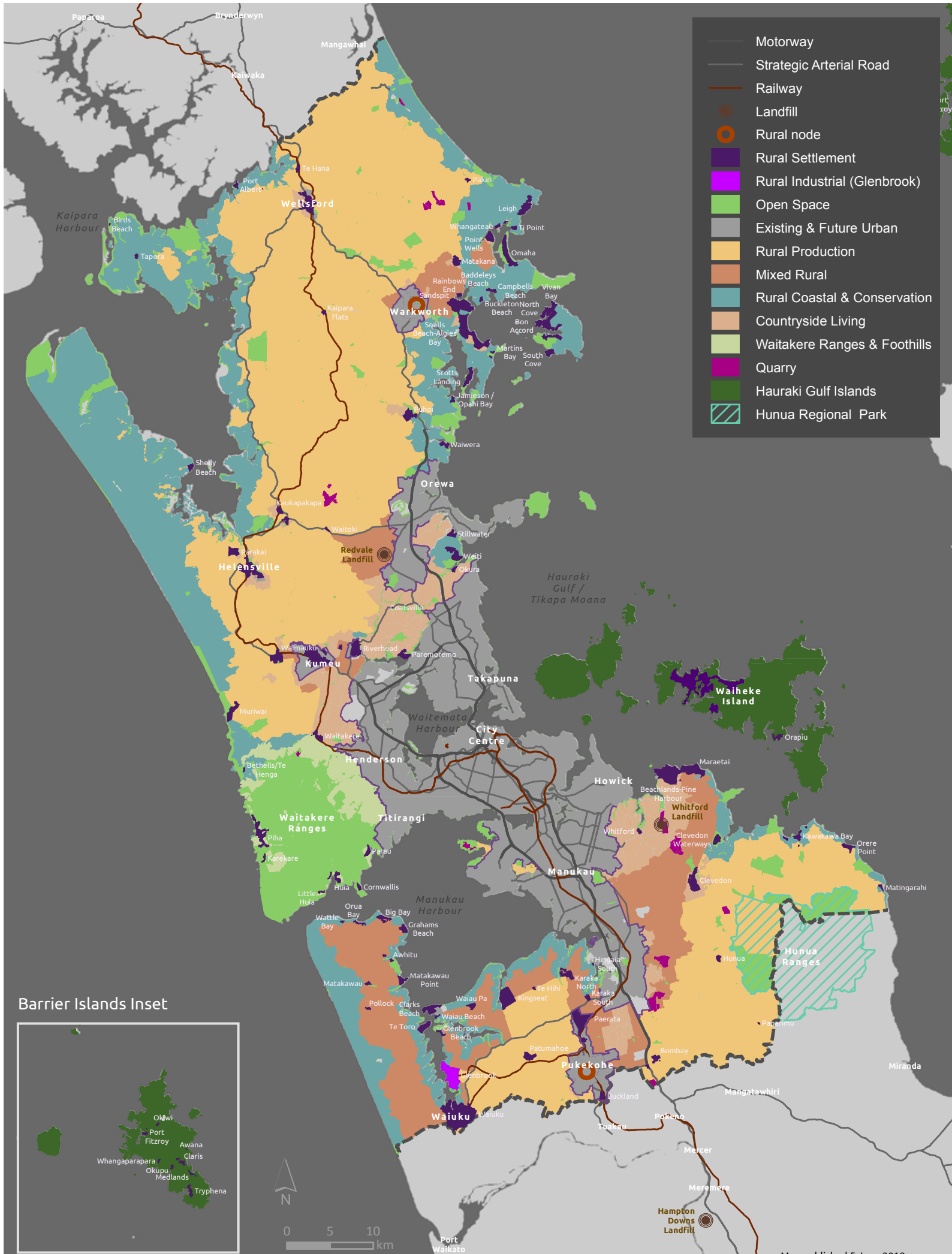
- Motorway
- Strategic Arterial Road
- Railway
- Landfill
- Rural node
- Rural Settlement
- Rural Industrial (Glenbrook)
- Open Space
- Existing & Future Urban
- Rural Production
- Mixed Rural
- Rural Coastal & Conservation
- Countryside Living
- Waitakere Ranges & Foothills
- Quarry
- Hauraki Gulf Islands
- Hunua Regional Park

Paparoa
Brynderwyn
Mangawhai
Kaiwaka
Te Hana
Pakiri
Port Albert
Wellsford
Leigh
Whangateau
Ti Point
Point Wells
Omaha
Matakana
Baddeleys Beach
Rainbows End
Sandspit
Campbells Beach
Vivan Bay
Buckleton Beach
North Cove
Bon Accord
Warkworth
Snells Beach-Algies Bay
Martins Bay
South Cove
Scotts Landing
Jamieson / Opahi Bay
Puhoi
Waiwera
Shelly Beach
Orewa
Kaukapakapa
Waitoki
Stillwater
Weiti
Parakai
Helensville
Redvale Landfill
Okura
Coatesville
Hauraki Gulf / Tīkapa Moana
Waimauku
Riverhead
Paremoremo
Kumeu
Takapuna
Waiheke Island
Muriwai
Waitakere
Orapiu
Waitemata Harbour
City Centre
Bethells/Te Henga
Henderson
Waitakere Ranges
Titirangi
Maraetai
Howick
Beachlands-Pine Harbour
Whitford Landfill
Piha
Parau
Whitford
Clevedon Waterways
Kawakawa Bay
Orere Point
Karekare
Clevedon
Matingarahi
Little Huia
Huia
Cornwallis
Manukau Harbour
Manukau
Orua Bay
Big Bay
Grahams Beach
Wattle Bay
Awhitu
Hingaia South
Hunua
Hunua Ranges
Matakawau
Matakawau Point
Te Hihi
Karaka North
Paparimu
Pollock
Clarks Beach
Waiau Pa
Kingseat
Karaka South
Te Toro
Waiau Beach
Glenbrook Beach
Paerata
Patumahoe
Bombay
Miranda
Pukekohe
Waiuku
Glenbrook
Buckland
Mangatawhiri
Tuakau
Pokeno
Mercer
Port Waikato
Meremere
Hampton Downs Landfill

Barrier Islands Inset

Okiwi
Port Fitzroy
Awana
Claris
Whangaparapara
Okupu
Medlands
Tryphena

Kaipara Harbour
Birds Beach
Tapora

N

0 5 10 km

Map published 5 June 2018

Auckland's infrastructure

Auckland's infrastructure needs to keep up with the pace and scale of growth.

Investment in infrastructure has long-term consequences for Auckland's future, and will shape how well it functions for future generations.

The population and economic growth expected in Auckland over the next 30 years presents a number of infrastructure-related challenges and opportunities, including:

- coordinating investment and planning to enable growth
- improving the performance of Auckland's infrastructure
- creating resilient infrastructure networks.

Significant investment by central government, council and the private sector is needed to respond to these challenges.

At the same time, Auckland must concentrate on:

- what it takes to efficiently plan and deliver infrastructure
- keeping up with advancing technology
- ensuring that the regulatory environment supports good planning and business practices.

Auckland's strategic networks

Auckland's strategic infrastructure networks influence where and when significant urban growth can occur, especially in future urban areas.

These strategic networks provide essential bulk services and include:

- public transport
- roads
- wastewater
- water.

The following maps identify the projects currently needed to increase the capacity of the strategic networks to meet Auckland's growth for the next 30 years and beyond. Projects and timeframes may alter in response to changes in growth, community expectation, funding and technology.

See Map 19 - Strategic Public Transport, Map 20 - Strategic Road Network, Map 21 - Wastewater, Map 22 - Water Supply and Map 23 - Social Infrastructure - an interactive version of the map is available at aucklandplan.govt.nz

Projects to expand or increase capacity in strategic networks often require substantial public investment and have long lead times for planning and construction.

The 30-year Auckland Infrastructure Strategy[298] identifies the funding status of projects to increase the capacity of the strategic networks.

Coordinating investment and planning to enable growth

The next 30 years will require significant investment in infrastructure.

Coordinated action between public and private infrastructure providers and the development sector is needed to enable the scale of development required to accommodate Auckland's growth.

It is crucial that this investment is coordinated and aligned with growth, in order to minimise the costs of under-used assets, increase Auckland's productivity and achieve better environmental outcomes.

If not managed carefully, the size of infrastructure investment required may have significant financial implications for infrastructure providers.

Ensuring that infrastructure networks have sufficient capacity to service growth is critical. The sequencing of future urban and development areas influences the timing of investment in the strategic networks needed to service these areas. Further investment in local infrastructure will be needed as these areas grow. This will require alignment between the expansion of strategic water and transport networks, and investment in local infrastructure, particularly to service development areas and future urban areas.

Investment in Auckland's digital networks is vital for our future.

Delivering Auckland's infrastructure requires co-ordination across a number of public and private organisations depending on the type or scale of infrastructure. Typically:
• Government provides state highways, railway lines, and some social infrastructure such as schools and hospitals. It also subsidises other transport infrastructure.
• Auckland Council, including the council-controlled organisations, provides arterial roads, public transport systems, water supply, wastewater and stormwater networks and social infrastructure such as community facilities and parks.
• Developers initially construct local streets and pipe networks which are then vested with council to own and maintain.
• Energy and communications infrastructure is typically supplied by private utility companies.

Water Supply

Wastewater treatment

Water treatment

Local network

Stormwater treatment

Key:

Wastewater

Drinking water   Stormwater

Transport   Community facilities

AUCKLAND
PLAN
2050

Development
Strategy

Strategic Public Transport

Map 19
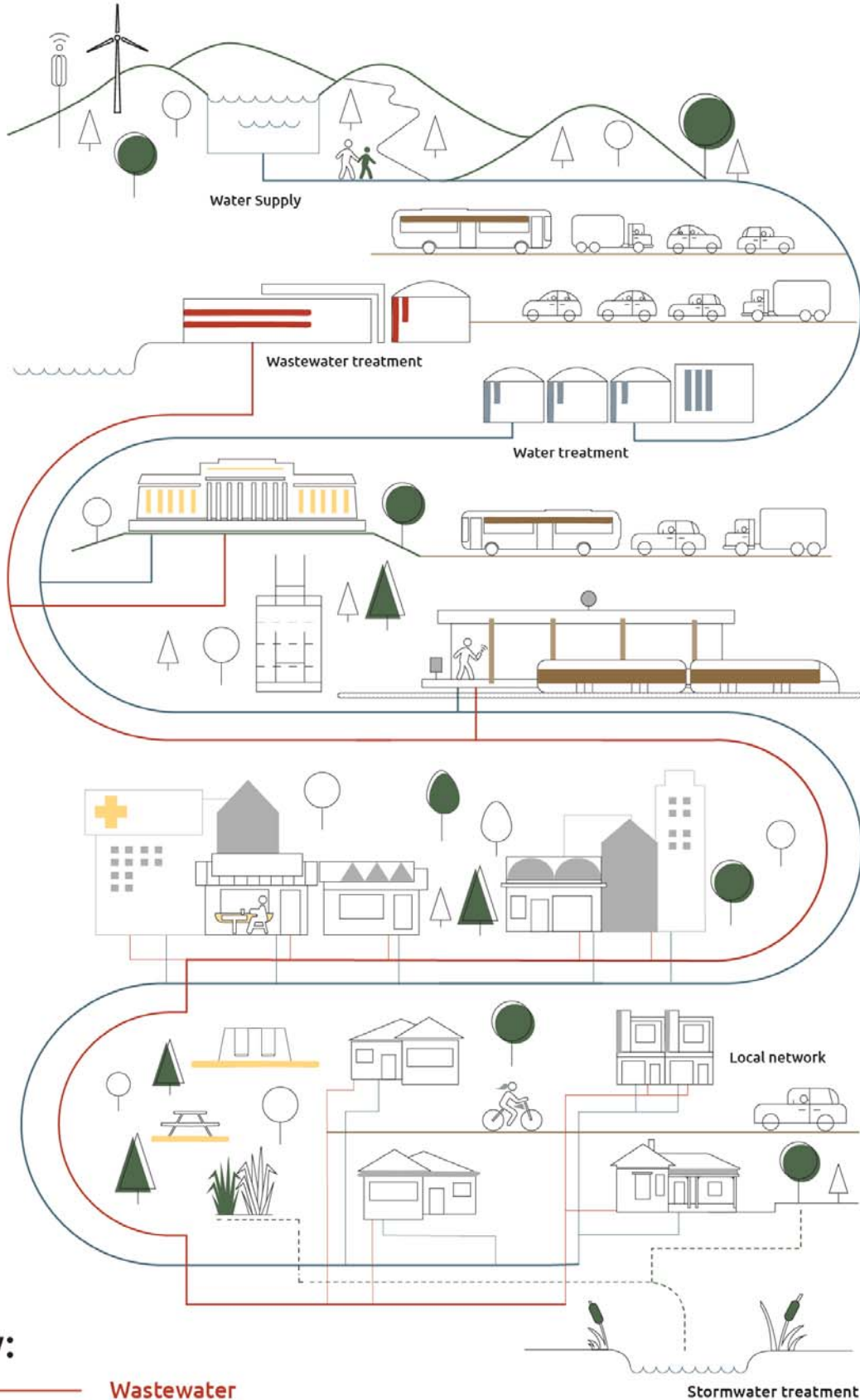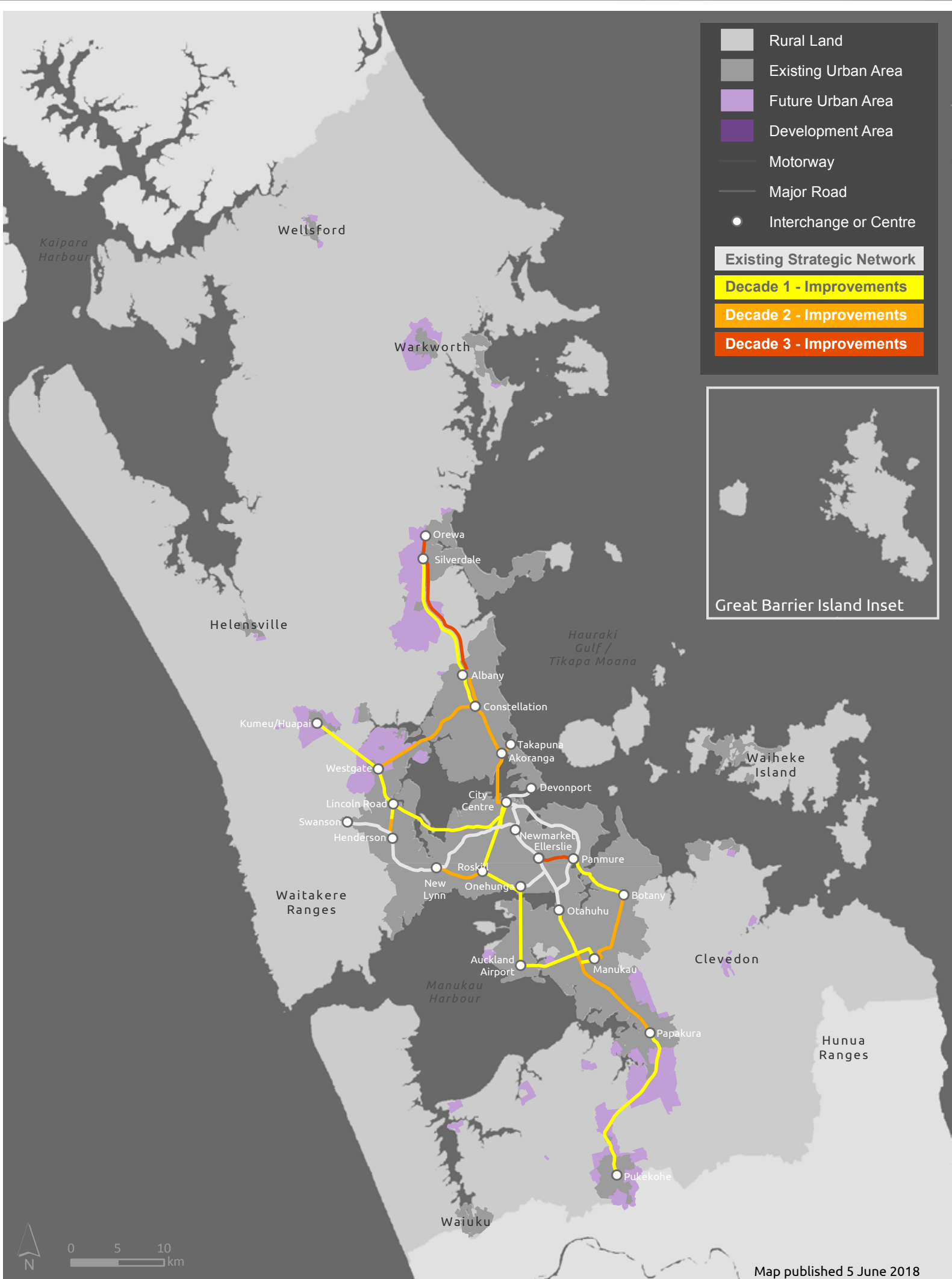
Rural Land
Existing Urban Area
Future Urban Area
Development Area
Motorway
Major Road
Interchange or Centre
Existing Strategic Network
Decade 1 - Improvements
Decade 2 - Improvements
Decade 3 - Improvements

Great Barrier Island Inset

Wellsford

Kaipara
Harbour

Warkworth

Helensville

Orewa
Silverdale

Hauraki
Gulf /
Tīkapa Moana

Albany

Constellation

Kumeu/Huapai

Takapuna
Akoranga

Westgate

Devonport

City
Centre

Waiheke
Island

Lincoln Road

Swanson

Newmarket
Ellerslie

Henderson

Panmure

Roskill

New
Lynn

Onehunga

Botany

Waitakere
Ranges

Otahuhu

Clevedon

Auckland
Airport

Manukau

Manukau
Harbour

Papakura

Hunua
Ranges

Waiuku

Pukekohe

0   5   10
km

N

Map published 5 June 2018

AUCKLAND
PLAN
2050

Development
Strategy

Strategic Road Network

Map 20

Rural Land

Existing Urban Area

Future Urban Area

Development Area

Motorway

Strategic Arterial Road

Decade 1 - Improvements

Decade 2 - Improvements

Decade 3 - Improvements

Great Barrier Island Inset

Wellsford

Warkworth

Orewa

Kaipara
Harbour

Helensville

Hauraki
Gulf /
Tīkapa Moana

Kumeū

Takapuna

Waitematā
Harbour

Waiheke
Island

Henderson

Waitākere
Ranges

Titirangi

Howick

Manukau

Clevedon

Manukau
Harbour

Hunua
Ranges

Pukekohe

Waiuku

0   5   10
km

N

Map published 5 June 2018

AUCKLAND
PLAN
2050

Development
Strategy

Wastewater

Map 21

Legend

- Rural Land
- Existing Urban Area and Rural Settlements
- Future Urban Area
- Motorway
- Major Road
- Treatment Plant
- Wastewater Network
- Decade 1 - Improvements
- Decade 2 - Improvements
- Decade 3 - Improvements

Great Barrier Island Inset

Kaipara Harbour

Wellsford

Warkworth

Snells Beach

Ōrewa

Army Bay

Helensville

Hauraki Gulf / Tīkapa Moana

Kumeū

Rosedale

Takapuna

Waitematā Harbour

City Centre

Waiheke Island

Henderson

Waitākere Ranges

Titirangi

Ōnehunga

Howick

Manukau

Clevedon

Māngere

Manukau Harbour

Papakura

Hunua Ranges

Waiuku

Pukekohe

Map published 5 June 2018

Legend

- Rural Land
- Existing Urban Area and Rural Settlements
- Future Urban Area
- Motorway
- Major Road
- ▲ Dams
- ■ Reservoir
- ● Treatment Plant
- Watermain Network
- Decade 1 - Improvements
- Decade 2 - Improvements
- Decade 3 - Improvements
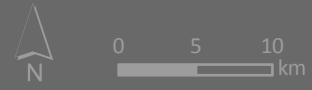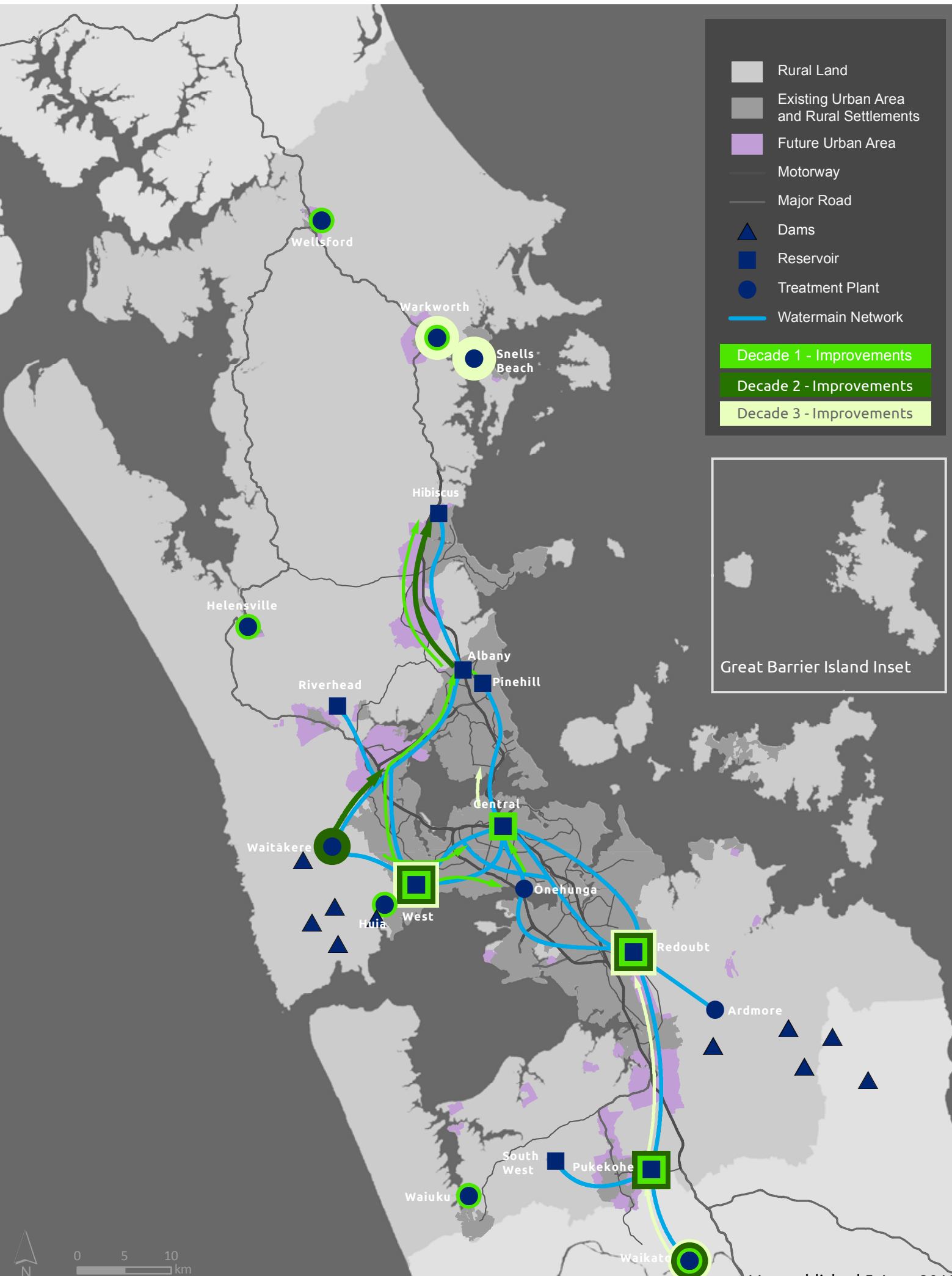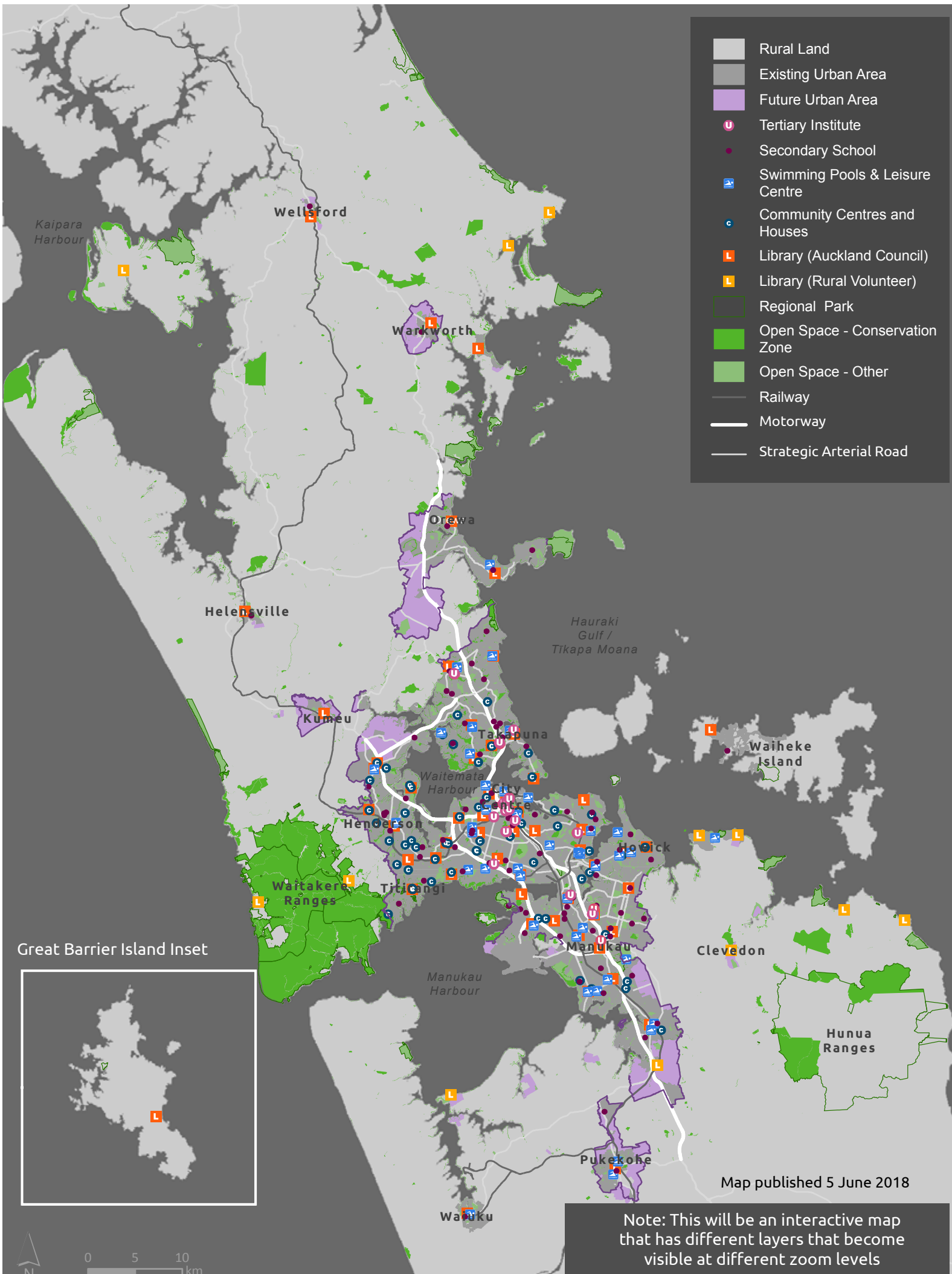
Great Barrier Island Inset

Wellsford

Warkworth

Snells Beach

Hibiscus

Helensville

Albany

Pinehill

Riverhead

Central

Waitākere

Onehunga

West

Huia

Redoubt

Ardmore

South West

Pukekohe

Waiuku

Waikato

N

0   5   10
km

Map published 5 June 2018

Legend

- Rural Land
- Existing Urban Area
- Future Urban Area
- **U** Tertiary Institute
- Secondary School
- Swimming Pools & Leisure Centre
- **c** Community Centres and Houses
- **L** Library (Auckland Council)
- **L** Library (Rural Volunteer)
- Regional Park
- Open Space - Conservation Zone
- Open Space - Other
- Railway
- Motorway
- Strategic Arterial Road

Kaipara Harbour

Wellsford

Warkworth

Orewa

Helensville

Kumeu

Hauraki Gulf / Tīkapa Moana

Takapuna

Waitematā Harbour

City Centre

Henderson

Waiheke Island

Waitakere Ranges

Titirangi

Howick

Manukau

Clevedon

Manukau Harbour

Hunua Ranges

Great Barrier Island Inset

L

Pukekohe

Waiuku
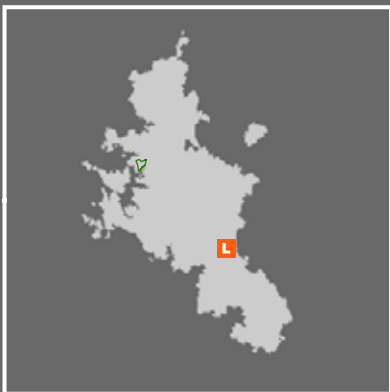
Map published 5 June 2018

Note: This will be an interactive map that has different layers that become visible at different zoom levels

0   5   10
km
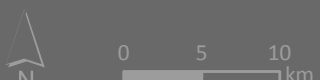
Improving the performance of Auckland's infrastructure

Even without the pressure of expected changes in Auckland's population over the next 30 years, current infrastructure assets require maintenance, renewal and replacement. Disparities in service provision across Auckland also need to be addressed.

Dealing with ageing and obsolete infrastructure

Auckland's infrastructure is not meeting current levels of demand. We also need to think ahead and plan for Auckland's future infrastructure needs.

Some of Auckland's infrastructure is getting old and will need replacing.

The investment in renewing ageing infrastructure is expected to significantly increase in the next three decades.

For example, pipe and electricity systems that were established during Auckland's post-war urban expansion from the 1940s to the 1960s are expected to require renewal from the 2020s onwards.

In addition, some of our infrastructure systems are becoming obsolete, and do not meet modern standards.

For example, the combined sewer and stormwater system in some parts of the isthmus are prone to overflows, with negative social and environmental impacts.

Differences in service provision

Disparities in the levels of service or performance of infrastructure across different parts of Auckland need to be addressed.

For example, the transport network provides comparatively poor access to employment opportunities from south and west Auckland.

Planned investment in strategic infrastructure networks, such as the construction of the City Rail Link, will help to address these issues as it will decrease travel time, particularly from the western urban area.

The design of infrastructure assets and levels of service needs to be appropriate for different locations, particularly between rural and urban areas.

Using emerging technologies

Emerging technologies will improve the performance of existing infrastructure networks and defer the need for some future investments.

The ability to collect and analyse data on a large scale will improve understanding of how individuals and households use infrastructure systems; this will in turn allow for more targeted investment.

For example, advancements in transport technology such as autonomous vehicles and real-time road user pricing, are expected to increase the capacity of existing roads.

A supportive regulatory environment will be necessary to realise the benefits of new technology.

Creating resilient infrastructure networks

Auckland's infrastructure needs to be able to:

- cope with disruptive events (such as natural disasters and human error)
- respond to on-going stresses (such as climate change)
- meet the evolving needs of Aucklanders.

Understanding the consequences and likelihood of failure, as well as the changing demands on our infrastructure systems, allows us to better manage risks to these networks.

Critical infrastructure

Failure of Auckland's critical infrastructure networks poses significant risks, as they are essential for Auckland to function.

These networks are prioritised in renewal and maintenance programmes and in emergency contingency planning.

See Map 24 - Critical Infrastructure

Development in close proximity to critical infrastructure networks, such as urbanisation near gas pipelines, needs to be managed carefully to ensure operation of these networks is not compromised and risks to Auckland and Aucklanders are avoided.

Evolving needs

Auckland's infrastructure systems need to be resilient to cope with ongoing stresses and trends, such as climate change and evolving technology.

Some locations are at increasing risk from natural hazards, due to the adverse impacts of climate change.

The growing demand for home energy generation and greater acceptance of water recycling and reuse has implications for Auckland's broader infrastructure networks.

Legend
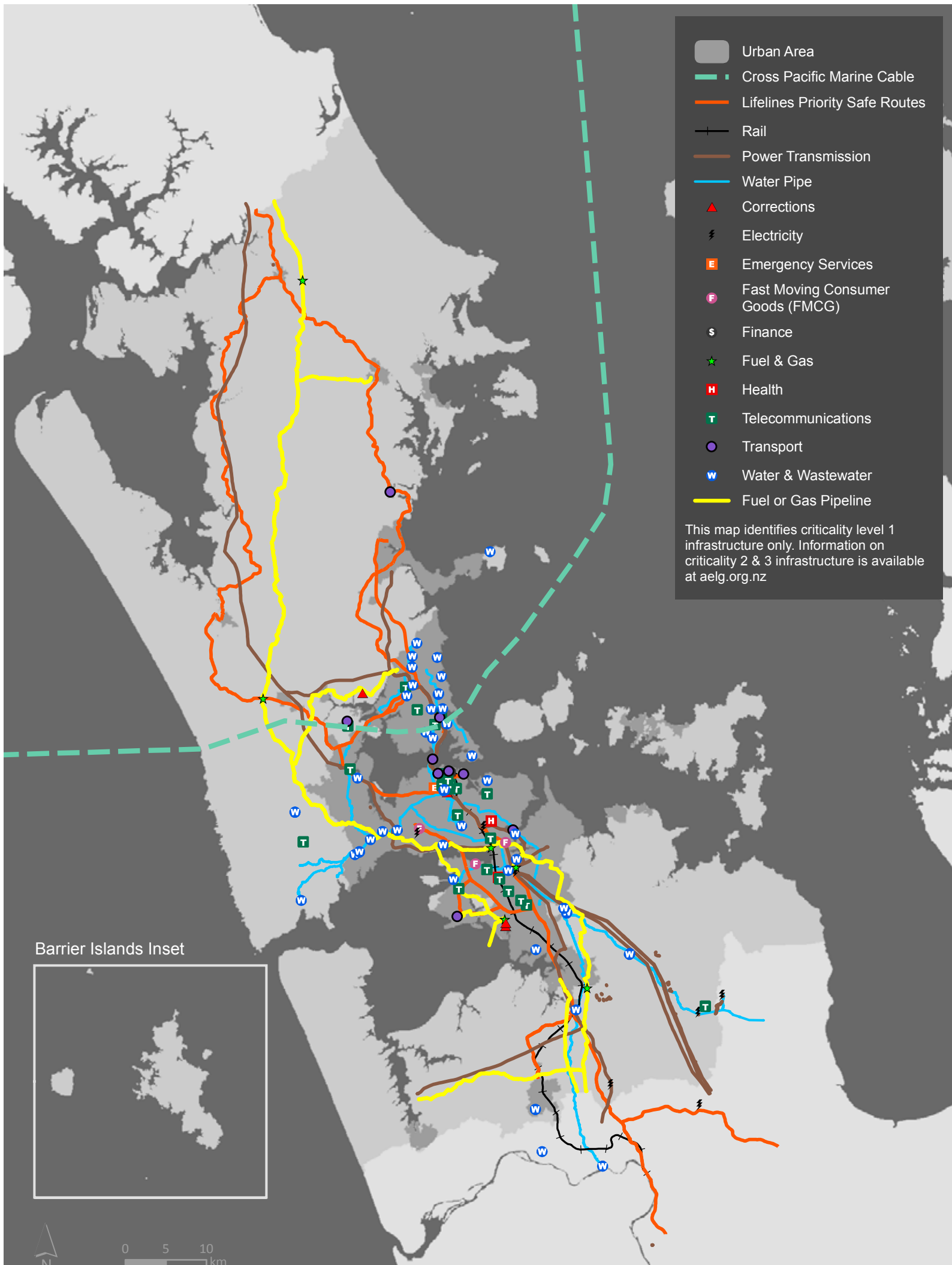
- Urban Area
- Cross Pacific Marine Cable
- Lifelines Priority Safe Routes
- Rail
- Power Transmission
- Water Pipe
- ▲ Corrections
- ⚡ Electricity
- E Emergency Services
- F Fast Moving Consumer Goods (FMCG)
- $ Finance
- ★ Fuel & Gas
- H Health
- T Telecommunications
- ● Transport
- W Water & Wastewater
- Fuel or Gas Pipeline

This map identifies criticality level 1 infrastructure only. Information on criticality 2 & 3 infrastructure is available at aelg.org.nz

Barrier Islands Inset

0   5   10
km

Responding to these trends involves building greater adaptability and responsiveness in our networks.

Ensuring our infrastructure systems serve multiple functions – for example, green infrastructure that manages stormwater and delivers localised amenity, or transport corridors that also function as urban forests or stormwater systems – is one way of enhancing long-term resilience.

How we will implement the development strategy

Implementation partners

In implementing the development strategy, Auckland Council has important regulatory, policy and facilitation roles. The council is also a provider of key infrastructure; stormwater, community facilities, parks and open space.

Water, wastewater and local transport infrastructure is planned for and delivered by two council controlled organisations: Watercare and Auckland Transport.

The council works in partnership with central government agencies to implement infrastructure and plan for growth. The New Zealand Transport Agency, Ministry of Education and Ministry of Health are the principal agencies involved. Cross boundary issues also mean that it will be important to work with adjoining councils.

Auckland Council also works with telecommunications providers, energy providers and other network utility operators that are planning for growth. These include Transpower, Vector and Spark.

In some areas Auckland Council also works with social and community housing providers and development agencies.

Mechanisms used to work together

Projects require clear roles and responsibilities to achieve effective outcomes.

Sequencing of development in locations where significant growth is anticipated over the next 30 years allows stakeholders to co-ordinate efforts. It also ensure value for money and assists investment decisions, through processes such as long-term planning.

Sequencing provides a level of certainty, particularly for infrastructure providers, as to where and when capacity may be required. This recognises that providing bulk infrastructure requires long lead in times to plan, design, and build.

Monitoring is a critical component of implementing the strategy, in order to understand the location and scale of growth over time and how this aligns with what the strategy anticipates. Monitoring will inform changes to nodes, development areas and future urban areas if needed. It will also inform subsequent adjustments to the future planning and funding decisions of providers, including Auckland Council.

The scale and complexity of these areas means that aligning land use planning and infrastructure provision is essential to delivering good outcomes.

In existing urban areas specific interventions will be required in development areas as they grow. Each development area will be different and will experience growth at varying rates and at different times. The investment required in these areas will focus on addressing the impacts of increased demand on infrastructure and services as development occurs. Interventions may range from regulatory changes and infrastructure investment to public realm improvements and redevelopment of council-owned assets.

In future urban areas structure planning will be undertaken to refine land use patterns, staging and required infrastructure specific to each place.

Auckland will progressively move toward managing demand on network infrastructure more effectively. Managing demand enables better use of existing infrastructure and reduces or defers council spend on new infrastructure to cater for growth.

Supporting strategies and plans

Auckland Unitary Plan[299]

This plan sets out the planning rules for Auckland and creates adequate capacity for jobs and homes over the next 30 years.

Infrastructure Strategy[300]

This is part of Auckland Council's Long-term Plan, the strategy sets out Auckland's infrastructure challenges and responses.

Future Urban Land Supply Strategy[301]

This strategy sets out the timing and sequencing of future urban areas for urban development over the next 30 years.

How to get involved

- The Auckland Design Manual website[302] provides a guide to the design and development process and shows how to deliver quality projects within the built environment.

- The Roads and Streets Framework[303] provides guidance on appropriately balancing the place and movement functions of road and street design.

- Auckland Council provides opportunities to find out more information, give feedback on different topics, consultations, projects, plan changes and structure plans. Find out more on how to Have your say.[304]

Supporting information

The National Policy Statement on Urban Development Capacity[305] requires Auckland Council to develop a Future Development Strategy. This requirement is satisfied by the Auckland Plan Development Strategy.

Supporting Information

What will Auckland's city centre look like in the future

The city centre is Auckland's primary centre.

It plays a critical role in the success of both Auckland and New Zealand.

One of its strengths is the concentration of population and economic activity.

It is the main location for business, tourism, educational, cultural and civic activities in Auckland, and includes the city fringe areas of Parnell, Grafton, Newmarket, Newton and Ponsonby.

It is supported by the Albany, Westgate and Manukau nodes.

The city centre

Auckland's city centre has changed substantially over the past 10 to 15 years, as a result of significant public and private investment in infrastructure and development projects.

Public investment has revitalised areas that were once run down, such as Britomart and Wynyard Quarter on Auckland's waterfront, and has been the catalyst for further private investment.

A number of developments have contributed to making the city centre a much more welcoming place for people, such as:

- shared spaces, where neither cars nor pedestrians have priority
- public space improvements
- improved public transport services.

There has been substantial growth in the city centre resident population. There are now over 80,000 people living in the city centre and fringe areas.

The city centre is the largest and fastest growing employment centre in New Zealand. Infometrics report there were 114,264 filled jobs in 2016, including those who were self-employed.[306]

An estimated 17 per cent of Auckland's gross domestic product is generated from the city centre alone.[307]

In addition to the greater number of people living in the city centre, it is well served by the transport network and draws people from as far afield as rural Auckland and northern Waikato.

Continuing investment in infrastructure, such as cycleways and the City Rail Link, means that increasing numbers of people can easily access the city centre.

Future development of the city centre

Improvements in the city centre are ongoing. The public and private sectors must continue to ensure it carries on being a highly competitive, interesting and enjoyable place to be.

Its success shows that investment in public transport, pedestrian environments and public spaces, along with the strong vision in the City Centre Masterplan and Waterfront Plan, can shape the future of central Auckland, leading to a place that is attractive, competitive, inclusive and prosperous.

In the future, the city centre will continue to be the focus of Auckland's business, tourism, educational, cultural and civic activities.

It will grow as an important residential centre, with 58,000 more people living there by 2048. Total jobs may increase by over 75,000 by 2048, which is over one quarter of all employment growth in the region.

The city centre will have to continue to change and adapt over the next 30 years to serve Aucklanders, but also as it competes in the global network of cities.

Node – City centre

The city centre is an international centre for business and learning, innovation, entertainment, culture and urban living.

Population increases of over 58,400 people are expected in the centre and fringe areas by 2048, along with approximately 25,000 additional dwellings. Total jobs may increase by over 75,800 by 2048, which is over one quarter of all employment growth in the region. There is strong current development interest in the city centre. Many private sector, local and central government and other agency projects are already underway.

There is a feasible capacity of approximately 220 dwellings.
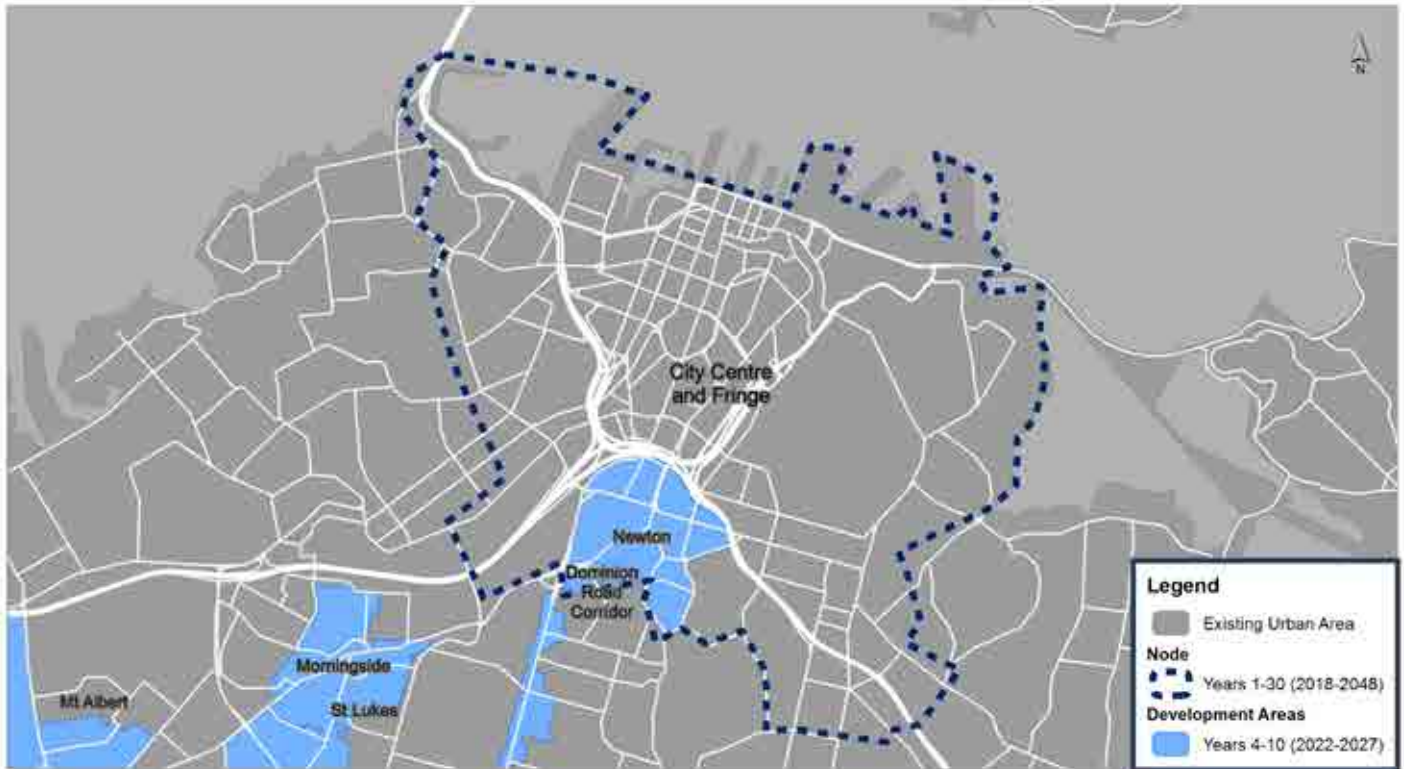
Anticipated household growth 2018-2048	25,240
Anticipated population growth 2018-2048	58,430
Anticipated employment growth 2018-2048	75,850
Average no. jobs accessible within 45min morning peak public transport by 2026	Over 300,000
Enabled housing capacity *does not include centres or mixed use zones	12,540
Feasible development capacity 2017	220
Timing / Sequencing	1-30 Years

What will Albany look like in the future

Albany has a significant strategic role as one of Auckland's three key nodes outside of the city centre. It will continue to evolve and develop over time as the key node for the north of Auckland.

As the northern node it will help to support the future urban areas of Wainui East, Silverdale and Dairy Flat as they develop.

Albany has significant opportunities for additional business and residential growth.

It is a focal point for future employment, business activity, social facilities and services all of which will support a growing population.

The Albany area

The Albany area has a long development history.

Planning for the urbanisation of the area began in the 1960s, when it was a predominantly rural area.

Over the next five decades, the area steadily grew and was further assisted by the North Shore City Council purchasing key land holdings and selling them to developers to facilitate further development.

Significant change occurred in the 1990s, when the extension of the Northern Motorway made new urban developments in and around Albany possible.

Albany Westfield, one of New Zealand's largest shopping centres, opened in 2007.

The opening of the Northern Busway and the associated park and ride facility in Albany in 2008 formed an important part of Auckland's Rapid Transport Network and reduced travel times from Albany to central Auckland.

Future development of Albany

In the future, Albany is likely to experience higher-density residential and mixed-use developments, with good transport connections, including high-frequency public transport.

Interest and significant investment in both commercial and residential development is evident through a number of recent large developments such as the Rose Garden Apartments and Library Lane.

Albany will continue to develop, building on its strengths, to be an attractive place to live, work and visit, with vibrant commercial, entertainment and retail areas.

Albany's existing strengths include:

- tertiary education facilities, such as Massey University
- local schools
- a large retail offer
- sporting facilities such as the QBE Stadium and Albany Stadium Pool.

These strengths provide a basis for development of the wider area.

In addition to Albany itself, the surrounding business and industrial areas of Rosedale and Apollo Drive continue to grow, offering an increasing range of services and jobs.

In the year to June 2017, over 7700 square metres of new industrial floor space was completed in and around Albany.[308]

The range of industries and services on offer in the wider area is also expanding.

Further development of Albany, including the surrounding business areas, will result in a well-connected northern node that provides a range of employment options, commercial and retail opportunities, community and civic activities, and more housing options.

Node – Albany

Albany is the node for the north and has been identified for significant growth and intensification over the next 30 years.

Motorway access and the northern busway provide good transport connections to and from the area. Albany will provide a diverse range of employment, housing, education facilities, community and civic services, as well as retail and commercial opportunities.

There is a feasible capacity of approximately 990 dwellings.
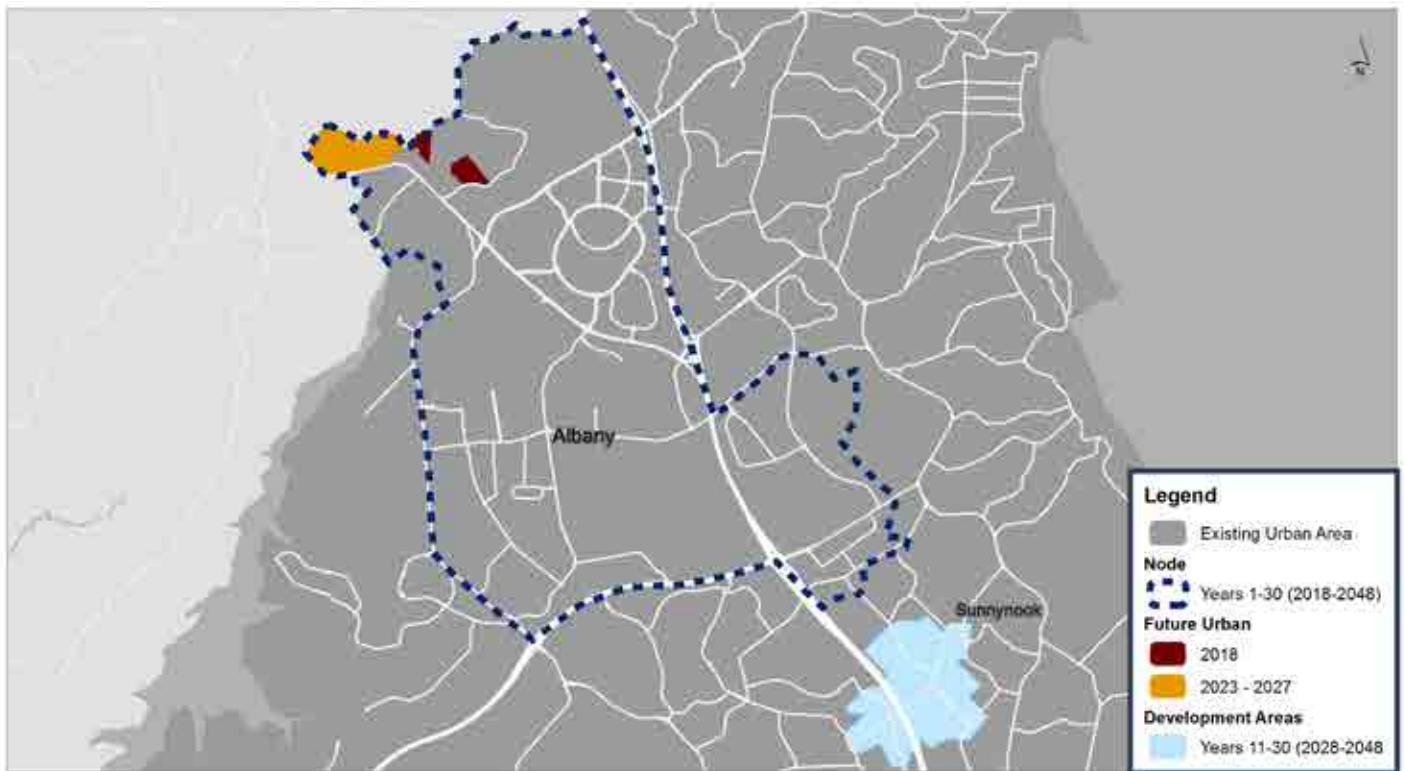
Anticipated household growth 2018-2048	5,750
Anticipated population growth 2018-2048	16,080
Anticipated employment growth 2018-2048	6,740
Average no. jobs accessible within 45min morning peak public transport by 2026	200,000-300,000
Enabled housing capacity *does not include centres or mixed use zones	6,880
Feasible development capacity 2017	990
Timing / Sequencing	1-30 Years

What will Westgate look like in the future

Westgate is the key node of north west Auckland. It features a town square, library and 28 hectares of public open space. There are more than 400,000 square metres of retail.

Westgate serves local established residential areas such as Henderson and Massey, and is a focal point for the significant growth area of north-west urban Auckland, including the areas around Red Hills, Whenuapai and Kumeū-Huapai.

Its location on the western ring route means it is now well served by motorway connections north, west and south.

Total public and private sector investment in Westgate to date is estimated at nearly $1 billion.

The Westgate area

Westgate and surrounding areas were rural prior to the opening of the north-western motorway to Hobsonville Road in 1961. That was a catalyst for the development of new suburbs from Te Atatu to Westgate. Between 1968 and 1978 around 10,000 people moved to Massey.

However, a lack of local employment opportunities resulted in a strong pattern of commuting to other parts of Auckland for work, particularly the city centre.

This led to the identification of Westgate for urbanisation in the late 1990s.

The lack of employment in the north-west also resulted in the identification of over 300 hectares of land in and around Westgate, Whenuapai and Hobsonville Road for business activities, particularly light industry.

This employment focussed area represents a significant opportunity for existing and future residents to work closer to where they live.

Future development of Westgate

Over the next 30 years, the population of the future urban areas of Red Hills and Whenuapai are anticipated to grow from 4000 to over 40,000. This growth will be significant.

The north-western rapid transit corridor, a dedicated public transport corridor from Point Chevalier to Westgate, will transform Westgate into a key transport interchange for the surrounding area, and support residential intensification in and around the centre.

A large business area will ensure that as the north-west population grows there will be an increase in diverse local employment opportunities.

Node – Westgate

Westgate is the node for the north west and will service nearby future urban areas of Red Hills, Whenuapai and Kumeū-Huapai.

It is well connected via motorway and access to the city centre will be improved via the proposed north western rapid transit corridor.

The node has the potential to accommodate significant growth with the Whenuapai future urban area expected to provide a range of employment opportunities.

This area has feasible capacity of approximately 41,190 dwellings.
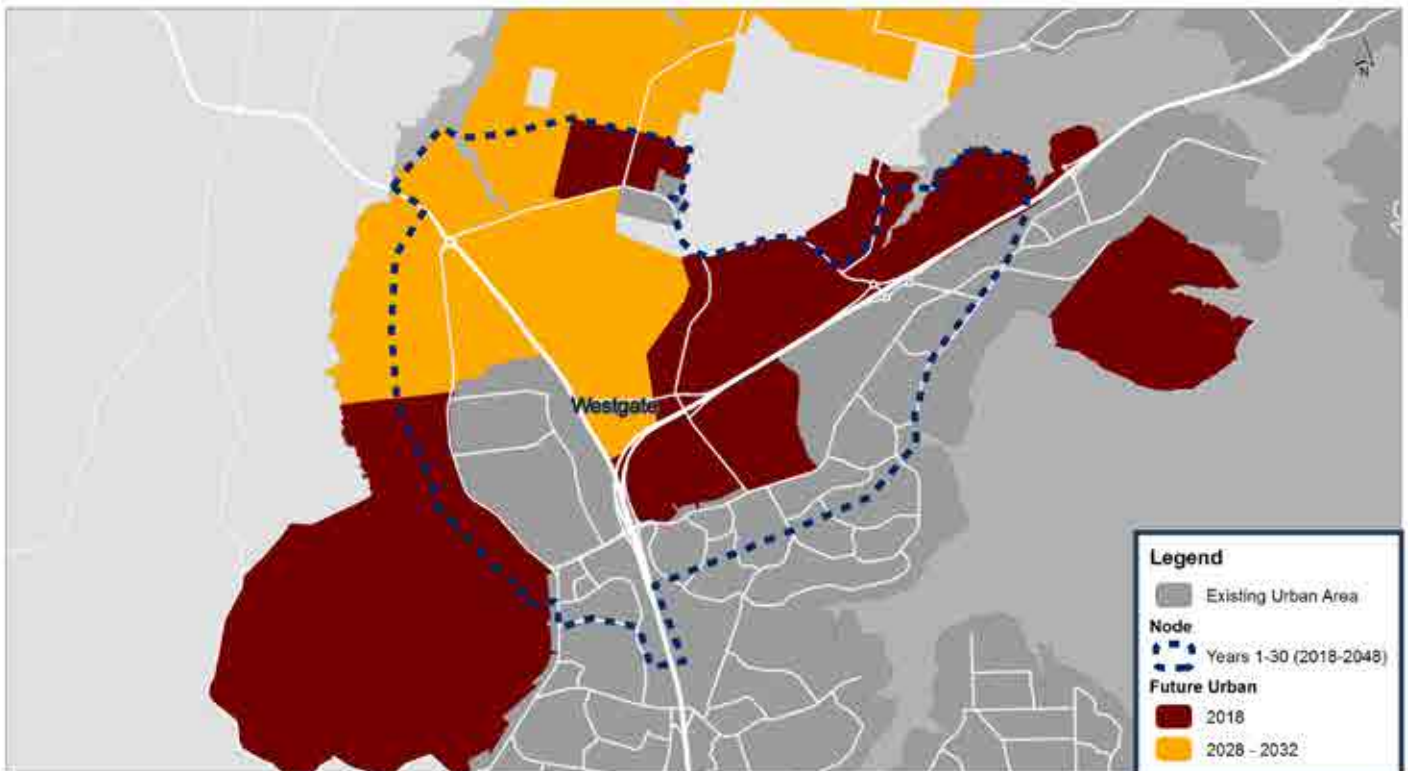
Anticipated household growth 2018-2048	33,190
Anticipated population growth 2018-2048	81,760
Anticipated employment growth 2018-2048	20,260
Average no. jobs accessible within 45min morning peak public transport by 2026	100,000-150,000
Enabled housing capacity *does not include centres or mixed use zones	43,860
Feasible development capacity 2017	41,190
Timing / Sequencing	1-30 Years

What will Manukau look like in the future

Manukau is the largest and most established of Auckland's nodes outside of the city centre. Its civic, retail, education and cultural facilities provide for the wider population of the south.

Close proximity to key distribution and transport links, including the southern and north-eastern motorways, the inland Port at Wiri and the Auckland International Airport, underpin a strong employment base and local economy.

Manukau and the surrounding business area produce about 14 per cent of Auckland's gross domestic product (Gross domestic product is for the combined local board areas of Māngere- Ōtāhuhu, Ōtara-Papatoetoe and Manurewa. It is measured in 2010 prices.).[309]

Manukau is currently undergoing major transformation that fosters and builds on the existing pride, values and culture of its people. The momentum of change and development in this area will drive demand for a more diverse range of services and activities.

The Manukau area

Similar to other nodes such as Albany, Manukau centre was planned in the 1960s. It was designed as a major administrative and commercial centre that would service southern Auckland, at a time when the area was predominantly rural.

From the outset Manukau received significant public and private investment, which allowed it to develop over time into a large centre. It played an important role of servicing a fast growing population in the southern part of Auckland.

Several government functions and service agencies were shifted into purpose-built office buildings well before the wider area developed. The Manukau mall followed in 1976 and Rainbow's End theme park opened in 1982.

The last decade has seen Manukau mature in its role as the commercial, cultural and educational node for southern Auckland.

Recent developments in the centre include:

- public space improvements
- the building of residential apartments
- expansion of the shopping centre
- completion of a multi-purpose events centre.

In April 2012 a fully integrated rail station and university campus development was completed and Manukau was connected to the Auckland rail network.

The Manukau bus interchange, immediately adjacent to the Manukau train station, is a critical component of both Manukau's development and of the Auckland transport network. Being close to public transport makes it easier for people to live and work in the area.

Future development of Manukau

Significant growth is expected in Manukau over the next 30 years. The residential population is expected to increase from around 6000 households at present to over 10,500 and the number of jobs is expected to increase by over 22,500 to around 56,000.

Manukau is also an investment focus for Panuku Development Auckland (an Auckland council-controlled organisation). This includes urban renewal in and around Manukau centre.

The investment currently being made in Manukau centre, and the momentum of business and employment growth in the wider area, will see Manukau strengthen its role as the node of southern Auckland.

Node – Manukau

Manukau is the node for southern Auckland. Its civic, retail, education and cultural facilities provide for the wider population of the south.

The area is well located with links to Auckland Airport, the Waikato and the city centre. It is accessible by rail, bus and the state highway network (SH1 and SH20). The recent completion of an integrated rail station and tertiary facility next to the centre, along with the bus interchange will attract further investment.

There is a feasible capacity of approximately 1,560 dwellings.

Legend

Existing Urban Area	
Node	
Years 1-30 (2018-2048)	

Future Urban
- 2018
- 2018 - 2022
- 2028 - 2032

Development Areas
- Years 1-3 (2018-2021)
- Years 4-10 (2022-2027)
- Years 11-30 (2028-2048)
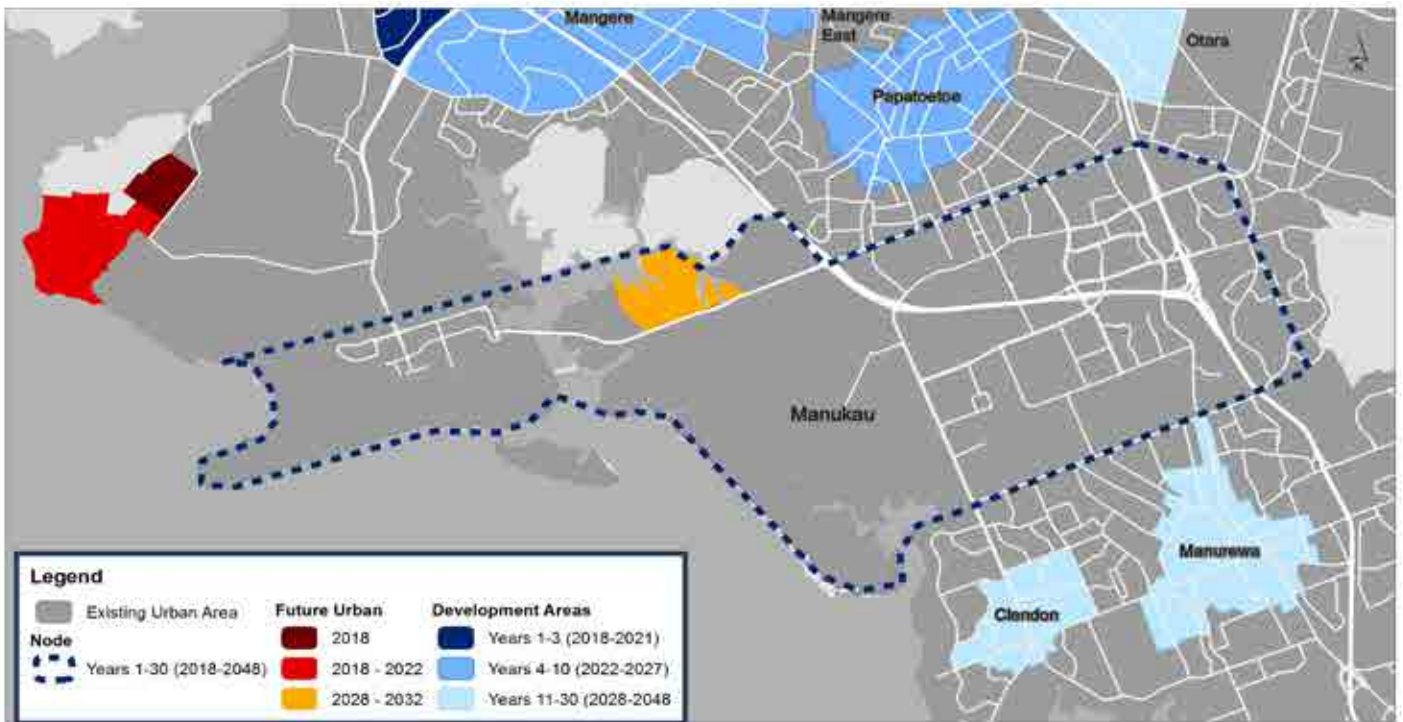
Anticipated household growth 2018-2048	4,750
Anticipated population growth 2018-2048	13,920
Anticipated employment growth 2018-2048	22,620
Average no. jobs accessible within 45min morning peak public transport by 2026	100,000-150,000
Enabled housing capacity *does not include centres or mixed use zones	11,250
Feasible development capacity 2017	1,560
Timing / Sequencing	1-30 Years

What will Warkworth look like in the future

Warkworth is a growing rural node located 57 kilometres north of Auckland's centre.

It is the largest rural town in the northern part of Auckland and serves a large rural catchment.

Warkworth is easily accessible via State Highway 1 and serves as a gateway to the many villages and beaches along the Matakana and Kowhai Coasts.

Land uses in the area have evolved from shipbuilding and orchards to dairy and sheep farms.

Horticulture, winemaking, dairying, tourism and forestry are now key contributors to the local economy.

Lifestyle blocks, retirement housing and holiday homes have also become increasingly popular.

Significant residential and employment growth is expected over the next 30 years with around 1100 hectares earmarked as future residential and business land.

This could accommodate approximately 7500 additional dwellings, or an additional 20,000 people.

The 2015 population was approximately 4500, so the anticipated growth will require investment in supporting infrastructure including transport, water and wastewater upgrades.

Future development of Warkworth

The development of quality transport links within Warkworth, as well as between Warkworth, Northland and the rest of Auckland will be critical to supporting the town's future growth.

The Pūhoi to Warkworth Road of National Significance, Ara Tūhono, will be completed in late 2021 as will the Matakana Link Road.

These projects will take through-traffic and freight away from the town centre and improve travel times to and from Warkworth.

Development will be staged over the next 20 years, reflecting demand and the provision of the necessary infrastructure upgrades.

A structure plan for Warkworth will refine the staging and timing of development and will identify the mix and location of housing, employment, retail, commercial and community facilities.

Node – Warkworth

The satellite town of Warkworth is a rural node in the northern part of Auckland serving a large rural catchment.

Significant residential and employment growth is expected over the next 30 years with around 1100 hectares earmarked as future urban land. This could accommodate approximately 7,500 additional dwellings, or an additional 20,000 people.

The anticipated growth will require investment in supporting infrastructure including transport, water and wastewater upgrades.

A structure plan for Warkworth will refine the staging and timing of development and will identify the mix and location of housing, employment, retail, commercial and community facilities.
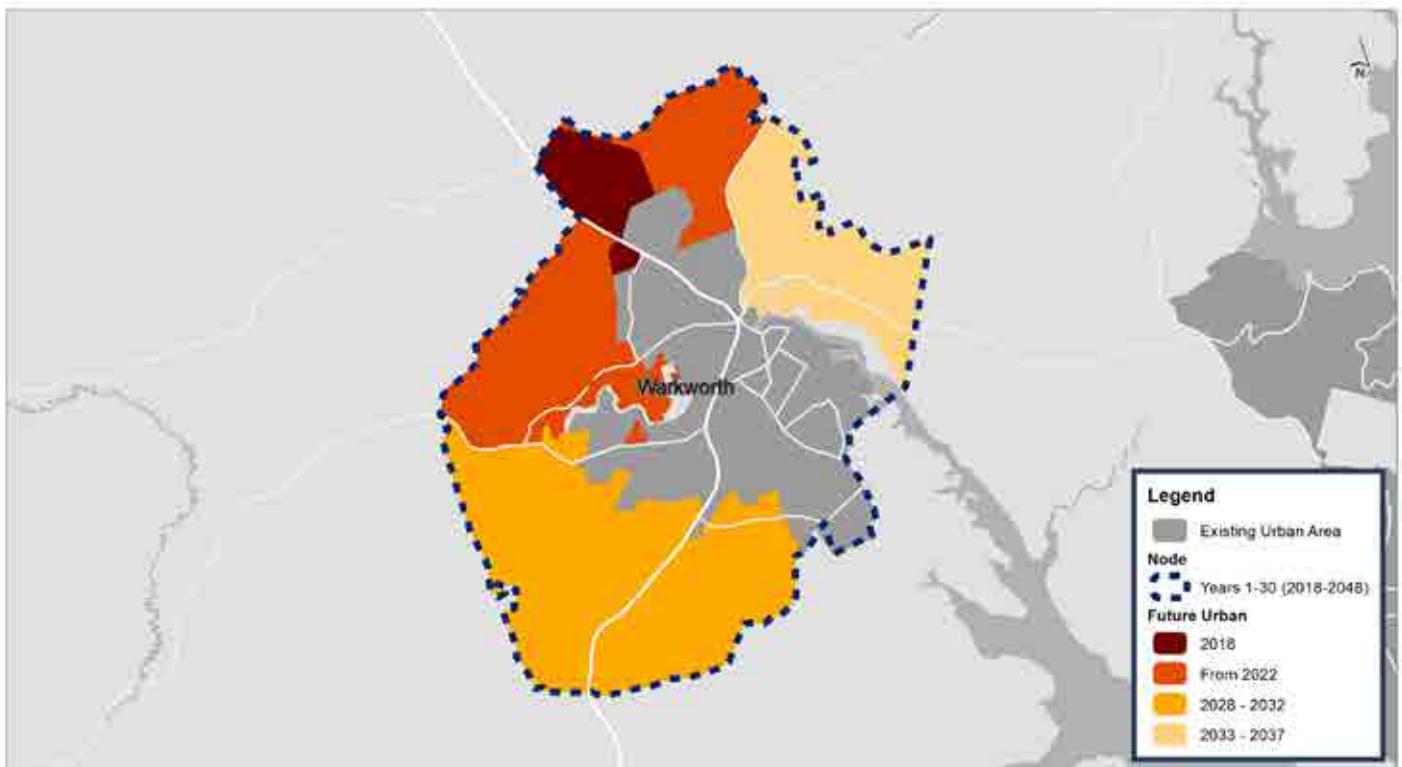
What will Pukekohe look like in the future

The satellite town of Pukekohe is an established rural node located approximately 50 kilometres south of Auckland's city centre.

It is located on the rail line and is connected to State Highway 1 and the rest of Auckland via State Highway 22.

The wider catchment includes Paerata, located on State Highway 22, and immediately to the north of Pukekohe.

The nearby towns of Tūākau and Pokeno, located in the Waikato District, are also well connected to Pukekohe.

The node serves a wide rural catchment, centred on rural production with some of New Zealand's elite soils and prime agricultural land. Dairy farms and horticultural production activities have long been established on the surrounding fertile soils.

Pukekohe's economy is centred on farming-related activities and the protection of its highly productive soils is critical for the area. It also continues to attract those seeking a rural lifestyle.

Its town centre offers a wide variety of services and facilities.

Future development of Pukekohe

Significant growth is anticipated in this area over the next 30 years. Approximately 1700 hectares of land for future urban development has been identified around Pukekohe, including around 790 hectares in Paerata.

This has the potential to accommodate approximately 14,000 dwellings.[310] Upgrades to water, wastewater, stormwater and transport will be required.

This includes:

- an extension of electric passenger trains from Papakura to Pukekohe
- a new train station at Paerata
- improvements to the road network to increase safety, capacity and resilience.

Development has been staged over the next 10 years, reflecting demand and the provision of the necessary infrastructure upgrades.

Priority has been given to the development of Paerata, with around 330 hectares of land ready for development.

The structure plan for Pukekohe and Paerata will refine the staging and timing of development and will identify the mix and location of housing, employment, retail, commercial and community facilities.

Node – Pukekohe

The satellite town of Pukekohe is an established rural node located approximately 50 kilometres south of Auckland's city centre. It serves a wide rural catchment.

It is located on the rail line and is connected to State Highway 1 and the rest of Auckland via State Highway 22.

Significant growth is anticipated in this area over the next 30 years. Approximately 1700 hectares of land for future urban development has been identified around Pukekohe, including around 790 hectares in Paerata. This has the potential to accommodate approximately 14,000 dwellings. Upgrades to water, wastewater, stormwater and transport will be required.

The structure plan for Pukekohe and Paerata will refine the staging and timing of development and will identify the mix and location of housing, employment, retail, commercial and community facilities.
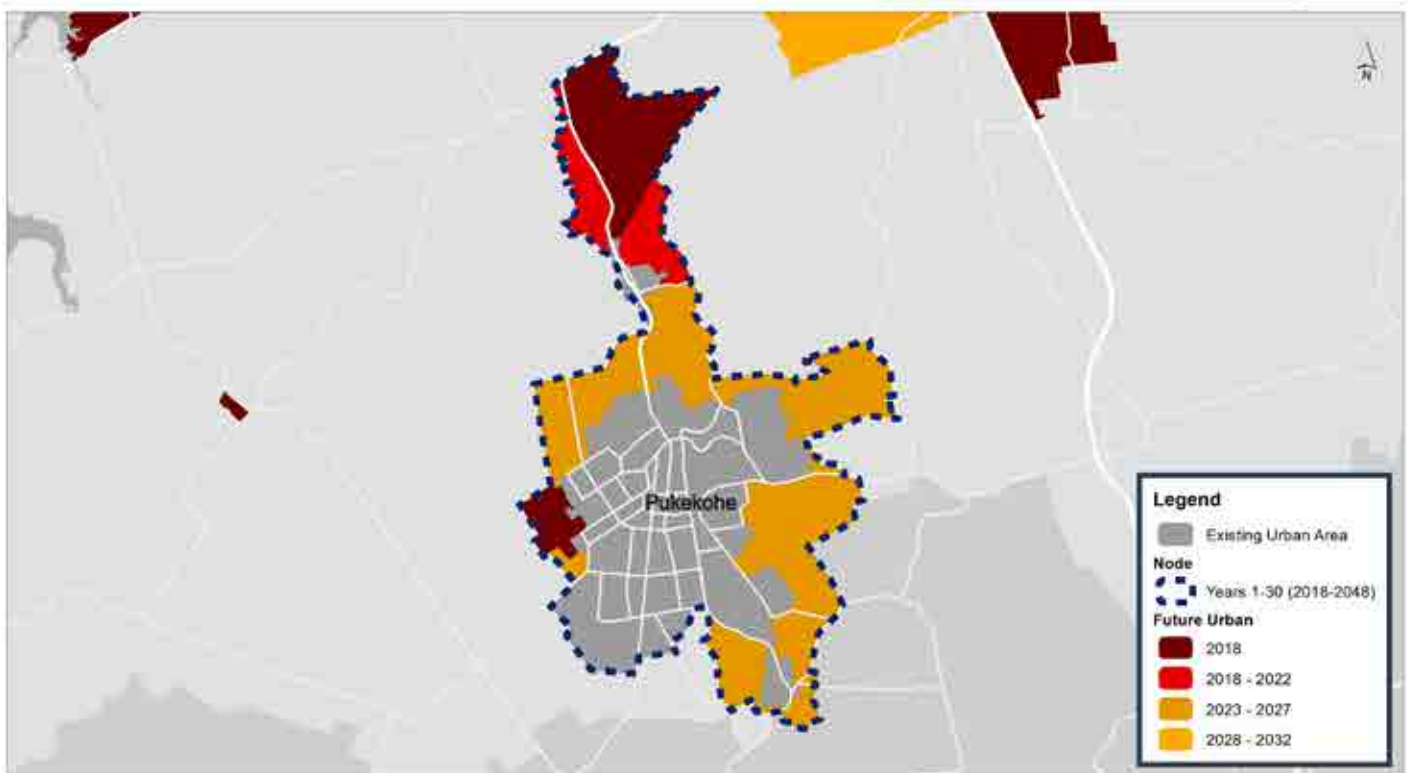
Development Area - Sunnynook

Sunnynook, including Totara Vale, on the west of State Highway 1, has good access through its station on the Northern Busway.

It has significant potential for redevelopment with the majority of the area zoned Mixed Use, Terraced Housing and Apartment Building (THAB) or Mixed Housing Urban in the Auckland Unitary Plan.

The area has feasible capacity of approximately 990 dwellings.

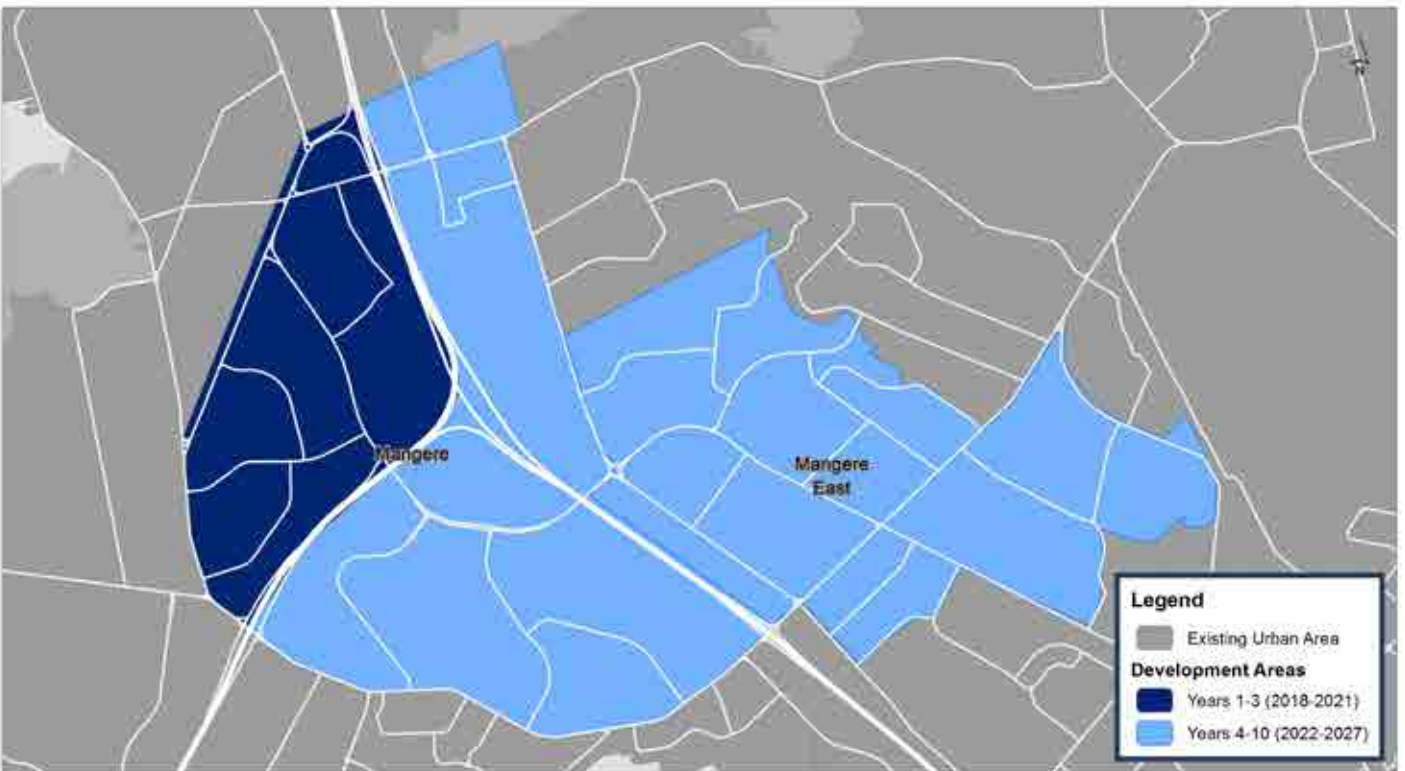|	
Anticipated household growth 2018-2048	990
Anticipated population growth 2018-2048	1,970
Anticipated employment growth 2018-2048	410
Average no. jobs accessible within 45min morning peak public transport by 2026	200,000-300,000
Enabled housing capacity *does not include centre and mixed use zones	9,810
Feasible development capacity 2017	990
Phasing / Sequencing	11-30 years

Development Area - Takapuna and Northcote

Takapuna is a centre located next to one of Auckland's most popular beaches.

Its high amenity, good connections to the city centre via bus, and high development potential have resulted in a number of recent medium density developments. To support this growth, Auckland Council has invested in open space upgrades in the area and identified it for its urban regeneration programme, concentrating on the redevelopment of a few key sites.

Northcote is well located close to the Northern Busway, Harbour Bridge and State Highway network. When Skypath is complete, the area will also have direct cycle and pedestrian connections to the city centre.

Town centre and surrounding residential land is currently being jointly redeveloped by a number of agencies. The project aims to revitalise the area and make it more attractive to more people as a place to live. Town centre and surrounding residential land is currently being jointly redeveloped by a number of agencies. The project aims to revitalise the area and make it more attractive to more people as a place to live.

There are also a number of Special Housing Areas (SHAs) in the area including the Northcote Strategic SHA which has the potential to create over 700 new housing sites.

These areas together have a feasible capacity of approximately 2,030 dwellings.

	Takapuna	Northcote
Anticipated household growth 2018-2048	5,390	1,450
Anticipated population growth 2018-2048	11,635	3,631
Anticipated employment growth 2018-2048	11,620	320
Average no. jobs accessible within 45min morning peak public transport by 2026	Over 300,000	200,000-300,000
Enabled housing capacity *does not include centre and mixed use zones	7,260	10,430
Feasible development capacity 2017	1,150	880
Phasing / Sequencing	1-3 years	1-3 years

Development Area - Birkenhead

Birkenhead has feasible capacity of approximately 2010 dwellings.

There is some private sector development interest in this area with some small developments planned or underway. Planning is also underway for the redevelopment of the Highbury Shopping Centre, including the addition of apartments above the mall.

These developments, along with a number of improvements currently underway or complete in the area, could trigger further redevelopment opportunities.
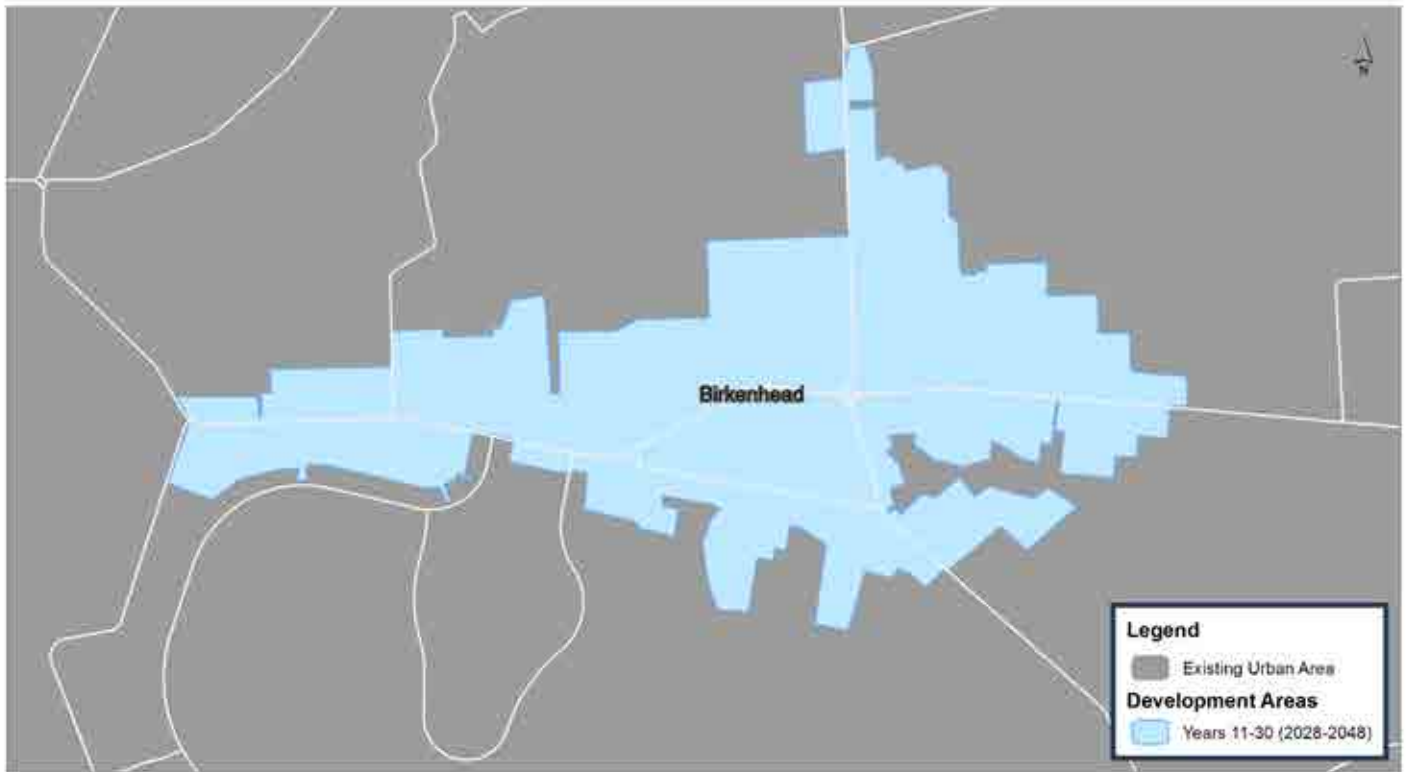
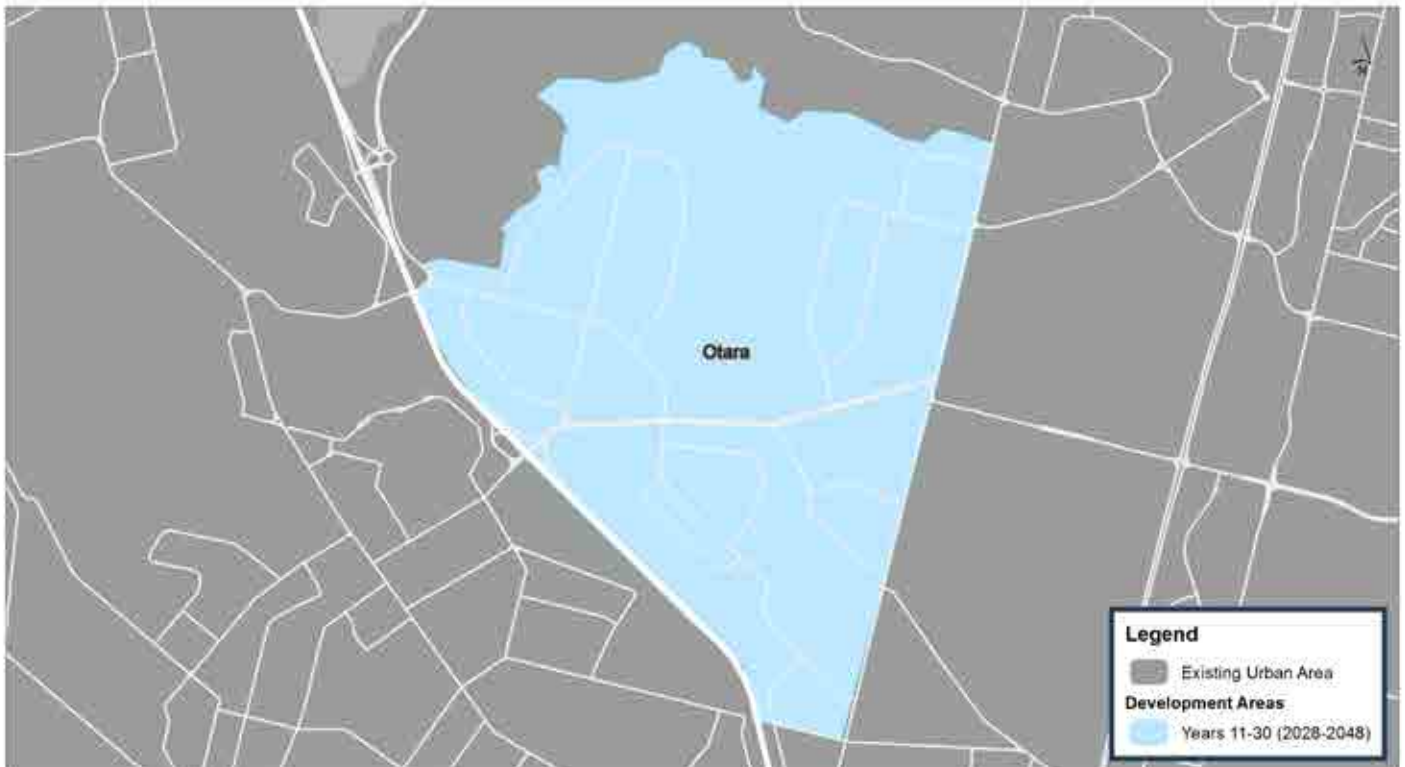|	
Anticipated household growth 2018-2048	2,820
Anticipated population growth 2018-2048	7,440
Anticipated employment growth 2018-2048	580
Average no. jobs accessible within 45min morning peak public transport by 2026	200,000-300,000
Enabled housing capacity *does not include centre and mixed use zones	9,380
Feasible development capacity 2017	2,010
Phasing / Sequencing	11-30 years

Development Area – Henderson, Glendene, Sunnyvale, Te Atatū Peninsula and Te Atatū South

Henderson is a centre with good public transport links. When the City Rail Link is complete, travel times to the city centre are expected to improve to approximately 30 minutes.

The centre has a range of facilities and excellent links to open space and recreation. Auckland Council is facilitating the development of nine sites in Henderson and is planning public space upgrades and further improvements to walking and cycling links. These improvements could trigger further development interest.

Te Atatū Peninsula has good redevelopment potential with large areas zoned for Terraced Housing and Apartment Building (THAB). The area has high amenity and there has been recent investment in social infrastructure, such as the library, community centre and parks.

The north western rapid transit corridor will improve access to the city centre and Westgate. This could increase development potential and see uptake of development in the THAB area.

Development in Henderson and Te Atatū Peninsula is likely to result in spill-over into Te Atatū South. Development in Glendene and Sunnyvale will be influenced by growth in Henderson, Glen Eden and Kelston, and Te Atatū.

These areas together have a feasible capacity of approximately 2,670 dwellings.

	Henderson	Glendene	Sunnyvale	Te Atatū Peninsula	Te Atatū South
Anticipated household growth 2018-2048	3,780	0	530	1,110	290
Anticipated population growth 2018-2048	11,870	-470	1,000	1,120	250
Anticipated employment growth 2018-2048	5,070	-10	-10	180	130
Average no. jobs accessible within 45min morning peak public transport by 2026	0-100,000	0-100,000	0-100,000	150,000-200,000	200,000-300,000
Enabled housing capacity *does not include centre and mixed use zones	11,690	4,743	4,590	18,410	7,470
Feasible development capacity 2017	570	390	410	700	600
Phasing / Sequencing	4-10 years	11-30 years	11-30 years	4-10 years	11-30 years

Development Area – Avondale, New Lynn, Kelston and Glen Eden

Avondale is an established town centre located on the western rail line with significant development potential, particularly when combined with adjacent New Lynn.

Key transport and wastewater infrastructure projects will help support its development. The City Rail Link will improve access to the city centre. The central interceptor will ensure there is capacity in the wastewater network to meet planned growth.

Avondale is an attractive development location given its central-west location and planned transport improvements. There is current development interest in the area with Auckland Council actively involved in residential development projects.

New Lynn has had major council investment and there is current development interest from the private sector and Housing New Zealand. The area is well connected via rail and bus with the New Lynn rail station and when the City Rail Link is complete, it will be a 23 minute journey to the city centre.

Kelston and Glen Eden will be a 30 minute rail journey from the city centre once the City Rail Link is complete. This will increase its attractiveness as an area for redevelopment with potential spill-over from development already occurring at New Lynn and Henderson. Present market interest in the area includes a development of 168 apartments near the Glen Eden rail station and plans for the redevelopment of the Kelston Shopping Centre.

These areas together have a feasible capacity of approximately 3,520 dwellings.
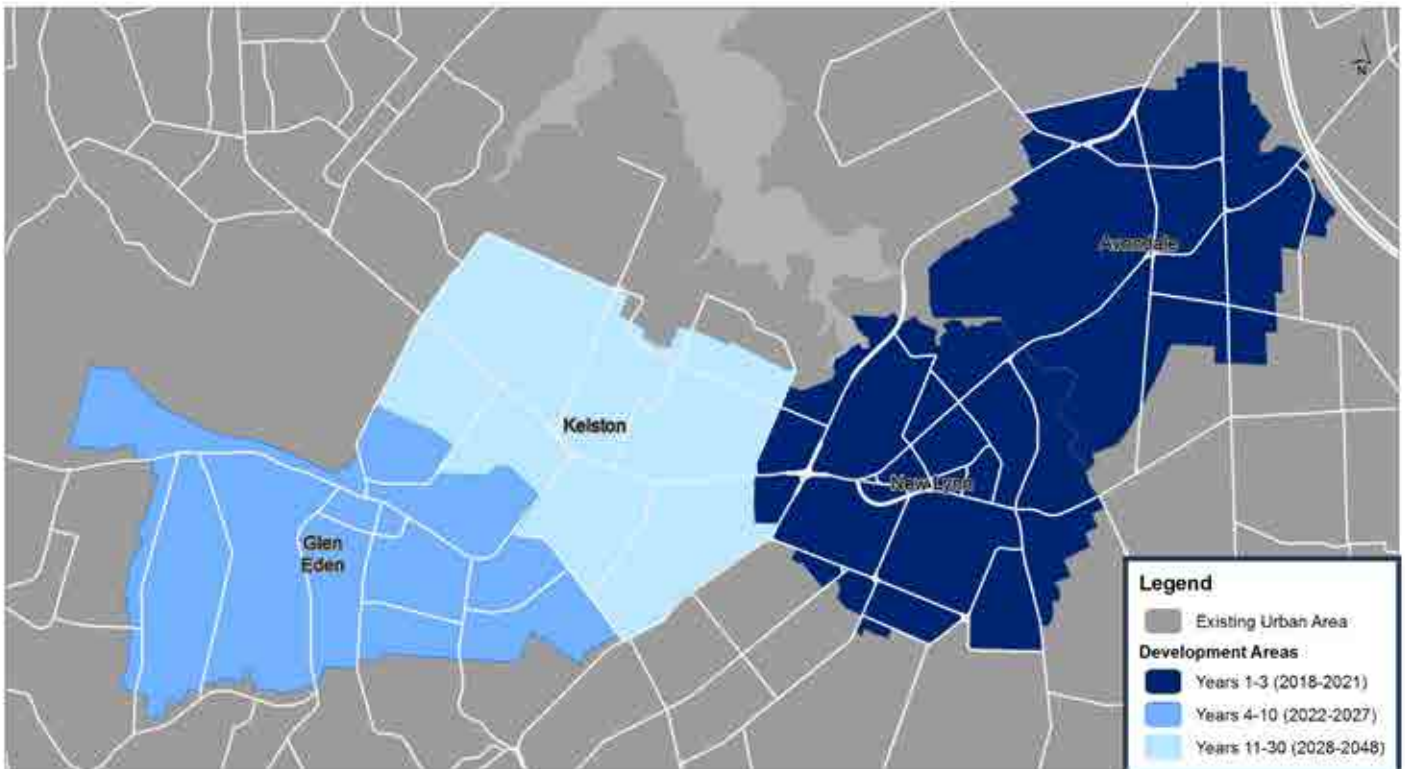
	Avondale	New Lynn	Kelston	Glen Eden
Anticipated household growth 2018-2048	2,440	6,850	1,150	1,550
Anticipated population growth 2018-2048	7,470	18,130	2,490	3,480
Anticipated employment growth 2018-2048	150	4,860	40	-20
Average no. jobs accessible within 45min morning peak public transport by 2026	Over 300,000	200,000-300,000	150,000-200,000	150,000-200,000
Enabled housing capacity *does not include centre and mixed use zones	11,620	6,590	13,470	16,440
Feasible development capacity 2017	980	280	990	1,270
Phasing / Sequencing	1-3 years	1-3 years	11-30 years	4-10 years

Development Area – Mt Albert, Newton, Morningside, St Lukes

Recent council investment in Mt Albert includes a rail station upgrade, ongoing town centre improvements and cycleway developments. It is within walking distance of Unitec and has good access to open space, including Western Springs, and the motorway network.

Morningside and St Lukes are city fringe suburbs with good accessibility via the rail station and bus routes along New North Road. Cycling links onto the north western cycleway and pedestrian links increase accessibility to nearby areas. Once the City Rail Link is complete, the area will be a 14 minute rail journey to the city centre.

There are a number of large light industrial sites in both areas that have been rezoned to Mixed Use, particularly around the Morningside rail station.

Newton is a city fringe suburb in walking distance of the city centre and Auckland University. The area has good accessibility with bus routes along Symonds Street and links to the North western cycleway. On completion of the City Rail Link, the area will be in close proximity to Mt Eden and Karangahape Road rail stations. There are a number of open air car parks and large sites in the area that provide development potential.

These areas together have a feasible capacity of approximately 660 dwellings with much of the development potential near town centres.
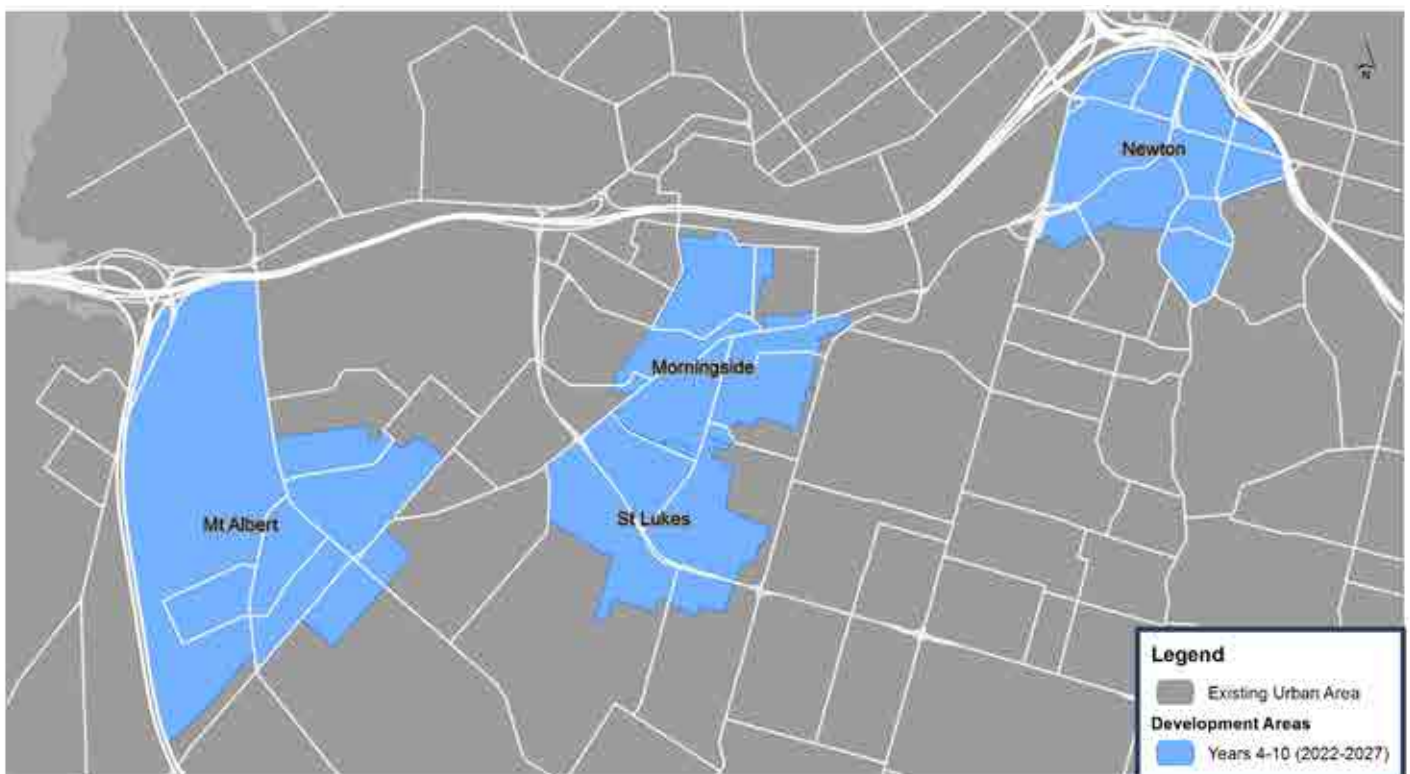
	Mt Albert	Newton	Morningside	St Lukes
Anticipated household growth 2018-2048	1,190	2,980	490	1,320
Anticipated population growth 2018-2048	3,418	7,060	1,750	4,330
Anticipated employment growth 2018-2048	410	5,060	-10	-30
Average no. jobs accessible within 45min morning peak public transport by 2026	Over 300,000	Over 300,000	Over 300,000	Over 300,000
Enabled housing capacity *does not include centre and mixed use zones	6,410	480	3,650	7,490
Feasible development capacity 2017	230	30	90	310
Phasing / Sequencing	4-10 years	4-10 years	4-10 years	4-10 years

Development Area – Dominion Road Corridor, Mt Roskill and Three Kings

Dominion Road corridor has a number of established centres, including Balmoral and Valley Roads, with large amounts of mixed use along the corridor. There are good bus routes with high levels of established public transport patronage as well as some cycle connections to the city.

Mt Roskill and Three Kings are located less than 10km from the city centre. With frequent buses along Sandringham, Mt Eden and Dominion Roads and buses along Mt Albert Road, connecting to the Mt Albert rail station, the area has good accessibility.

The Auckland Unitary Plan provides scope for increased density in Mt Roskill and Three Kings with large areas zoned for Terraced Housing and Apartment Building (THAB) and Mixed Housing Urban (MHU).

Redevelopment has commenced at Three Kings Quarry. Homes Land Community are currently progressing developments in Roskill South (therefore sequenced in Years 1-3). This is being complemented by pedestrian, cycling and open space improvements. The remaining parts of the development areas are anticipated to experience large scale development in Years 4-10.

A potential light rail service along Dominion Road would increase accessibility and act as a catalyst for development around future stations.

These areas together have a feasible capacity of approximately 2,900 dwellings which could increase following the completion of light rail.
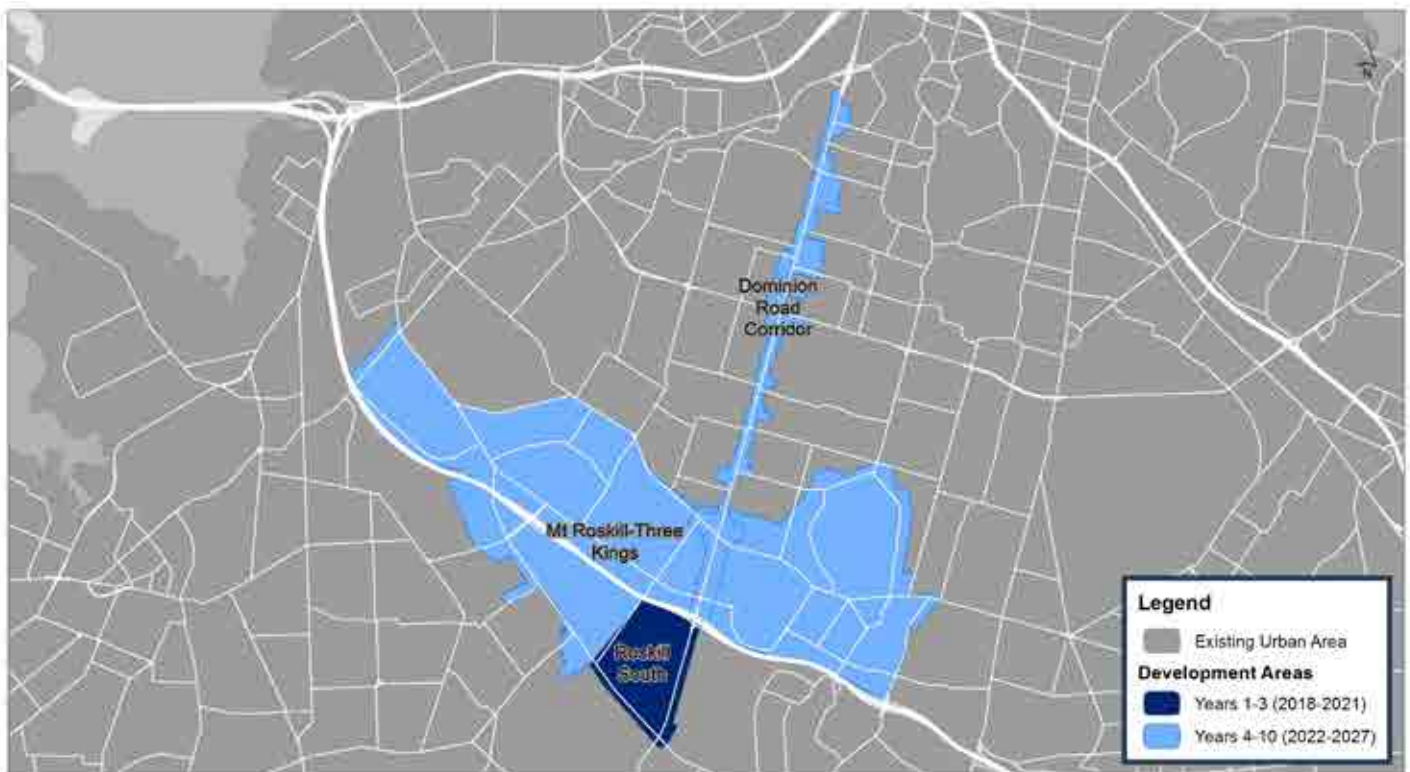
	Dominion Road Corridor	Mt Roskill and Three Kings
Anticipated household growth 2018-2048	1,980	6,240
Anticipated population growth 2018-2048	6,750	17,220
Anticipated employment growth 2018-2048	820	2,260
Average no. jobs accessible within 45min morning peak public transport by 2026	Over 300,000	Over 300,000
Enabled housing capacity *does not include centre and mixed use zones	5,760	36,700
Feasible development capacity 2017	300	2,600
Phasing / Sequencing	4-10 years	4-10 years 1-3 years (Roskill South)

Development Area - Greenlane and Ellerslie

With good connections to rail and state highway networks, Greenlane is located close to the city centre, Newmarket and Cornwall Park. Much of the area is zoned Terraced Housing and Apartment Building (THAB) under the Auckland Unitary Plan. Market interest is evident in the nearby Alexander Park Raceway developments, which will result in nearly 250 dwellings and retail space.

Ellerslie is well connected with one of the busiest railway stations in the region and good access to the State Highway network. Much of the area is zoned THAB and market interest is evident in the proposed development on the Ellerslie Racecourse site.

These areas together have a feasible capacity of 430 dwellings.
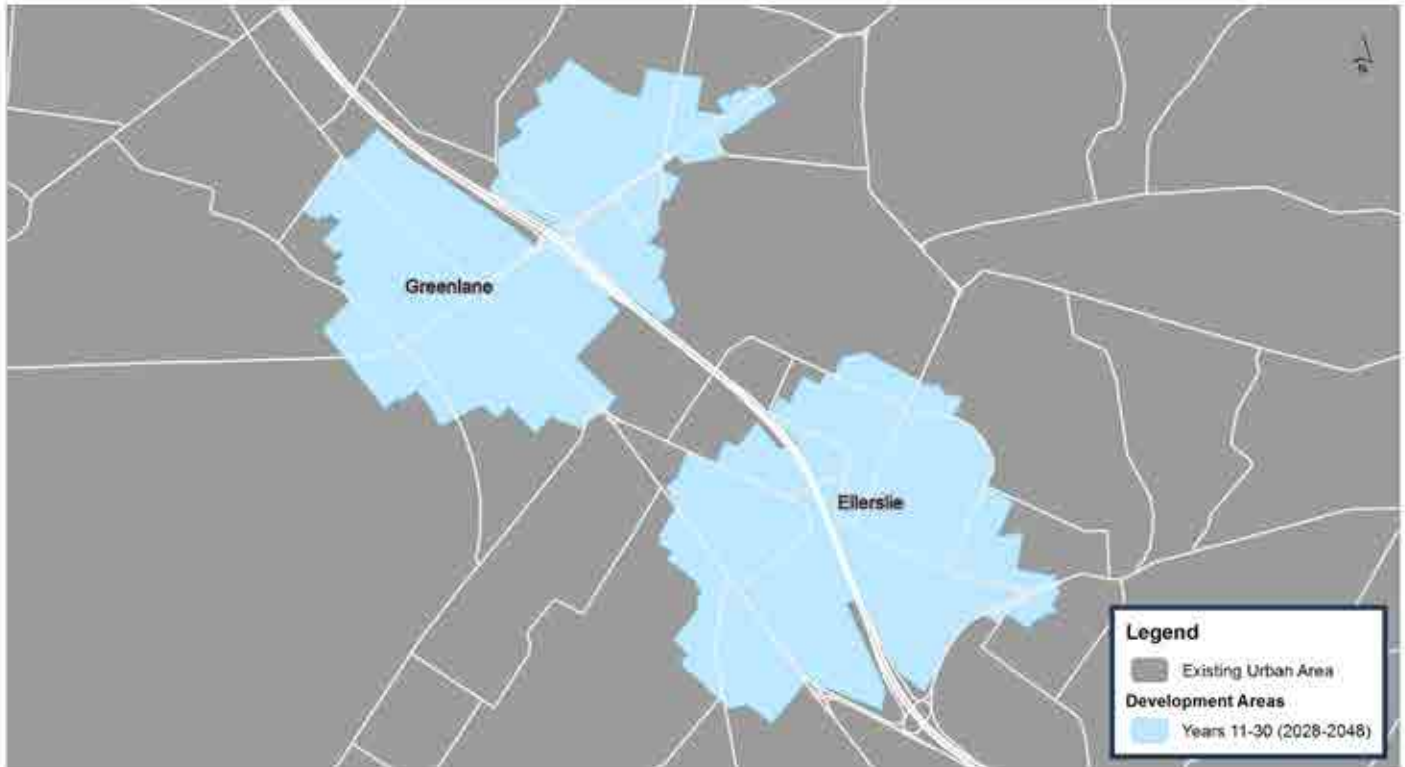
	Greenlane	Ellerslie
Anticipated household growth 2018-2048	1,570	2,280
Anticipated population growth 2018-2048	4,540	6,940
Anticipated employment growth 2018-2048	300	1,400
Average no. jobs accessible within 45min morning peak public transport by 2026	Over 300,000	Over 300,000
Enabled housing capacity *does not include centre and mixed use zones	10,670	4,710
Feasible development capacity 2017	200	230
Phasing / Sequencing	11-30 years	11-30 years

Development Area - Glen Innes, Tāmaki and Panmure

Tāmaki and Glen Innes are currently the focus of the urban transformation led by the Tāmaki Redevelopment Company. The area has good access to beaches, parks and the city centre with a train station near the town centre.

Panmure will undergo change over the next 10-15 years. The Tāmaki Redevelopment Company is actively involved in the redevelopment of the Panmure area. There is also significant development opportunity in the town centre. The new Panmure public transport interchange, opened in 2014, has resulted in improved accessibility for the area. There is also potential for accessibility to increase further once linkages to the station are improved and AMETI is complete.

These areas together have a feasible capacity of approximately 5,730 dwellings.
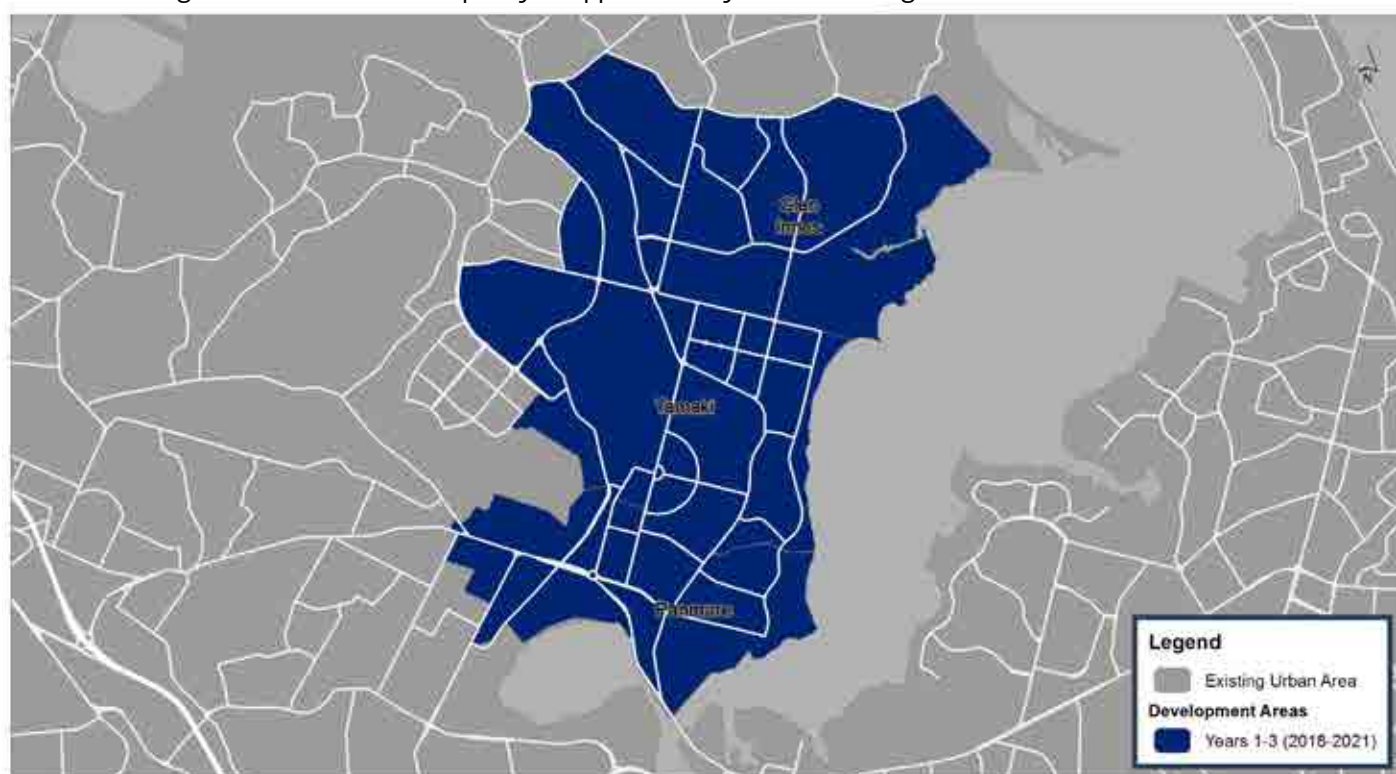
	Glen Innes	Tāmaki	Panmure
Anticipated household growth 2018-2048	3,590	960	1,780
Anticipated population growth 2018-2048	10,210	2,530	5,080
Anticipated employment growth 2018-2048	450	390	740
Average no. jobs accessible within 45min morning peak public transport by 2026	200,000-300,000	200,000-300,000	200,000-300,000
Enabled housing capacity *does not include centre and mixed use zones	23,560	5,090	9,900
Feasible development capacity 2017	3,420	1,230	1,080
Phasing / Sequencing	1-3 years	1-3 years	1-3 years

Development Area – Sylvia Park

Sylvia Park centre is the location of Auckland's largest shopping centre, with plans for further expansion. It has significant potential for redevelopment with the majority of the area zoned Mixed Use, Terraced Housing and Apartment Building (THAB) or Mixed Housing Urban in the Auckland Unitary Plan.

The area has feasible capacity of approximately 1520 dwellings and private sector interest in residential development is already underway. There are good connections to other parts of the city and the region through a rail station, State Highway 1 and Mt Wellington Highway. However, current pedestrian amenity needs to be improved.

The area is in close proximity to large employment areas of Penrose, Ellerslie and Greenlane, and there is potential for business areas surrounding the centre to redevelop into higher value business as the area evolves.

Legend

Existing Urban Area

Development Areas

Years 4-10 (2022-2027)
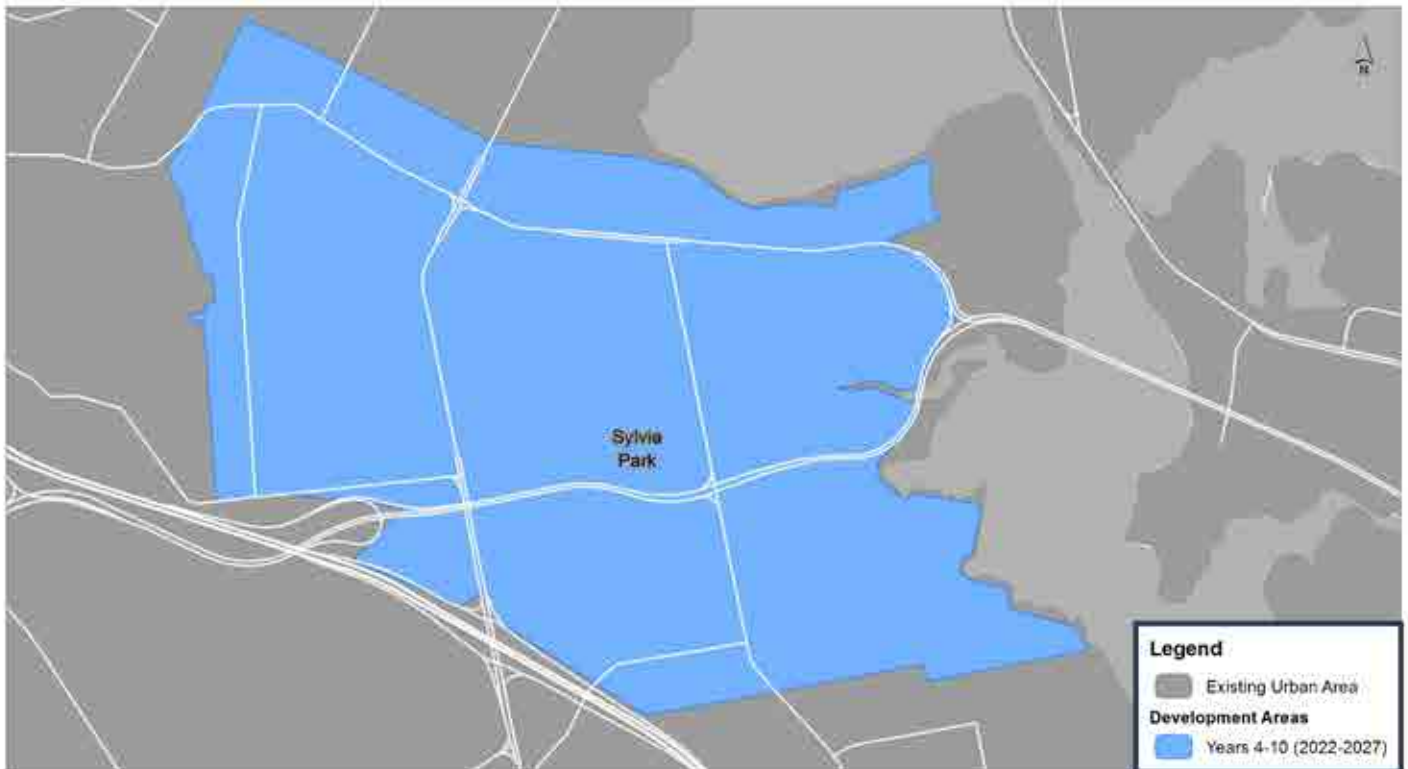
Anticipated household growth 2018-2048	5,210
Anticipated population growth 2018-2048	14,680
Anticipated employment growth 2018-2048	4,030
Average no. jobs accessible within 45min morning peak public transport by 2026	Over 300,000
Enabled housing capacity *does not include centre and mixed use zones	10,230
Feasible development capacity 2017	1,520
Phasing / Sequencing	4-10 years

Development Area – Pakuranga, Pakuranga Corridor and Highland Park

Pakuranga will be well connected to Panmure, Botany and the city centre, via the bus/rail interchange at Panmure, when AMETI is complete. A masterplan for the area was completed in 2015 and there are opportunities to improve connections between the town centre and the surrounding residential areas.

There is developer interest in the area with developments currently planned or underway for housing, retail and a hotel. Much of the Highland Park – Pakuranga Road Corridor is zoned for Terraced Housing and Apartment Building (THAB) or Mixed Housing Urban in the Auckland Unitary Plan.

It is likely that Highland Park and the corridor between Pakuranga and Highland Park will see some redevelopment as improved accessibility from the completion of AMETI is realised.

These areas together have a feasible capacity of approximately 9,420 dwellings.

	Pakuranga	Pakuranga Corridor	Highland Park
Anticipated household growth 2018-2048	1,700	1,040	1,380
Anticipated population growth 2018-2048	3,620	350	1,700
Anticipated employment growth 2018-2048	10	-30	120
Average no. jobs accessible within 45min morning peak public transport by 2026	Over 300,000	100,000-150,000	0-100,000
Enabled housing capacity *does not include centre and mixed use zones	14,930	15,410	14,620
Feasible development capacity 2017	2,890	3,630	2,900
Phasing / Sequencing	4-10 years	11-30 years	11-30 years

Development Area - Ōtāhuhu

Ōtāhuhu has been the focus of recent Auckland Council investment and is well located between the city centre and Manukau.

Recent investment has included a public transport interchange, new bus stops in the town centre and the development of the Ōtāhuhu Recreation Precinct. This includes a library, aquatic and recreation centre in one facility. Leveraging off these investments, the town centre is identified for regeneration, including the Portage Route through to Middlemore Hospital. Public investment is likely to trigger private redevelopment.

There is feasible capacity of approximately 2,870 dwellings.

Anticipated household growth 2018-2048	2,250
Anticipated population growth 2018-2048	5,900
Anticipated employment growth 2018-2048	840
Average no. jobs accessible within 45min morning peak public transport by 2026	200,000-300,000
Enabled housing capacity *does not include centre and mixed use zones	19,860
Feasible development capacity 2017	2,870
Phasing / Sequencing	1-3 years

Development Area - Ōnehunga

Ōnehunga, strategically located on the Manukau Harbour, is within 10km of Auckland Airport and has good accessibility to the city centre with a rail station near its centre.

Recent investment in the area included an upgrade of Ōnehunga Mall, Taumanu Reserve, and investments in transport including rail, walking and cycling facilities, SH20 roading improvements and connections to the western ring route. The area continues to be a focus for public investment and regeneration.

The Auckland Unitary Plan has enabled development in the area, with a feasible capacity of approximately 640 dwellings.

Legend

Existing Urban Area

Development Areas

Years 1-3 (2018-2021)
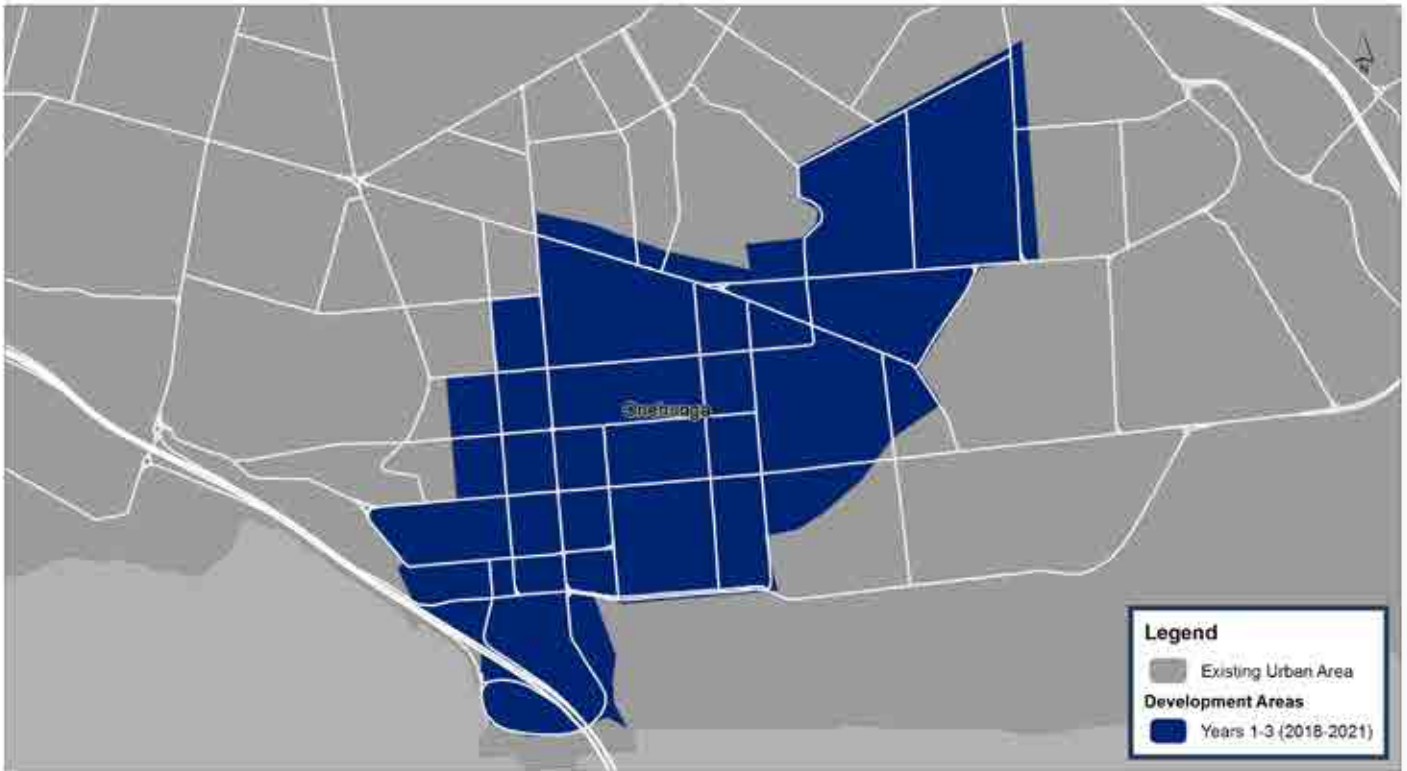
Anticipated household growth 2018-2048	3,890
Anticipated population growth 2018-2048	11,140
Anticipated employment growth 2018-2048	350
Average no. jobs accessible within 45min morning peak public transport by 2026	Over 300,000
Enabled housing capacity *does not include centre and mixed use zones	10,440
Feasible development capacity 2017	640
Phasing / Sequencing	1-3 years

Development Area – Māngere and Māngere East

Māngere has large areas zoned for Terraced Housing and Apartment Building (THAB) or Mixed Housing Urban. Māngere East has large areas zoned Mixed Housing Urban.

The Crown is currently undertaking a number of smaller redevelopments in Māngere. Specifically, developments in the northern part of Māngere are progressing now and are sequenced in Years 1-3. There is potential for larger scale redevelopment in the remaining parts of Māngere and in Māngere East given Housing New Zealand's significant land ownership. These areas are anticipated to experience large scale development in Years 4-10.

Potential light rail to Auckland Airport could trigger widespread redevelopment and greatly improve accessibility for Māngere and Māngere East, in particular to the airport and city centre.

There is feasible capacity of approximately 3,160 dwellings.

	Māngere	Māngere East
Anticipated household growth 2018-2048	1,250	780
Anticipated population growth 2018-2048	490	-690
Anticipated employment growth 2018-2048	330	120
Average no. jobs accessible within 45min morning peak public transport by 2026	150,000-200,000	200,000-300,000
Enabled housing capacity *does not include centre and mixed use zones	26,830	13,510
Feasible development capacity 2017	1,340	1,820
Phasing / Sequencing	1-3 years (northern area) 4-10 years (remaining area)	4-10 years

Development Area – Papatoetoe and Hunters Corner

Papatoetoe and Hunters Corner are small established centres located just north of Manukau. They have good accessibility to rail and bus services as well as the State Highway network. The area has feasible capacity of approximately 2,710 dwellings.

Auckland Council is actively involved in the area and is leading the redevelopment of the Old Papatoetoe mall, including a health hub. The area has seen recent development interest with numerous residential projects (apartments and a retirement village) complete or under construction.
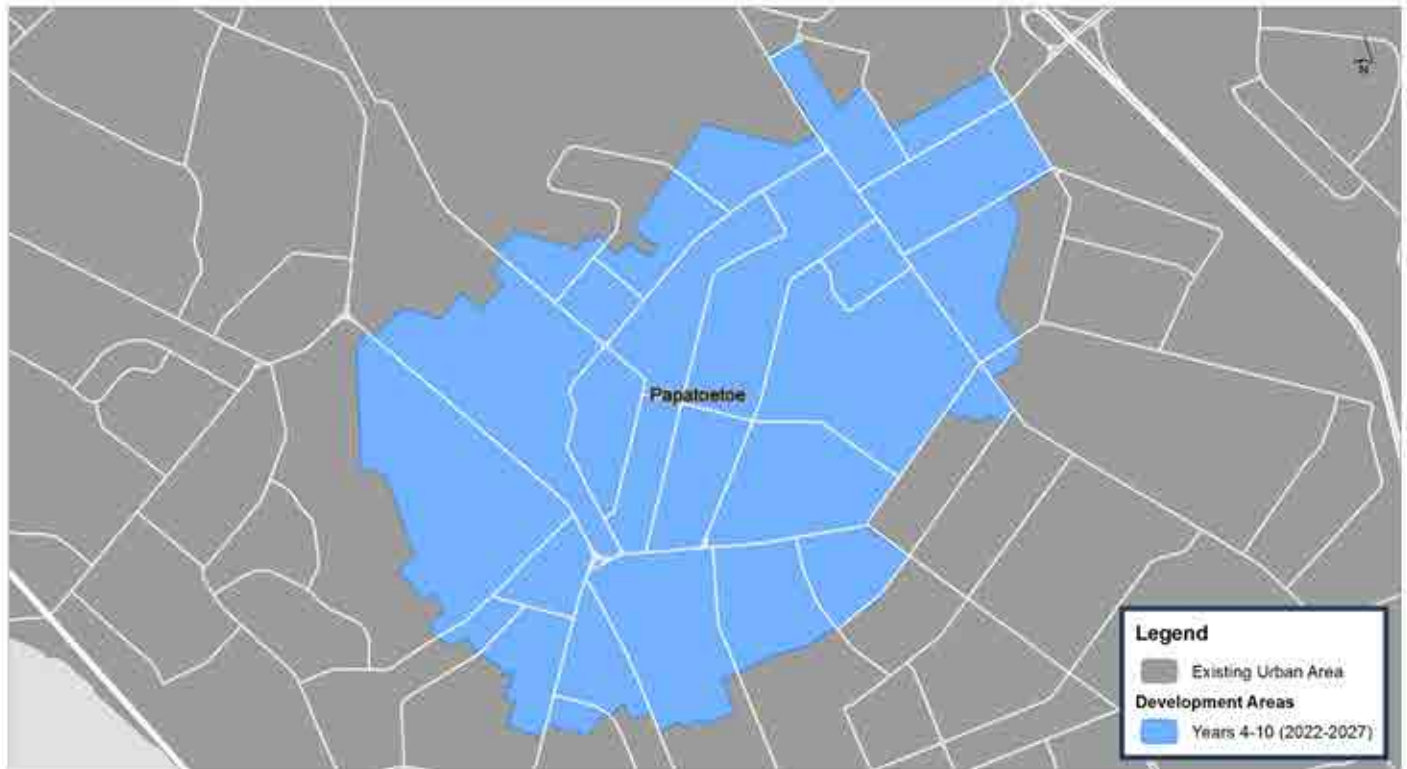
Anticipated household growth 2018-2048	2,230
Anticipated population growth 2018-2048	5,200
Anticipated employment growth 2018-2048	350
Average no. jobs accessible within 45min morning peak public transport by 2026	150,000-200,000
Enabled housing capacity *does not include centre and mixed use zones	20,930
Feasible development capacity 2017	2,710
Phasing / Sequencing	4-10 years

Development Area – Ōtara

Ōtara is strategically located directly to the east of State Highway 1 and the area has good public transport links with a bus interchange.

It is close to large employment areas of Ōtāhuhu, East Tamaki and Manukau and has good potential for redevelopment with most of the area zoned Terraced Housing and Apartment Building (THAB) or Mixed Housing Urban in the Auckland Unitary Plan. The main campus for Manukau Institute of Technology is located in Ōtara and the centre has a library, swimming pool and leisure centre and an art gallery.

The area has feasible capacity of 1,320 dwellings. The Crown has large land holdings in the area and there is the potential for larger scale redevelopment in the area in the longer term.

Anticipated household growth 2018-2048	1,660
Anticipated population growth 2018-2048	1,770
Anticipated employment growth 2018-2048	600
Average no. jobs accessible within 45min morning peak public transport by 2026	100,000-150,000
Enabled housing capacity *does not include centre and mixed use zones	21,730
Feasible development capacity 2017	1,320
Phasing / Sequencing	11-30 years

Development Area – Manurewa and Clendon

Manurewa sits on the southern rail line and it has a well-used train station and transport interchange. The Auckland Unitary Plan provides for significant Terrace Housing and Apartment Buildings (THAB) zoning around the Manurewa town centre, with a lesser amount around Clendon local centre.

An Integrated Area Plan for Manurewa, Takanini and Papakura was completed in 2017. It identifies key regeneration opportunities in Manurewa that can be activated in conjunction with public and private agencies. It builds on work already delivered that includes revitalisation of the Manurewa town centre and specific upgrades leading to the station, town centre and way finding. The Southern Initiative is working in the area to deliver a long-term programme of co-ordinated social and economic investment.

The Crown has large land holdings in both Clendon and Manurewa and there is the potential for larger scale redevelopment in the area in the longer term.

There is a feasible capacity of approximately 4300 dwellings.

	Manurewa	Clendon
Anticipated household growth 2018-2048	990	660
Anticipated population growth 2018-2048	1,330	410
Anticipated employment growth 2018-2048	290	290
Average no. jobs accessible within 45min morning peak public transport by 2026	100,000-150,000	0-100,000
Enabled housing capacity *does not include centre and mixed use zones	20,820	14,310
Feasible development capacity 2017	2,730	1,570
Phasing / Sequencing	11-30 years	11-30 years

Development Area – Papakura

Papakura has good connections by rail and road both north and south. Papakura train station is the third busiest in Auckland with over 2000 people using it every day. The Auckland Unitary Plan provides scope for increased density with large areas zoned Metropolitan Centre, Terrace Housing and Apartment Building (THAB) and Mixed Use zoning.

An Integrated Area Plan for Manurewa, Takanini and Papakura was completed in 2017 and proposes to continue the revitalisation work already underway. This includes improvements to wayfinding for cycling and walking through the town centre, along greenways and to the station. The Southern Initiative is coordinating a long-term programme of investment to boost social, economic conditions and education opportunities in the area.

The Crown has large land holdings in the area and there is potential for larger scale redevelopment in the area in the longer term.

There is a feasible capacity of approximately 1530 dwellings.

Anticipated household growth 2018-2048	2,160
Anticipated population growth 2018-2048	4,730
Anticipated employment growth 2018-2048	1,240
Average no. jobs accessible within 45min morning peak public transport by 2026	0-100,000
Enabled housing capacity *does not include centre and mixed use zones	16,610
Feasible development capacity 2017	1,530
Phasing / Sequencing	11-30 Years

Remaining existing urban area

As Auckland's population grows, most urban areas will experience development and change. While much of this growth will occur in the nodes and development areas, some growth will take place in the remaining existing urban area. This could be in the form of subdivision, or the redevelopment of existing buildings/land parcels at higher densities.

Auckland's many network of centres and road corridors play an essential role in accommodating both population and employment growth. As focal points of the community, higher density in and around centres and along corridors supports public transport, maximises infrastructure investment and contributes to a quality compact urban form. This area also accommodates major employment areas that are a resource for all of Auckland.

Many of Auckland's neighbourhoods will also undergo smaller scale growth and change. Some of these areas have established character and heritage valued by the communities that live and work in them.

The remaining existing urban area has a feasible capacity of around 64,810.

Anticipated household growth 2018-2048	75,850
Anticipated population growth 2018-2048	150,300
Anticipated employment growth 2018-2048	49,590
Average no. jobs accessible within 45min morning peak public transport by 2026	N/A
Enabled housing capacity *does not include centre and mixed use zones	515,740
Feasible development capacity 2017	64,810
Timing / Sequencing	1-30 Years

Remaining existing urban area

ZONE

- Business - City Centre Zone
- Business - Local Centre Zone
- Business - Metropolitan Centre Zone
- Business - Neighbourhood Centre Zone
- Business - Town Centre Zone
- Business - Business Park Zone
- Business - General Business Zone
- Business - Heavy Industry Zone
- Business - Light Industry Zone
- Business - Mixed Use Zone
- Open Space - Civic Spaces Zone
- Open Space - Community Zone
- Open Space - Informal Recreation Zone
- Open Space - Sport and Active Recreation Zone
- Future Urban Zone
- Residential - Large Lot Zone
- Residential - Rural and Coastal Settlement Zone
- Residential - Mixed Housing Suburban Zone
- Residential - Single House Zone
- Residential - Mixed Housing Urban Zone
- Residential - Terrace Housing and Apartment Building Zone
- Development_Areas_Final
- Nodes_and_City_Centre
- Existing Urban Area

Wynyard Quarter - the changing nature of industrial land

The Wynyard Quarter area on Auckland's waterfront has transformed over the last decade from being an industrial port closed to the public, to being a vibrant and dynamic experience for all Aucklanders and visitors.

The Wynyard Quarter covers a large area of around 37 hectares and has almost 3 kilometres of coastal frontage. The area was historically used by the timber trade, and from the 1930s began to be used for bulk petro-chemical storage. A range of other industrial, commercial and marine activities also operated in the area.

After 2005, changes to the way fuel was supplied to Auckland meant that much of the land was no longer required for bulk fuel storage. This allowed an opportunity for the area to be opened to the public and radically changed. It is now a vibrant place for living, entertainment and business.

The first stage of redevelopment was completed in 2011. That involved creating a substantial area next to the water's edge with ANZ Viaduct Events Centre, restaurants, cafés and open spaces for the public to enjoy.

The Wynyard Quarter is now home to GridAKL,[311] an innovation precinct that provides the space for high-impact, growth-orientated, and technology focused businesses to establish, develop and grow.

Development continues in the Wynyard Quarter with residential accommodation, offices, a hotel and new parks and walkways expected in the short-term.

Placemaking at New Lynn

New Lynn is a great example of successful placemaking in Auckland.

In the 1990s New Lynn centre was in decline, as were local employment opportunities.

This was because of a general decline in manufacturing and because several major arterial roads and the North Auckland railway line cut through the centre.

The gradual decline of the centre could be seen in the quality of its built environment.

New Lynn was identified as a centre of strategic importance. This provided a strong signal for the substantial shared investment and development effort across multiple agencies that were needed to improve the town centre, and create additional residential and employment opportunities.

A community-led place-making process resulted in a master plan that would eventually see its revitalisation and transformation over the coming decades.

It was a transformational vision for New Lynn as a major urban growth area, based on the principles of a transit oriented development.

It opened up opportunities for a more connected and integrated urban environment and included:

- development of a new war memorial library, public plaza, Olympic Park, Rewarewa pedestrian bridge, and the New Lynn rail station and bus interchange
- the upgrade of Totara Avenue and Todd Triangle as shared spaces

- trenching and covering the North Auckland rail line through New Lynn to enable better connections in and around the town centre
- upgrades of Clark Street, Great North Road and associated link roads
- an extension to Clark Street with a new roadover-rail bridge.

This large-scale public investment and development was sustained over more than a decade, and was vital for New Lynn's transformation into a more market attractive centre.

The transport and public realm investments were largely complete by 2012 and the New Lynn rail station, a key transport interchange for west Auckland, is now the busiest rail station on the western line.

A number of plan changes between 2007 and 2012 supported further intensive residential development in and around the centre. There were two key developments - Crown Lynn and the Merchant Quarter. Both sites now include upgraded urban spaces with designs that reflect New Lynn's history.

Today the streets and public spaces are more pedestrian-friendly, with new public facilities, space for more businesses, and higher density housing within walking distance of the train station.

Through place-making, New Lynn has become a better connected, high-quality centre, with the infrastructure to support market-led growth.

Advanced industries

Auckland's advanced industries are an important part of the wider economy. These encompass research and development intensive industries that offer high levels of science, technology, engineering and mathematics employment.

Our advanced industries are growing. They are important as they are globally competitive in major markets, they are highly productive, they pay well, and they tend to cluster and agglomerate.

Being located close to transport routes, the Auckland International Airport and major centres is also important.

There is a heavy concentration of advanced industries in Auckland's city centre – 30 per cent of all advanced industry jobs are within two kilometres. There are also concentrations in Ōnehunga, Penrose, Mt Wellington, Ellerslie, and East Tāmaki/Highbrook industrial areas.

Fisher and Paykel Healthcare, Highbrook

Auckland's electricity network

A secure and reliable electricity supply is essential to Auckland's success.

There are three elements of a secure and reliable electricity supply:

- generation
- transmission
- distribution.

Auckland relies on other parts of the country for most of its electricity generation and supply. Generation sources in the central North Island and South Island are predominantly renewable hydro, wind and geothermal. They provide 95 per cent of Auckland and Northland's peak electricity demand.[312]

Transpower's transmission network traverses Auckland and supplies electricity to Northland. As the network crosses Auckland, electricity is transferred to local distribution lines via a series of exit points, including substations at Ōtāhuhu, Penrose and Mt Roskill. Local distribution companies deliver electricity to homes and businesses. In Auckland, Vector and Counties Power have the responsibility of distributing electricity locally

Since 2010, Transpower has made substantial improvements to the transmission network. This investment means the core network is now in place, providing adequate capacity beyond 2040. Ongoing maintenance projects will ensure the reliability of the network continues over the next 30 years.

Future demand for electricity

Auckland's continued growth is reflected in projected increases in the region's electricity demand.

Auckland's population growth and the impact of new technologies create a degree of uncertainty about future electricity consumption. However, it is anticipated that Auckland's electricity demand will remain at least as high as it is now with increases of about one per cent per year over time.[313]

New and emerging technologies will mean the electricity network will operate differently in the future. This may provide an opportunity to defer future investments.[314] For example, battery technology is continuing to develop and, in time, will impact significantly on the network. In the long term, it is anticipated that battery or other storage technologies will cover short-term imbalances in supply and demand and smooth out daily peaks.

Energy efficiency will also continue to play its part in reducing overall electricity demand in a variety of ways.

These include:

- industry improvements
- new houses being built
- retrofitting existing housing stock
- continued evolution of energy efficient products.[315]

Many new technologies are expected to reduce consumption. This may be partially offset by the uptake of electric vehicles. This uptake could be rapid due to associated benefits such as emission reductions and lower running costs.

In future, it is expected that electric vehicle batteries could have capability to be part of a battery network. This would provide services when the vehicle is plugged in to charge overnight.

Auckland's horticultural production

Over 7000 hectares of land in Auckland is used for horticultural production.

Auckland's main horticultural produce includes onions, potatoes, kiwifruit, lettuce, broccoli, wine grapes, cabbage, olives, cauliflower, pumpkin, carrots, avocados and strawberries.

Horticultural production relies on access to fresh water and quality soils.

Franklin in the south has the majority of Auckland's quality soils and a significant proportion of Auckland's horticultural produce is grown here. Vineyards are becoming a feature of Auckland horticulture – there are now over 100 vineyards in Auckland, including notable activity in Matakana, Kumeu, Clevedon and Waiheke Island.

Technological change, such as enhanced harvesting efficiency, packaging and sorting, has resulted in productivity gains in the horticultural industry.

In the medium to long-term, more technological change is expected. This will impact on how food is grown and processed, and will meet a growing demand for safe, fresh and healthy foods. It will also enable the production of larger volumes of food at a lower price.

For further reading

Martin Jenkins and Infometrics (2016). Upper North Island key sector trends to 2015 and labour demand to 2020. Prepared for the Upper North Island Strategic Alliance.[316]

Curran-Cournane, F., Vaughan, M., Memon, A. and Fredrickson, C. (2013). Auckland's elite and prime land: similar messages and continued trade-offs 54 years later. Auckland Council technical report, TR2013/050.

Implementing the Auckland Plan 2050

The Auckland Plan 2050 sets out a long-term vision for Auckland to thrive and succeed over the next 30 years.

Making this happen will need the investment and action of:

- central and local government
- mana whenua
- the private sector
- institutions and non-government organisations
- Auckland's communities.

We must work together and innovate, try new approaches, experiment and do things differently to bring about transformational change.

Working together to implement the Auckland Plan 2050

Auckland Council has developed the Auckland Plan 2050 with, and on behalf of, all Aucklanders.

Auckland now has a shared responsibility for implementing it.

Who needs to be involved

To an extent, all Aucklanders will play a role in shaping and delivering a better future for Auckland.

Several key groups and organisations play critical roles in achieving the outcomes and directions of the plan, through their knowledge, investment and actions:

- mana whenua have an enduring role as kaitiaki of Tāmaki Makaurau
- advocacy groups influence and shape strategic choices and decision-making
- Auckland's businesses not only deliver the goods and services Auckland requires, but they create opportunities for social, economic and environmental change
- Auckland's many non-government and not-for-profit organisations play a key role in delivering social, economic and environmental outcomes
- local and community organisations deliver on-the-ground initiatives tailored to meet their community's needs
- infrastructure providers must be coordinated to support sequenced changes in land use - particularly important as it takes time to deliver infrastructure.

- central government sets policy and legislation, provides funding and resources, and delivers essential services that impact on Auckland
- Auckland Council contributes to Auckland's future through its planning, funding, regulatory, advocacy and facilitation functions.

How we can all work together effectively

Broadly speaking, successful implementation depends on:

- good relationships among partners and stakeholders
- strong alignment in planning and investment
- effective coordination and agreement
- taking up opportunities to innovate and do things differently.

More specifically, we need to ensure that:

- shared investment programmes are developed and underpinned by robust information, analysis and monitoring of Auckland's growth and change
- initiatives, strategies, or programmes of work deliver on multiple outcomes wherever possible, to get the best value for money from collective investments
- previous successes, investment and efforts are not wasted and that we work together to leverage and build on what we can to avoid duplicating effort and wasting resources.

How Auckland Council contributes to the Auckland Plan 2050

Auckland Council is committed to working effectively to help deliver the long-term directions outlined in the Auckland Plan 2050.

There are many ways it does this, some of which are set out in Figure 48 - Implementation roles.

Alignment of council planning and activities

The Auckland Plan 2050 provides a basis for aligning Auckland Council's:

- implementation and regulatory plans
- policy development
- funding programmes
- internal operations and investments, including that of its council-controlled organisations (CCOs).

See Figure 49 - Auckland Council's planning system

The council also helps deliver the Auckland Plan by developing and implementing regional, sub-regional and local spatial planning approaches and rules.

These are supported by strategies and policies that focus and deliver on the high level social, cultural, economic and environmental objectives of the plan.

Auckland Council's strategies, policies and plans have acted as an important input in the development of the Auckland Plan 2050. With the adoption of the plan, the council will assess these documents to ensure they remain fit for purpose.

Auckland Council's long-term plan (LTP) is its mechanism for funding initiatives and work programmes in support of the Auckland Plan 2050.

Elected representatives make decisions on what will be funded and when funding will be available, and how much ratepayers, residents and users will contribute to delivering on different outcomes in the Auckland Plan 2050.

Having a clear plan of Auckland Council's spend on infrastructure, community facilities, transport, environmental, cultural, economic and social programmes also enables the council to work with central government on how, when and what they will contribute to Auckland's development.

Prudent financing

Auckland Council uses a number of tools to fund and finance its contribution towards delivering the plan's outcomes. The key tools are:

- property rates
- debt
- contributions from developers
- charges for water
- charges for other specific services.

The council's financial strategy details how these tools enable investment while maintaining a focus on ratepayer affordability, efficiency in delivery and prudent borrowing.

Auckland Council, central government and others continue to investigate new approaches to funding and financing. These include:

- use of market and incentive-based tools
- efficient and flexible pricing of infrastructure and service delivery
- demand management
- private sector participation.

Auckland Council will continue to use funding and financing tools available within existing legislation, and may seek legislative change to expand the range of funding tools available.

Figure 48 - Implementation roles

Legislation that enables a regional fuel tax came into effect in June 2018. Initially available only in the Auckland region, the fuel tax provides a funding tool for regional councils to raise revenue to fund transport projects that would otherwise be delayed or not funded. Within Auckland the regional fuel tax applies from 1 July 2018.

Read more about the council's financial strategy[317]

Updating to the Auckland Plan 2050

The Auckland Plan 2050 was adopted in June 2018.

The Plan is a 'living plan' that will evolve to address emerging or changing issues, as well as reflect updated data and evidence.

As local, national and international conditions and circumstances change and affect Auckland, the Auckland Plan will need to adapt.

New and revised data, links to new government or Auckland-based policy, and examples of delivery programmes and innovative projects will be added periodically so that it remains up to date and relevant.

This approach of creating a 'living plan' will not change the strategic direction, but will allow it to remain current and relevant.

Major issues or disruptions may require changes to parts of the plan, possibly all of it. Any changes to the plan's direction would need formal consultation.

See Figure 49 - Auckland Council's planning system
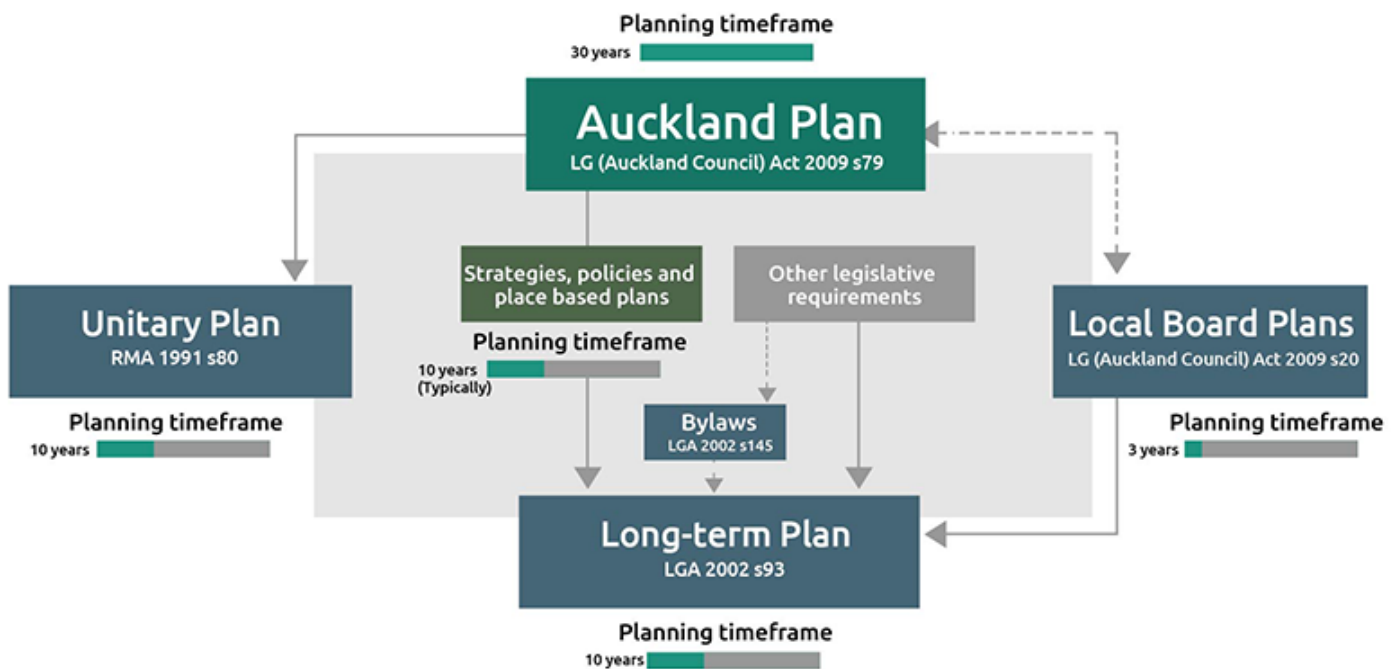
Measuring progress

Effective monitoring and clear evaluation processes are fundamental to the successful implementation of the Auckland Plan.

A robust monitoring and evaluation framework provides:

- a process for tracking progress
- an ongoing evidence base for aligning the implementation and regulatory plans and funding programmes of Auckland Council and other stakeholders.

Monitoring framework

The monitoring framework measures progress towards the strategic direction set out in the Auckland Plan.

The framework includes 33 measures that are aligned to the six Auckland Plan outcomes and the feasible development capacity target for housing as required by the National Policy Statement on Urban Development Capacity (NPSUDC).

The outcomes are broad in nature, and are to a large extent inter-dependent.

Some measures inform progress across more than one outcome, reflecting the integrated nature of the plan.

Belonging and Participation outcome

- Measure 1: Aucklanders' sense of community in their neighbourhood
- Measure 2: Aucklanders' sense of safety in their homes and neighbourhood
- Measure 3: Aucklanders' quality of life
- Measure 4: Relative deprivation across Auckland
- Measure 5: Aucklanders' health
- Measure 6: Treaty of Waitangi awareness and understanding

Māori Identity and Wellbeing outcome

- Measure 1: The benefits of whānau Māori measured through tamariki and rangatahi
- Measure 2: Māori in employment, education and training
- Measure 3: Māori decision making
- Measure 4 : Te reo Māori across Tāmaki Makaurau

Homes and Places outcome

- Measure 1: New dwellings consented by location and type
- Measure 2: Net new dwellings consented and completed
- Measure 3: Housing costs as a percentage of household income
- Measure 4: Homelessness
- Measure 5: Resident satisfaction with built environment at a neighbourhood level.

Transport and Access outcome

- Measure 1: Access to jobs
- Measure 2: Delay from congestion
- Measure 3: Use of public transport, walking and cycling
- Measure 4: Household transport costs
- Measure 5: Deaths and injuries from transport network.

Environment and Cultural Heritage outcome

- Measure 1: State and quality of locally, regionally and nationally significant environments
- Measure 2: Marine and fresh water quality
- Measure 3: Air quality and greenhouse gas emissions
- Measure 4: Protection of the environment
- Measure 5: Resilience to natural threats
- Measure 6: Treasuring of the environment

Opportunity and Prosperity outcome

- Measure 1: Labour productivity
- Measure 2: Aucklanders' average wages
- Measure 3: Employment in advanced industries
- Measure 4: Zoned industrial land
- Measure 5: Level of unemployment
- Measure 6: Internet usage based on income
- Measure 7: Educational achievement of young people.

Development Strategy

This Plan has 408,300 dwellings as its 30 year feasible development capacity target.

In addition, four of the above measures will specifically be used to track progress towards the aims of the Auckland Plan 2050 Development Strategy.

These are:

- new dwellings consented by location and type
- net new dwellings consented and completed
- access to jobs
- zoned industrial land.

Reporting

Progress reports will be publicly available.

Annual scorecard

A 'scorecard' will be prepared once a year. This will provide a snapshot of progress against the outcomes.

Data will be updated each year, where possible.

Three yearly progress report

A progress report will be prepared every three years.

This report will supplement the annual scorecards. It will provide a more detailed analysis of the trends for each measure.

This analysis will draw on a range of other reports and data sets.

The three yearly report will help to provide a strong evidence base for decision-makers.

Belonging and Participation

All Aucklanders will be part of and contribute to society, access opportunities, and have the chance to develop to their full potential.

Measure 1.
Aucklanders' sense of community in their neighbourhood

Measure 2.
Aucklanders' sense of safety in their homes and neighbourhood

Measure 3.
Aucklanders' quality of life

Measure 4.
Relative deprivation across Auckland

Measure 5.
Aucklanders' health

Measure 6.
Treaty of Waitangi awareness and understanding

Outcome Belonging and Participation

Homes and Places

Aucklanders live in secure, healthy, and affordable homes, and have access to a range of inclusive public places.

Measure 1.
New dwellings consented by location and type

Measure 2.
Net new dwellings consented and completed

Measure 3.
Housing costs as a percentage of household income

Measure 4.
Homelessness

Measure 5.
Residents satisfaction with built environment at a neighbourhood level

Outcome Homes and Places

Opportunity and prosperity

Auckland is prosperous with many opportunities and delivers a better standard of living for everyone.

Measure 1
Labour productivity

Measure 2.
Aucklanders' average wages

Measure 3.
Employment in advanced industries

Measure 4.
Zoned industrial land

Measure 5.
Level of unemployment

Measure 6.
Internet usage based on income

Measure 7.
Educational achievement of young people

Outcome Opportunity and prosperity

Māori Identity and Wellbeing

A thriving Māori identity is Auckland's point of difference in the world – it advances prosperity for Māori and benefits all Aucklanders.

Measure 1.
Benefits of whānau Māori measured through tamariki and rangatahi

Measure 2.
Māori in employment, education and training

Measure 3.
Māori decision making

Measure 4.
Te reo Māori across Tāmaki Makaurau

Outcome Māori Identity and Wellbeing

Transport and Access

Aucklanders will be able to get where they want to go more easily, safely and sustainably.

Measure 1.
Access to jobs

Measure 2.
Delay from congestion

Measure 3.
Use of public transport, walking and cycling

Measure 4.
Household transport costs

Measure 5.
Deaths and injuries from transport network

Outcome Transport and Access

Environment and Cultural heritage

Aucklanders preserve, protect and care for the natural environment as our shared cultural heritage for its intrinsic value and for the benefit of present and future generations.

Measure 1.
State and quality of locally, regionally and nationally significant environments

Measure 2.
Marine and fresh water quality

Measure 3.
Air quality and greenhouse gas emissions

Measure 4.
Protection of the environment

Measure 5.
Resilience to natural threats

Measure 6.
Treasuring of the environment

Outcome Environment and Cultural heritage

Glossary

Word	Description
Advanced economies	Economies identified as having a high level of gross domestic product per capita, as well as a very significant degree of industrialisation.
Advanced industries	Key growth industries expected to contribute to the Auckland economy, including knowledge intensive services (e.g. scientific research and analysis), high-tech manufacturing, and medium-high tech manufacturing.
Affordable housing	Two complementary measures are used to define affordable housing: the 30 per cent gross income benchmark, measuring whether a household pays no more than 30 per cent of its gross income on housing costs; and the Median Multiple Measure, the ratio between median house price to annual household income.
Ageing population	The growing proportion of the population is that aged 65 or over.
Amenity	The qualities of a place that make it pleasant and attractive for individuals and communities.
Aquaculture	Marine or land-based farming of aquatic plants and animals.
Asset Management Plans	Plans which consolidate data and information about asset types (e.g. roading infrastructure). This could include the condition of current assets, and projected requirements for growth, maintenance and renewals.
Big data	Large data sets analysed computationally to reveal patterns, trends, and associations, especially relating to human behaviour and interactions.
Biodiversity	The variety of life in a particular habitat or ecosystem including the totality of genes and species.
Body corporate	A legal entity that owns an entire development (e.g. apartment buildings, office buildings). Individuals have a number of shares in the body corporate, depending on the size of their unit (known as unit entitlement). The body corporate is responsible for management, financial and administrative functions relating to the common property and the development as a whole.
Bulk infrastructure	Large scale transport, water (water supply, wastewater and stormwater) and social infrastructure which services large areas, such as multiple suburbs.
Business activities	Commercial and/or industrial activities.
Business clustering	A group of same, similar or supplementary businesses located closely together.
Business land	Land with business zonings where commercial and/or industrial activities take place.
Carbon footprint	The amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organisation, or community.
Centre(s)	A focal point for a surrounding neighbourhood or area that contains a mix of activities or functions (e.g. shops, businesses, cafés, libraries, government services, public transport).
Character	A term used to describe the appearance, qualities and combination of attributes of an area, place, street or building that helps to give that place a distinct identity.
Coastal inundation	Flooding of normally dry, low-lying coastal land. This is primarily caused by severe weather events along the coasts, estuaries, and adjoining rivers.
Co-design	A framework where partners/stakeholders collaborate in a project. This approach can be applied to a range of areas, such as policy development, infrastructure or service design.
Critical infrastructure	Infrastructure assets and networks that provide essential services to a large number of customers or nationally significant infrastructure sites (such as Auckland Airport). Failure of these infrastructure networks would cause significant economic or social disruption.

Word	Description
Cultural infrastructure	Assets such as facilities and collections that support delivery of and access to a range of arts, cultural and heritage experiences, activities, services and resources. It includes technological infrastructure and virtual spaces that support connectivity and access to digital and online resources and collections.
Demand management	The adoption of a variety of tools, such as pricing and the provision of information, to encourage more efficient use of transport and other forms of infrastructure.
Demographic changes	Changes to the size, composition or structure of the population.
Development areas	Urban areas where significant growth is expected in jobs and housing over the next 30 years. These areas were identified based on factors such as ability to accommodate growth and committed projects. Planning and investment will be targeted when growth at scale occurs.
Development capacity	The quantity of development, such as housing or business, that can be undertaken on an area of land, taking into account relevant planning provisions and the availability of infrastructure.
Digital infrastructure	The infrastructure required to promote the sharing and consumption of digital data.
Digital literacy	The ability to confidently find, evaluate, use and create digital content in meaningful ways to participate in educational, cultural, social and economic activities.
Distributed energy resources	The transfer of electricity between the transmission network and end users through the local network.
Diversity	The range of human differences including, but not limited to, ethnicity and national origin; culture, religion and lived experience; socio-economic status; gender; gender identity and sexual orientation (i.e. rainbow communities); disability; age and rural, island or urban location.
Elite soils	This land is the most highly versatile and productive land in Auckland. It is well drained, friable, and has well structured soils, flat or gently undulating land, and is capable of continuous cultivation. Land classified as Land Use Capability Class 1 (LUC1).
Existing urban area	The area of Auckland with live urban zoning at 2017, including the rural towns (and excluding live zoned future urban areas).
Feasible capacity	The amount of development that is commercially viable, taking into account current costs, revenue and yields.
Feasible development capacity	The amount of development that is commercially viable, taking into account current costs, revenue and yields.
Food miles	Food miles is a term which refers to the distance food is transported from the time of its production until it reaches the consumer.
Fossil fuels	A natural fuel such as coal or gas, formed in the geological past from the remains of living organisms.
Freshwater environment	Beds, banks, margins, flood plains and waters of rivers and natural lakes and wetlands, and groundwater systems together with their natural functioning and interconnections.
Future urban areas	Areas identified for urban development in the Future Urban Land Supply Strategy 2017.
Governance structures	The way in which local government organises itself to work for and on behalf of its communities including the structures and processes that enable decision-making.
Green infrastructure	Natural and engineered ecological systems which integrate with the built environment to provide the widest possible range of ecological, community and infrastructure services.
Green technology	Technology intended to mitigate or reverse the effects of human activity on the environment.

Word	Description
Greenhouse gas (GHG) emissions	Gases emitted to the atmosphere which contribute to the greenhouse gas effect, in which more than the normal amount of atmospheric heat is retained in the atmosphere. These emissions include water vapour, carbon dioxide, nitrous oxide, methane, ozone, halocarbons and other chlorine and bromine-containing substances
Greenways	Connected pathways separated from roads that provide for safe walking, cycling and recreation. They provide access to places such as schools, libraries, shopping, and public transport nodes, and have environmental benefits.
Gross Domestic Product (GDP)	The monetary value of all goods and services produced within a nation's geographic borders over a specified period of time.
Hapū	A number of whānau sharing descent from a common ancestor; kinship group, sub-tribe.
Hau kāinga	Local people of a marae or area.
Housing stress	The stress that a household experiences when it must pay more for housing than what is considered affordable.
Hui	Verb, to assemble or meet. Noun, a gathering or meeting.
Inclusive growth	An approach to growth and development where the benefits are shared broadly.
Industrial activities	Manufacturing, construction, wholesale trade, transport and storage sectors of the economy. These activities typically require large sites.
Infrastructure	The structures, systems and facilities that support daily life such as water supply, roads and communications, including social infrastructure.
Innovation hub	Facilitates the interaction between business, industry, research agencies and the public sector to turn an idea into a process, product or service on the market.
Intergenerational wealth	Cultural, social, and economic wealth transferred from one generation to the next.
Intrinsic value	Values of the environment and cultural heritage in their own right, as distinct from the benefits people obtain from them.
Iwi	A number of hapū (section of a tribe) related through a common ancestor.
Iwi authorities	Mandated organisations representing the interests of iwi and/or hapū.
Iwi management plans	Documents prepared by iwi that councils must consider when developing or amending Resource Management Act plans.
Kaimoana	Sea food.
Kaitiaki	Trustee, custodian, guardian.
Kaitiakitanga	Guardianship, stewardship, trusteeship.
Kaumātua	Elderly man, elderly woman. A person of status within the whānau, hapū, iwi.
Kaupapa	Topic, subject or issue.
Kaupapa Māori	Maori approach or customary practice which incorporates the knowledge, skills, attitudes and values of Māori society.
Kōhanga reo	Māori language preschool.
Live zone	An operative urban zone (e.g. residential, business or open space) which specifies development activities and rules.
Long-term Plan	A 10-year plan prepared under the Local Government Act 2002 containing programmes for council's priorities, activities, operating and capital expenditure. Incorporates a 30 year Infrastructure Strategy that provides a long-term view of investment needed in council infrastructure.
Low carbon economy	An economy that is based on the need to reduce the release of carbon dioxide into the atmosphere.

Word	Description
Mahinga kai	Food-gathering place (rivers, bush, sea, gardens etc.).
Mana	Authority, status, prestige.
Mana whenua	Hapū and iwi with ancestral relationships to certain areas in Tāmaki Makaurau where they exercise customary authority
Manaaki	Generosity; support, provide hospitality and care of others.
Manaakitanga	The process of showing respect, hospitality, generosity and care for others.
Manuhiri	Visitor, guest.
Māori	Indigenous people of Aotearoa New Zealand. In this plan Māori incorporates mana whenua and mataawaka.
Māori centric-models	Models of business, learning, health and other forms of practice that may be developed with Māori values, tikanga Māori and mātauranga Māori as foundational to the delivery of the model.
Marae	Courtyard - the open area in front of the wharenui, where formal greetings and discussions take place. A term often used often to include the complex of buildings and spaces around the marae.
Mataawaka	Māori who live in Auckland and are not in a mana whenua group.
Matariki	Matariki is the Māori name for the star cluster Pleiades.
Mātauranga	Māori knowledge and expertise.
Maunga	Mountain, mount or peak. Also refers to volcanic cones.
Mauri	Life principle, life force, vital essence. The essential quality and vitality of a being or entity.
Mixed-use development	A mixture of activities such as residential, business, retail, or hospitality that occupy space within the same building or within the same block or area (e.g. an apartment building with shops, cafés and offices on the lower floors, or a town centre with these activities).
Moana	Sea, ocean, large lake.
Natural carbon assets	Natural features, e.g. wetlands and shrublands, that actively remove carbon dioxide from the atmosphere through photosynthesis, a process called carbon sequestration.
Natural heritage	Indigenous flora and fauna, terrestrial, marine and freshwater ecosystems and habitats, landscapes, landforms, geological features, soils and the natural character of the coastline.
Natural resource management	Management of natural and physical resources such as land, air and water.
Nodes	Major growth areas critical to accommodating development across Auckland. These areas are based around a significant centre and service large catchments. They encompass surrounding employment and high density residential areas.
Older person	Any person aged 65 and over.
Papakāinga	Settlement or village on communal Māori land.
Place-based initiatives	An approach that targets an entire community and aims to address issues that exist at the neighbourhood level.
Placemaking	The collaborative and integrated process of planning, designing and building places, so that they are successful, enduring and attractive for people.
Portage	Refers to the practice of carrying watercraft or cargo over land to avoid river obstacles, or between two bodies of water. A place where this carrying occurs is also called a portage.
Pōwhiri	Invitation, formal Māori welcome ceremony.

Word	Description
Prefabrication	Housing that has components made and/or assembled in one location before being transported to a final building site.
Prime soils	Land with slight to moderate physical limitations for arable use. Factors contributing to this classification are readily available water, favourable climate, favourable topography, good drainage, and versatile soils easily adapted to a wide range of agricultural uses. Land identified as land use capability classes two and three (LUC2, LUC3).
Productivity	A measure of how well an organisation uses its resources (inputs, such as labour and capital) to produce goods and services (outputs) and is typically expressed as a ratio of outputs to inputs. As such, productivity is a measure of efficiency.
Public amenities	Desirable or useful features or facilities of a building or place, usually established for the convenience of users, e.g. landscaping, lighting, public toilets, drinking fountains, rubbish bins, seating and picnic tables, shelters, playgrounds and playground equipment and bicycle stands and cycle parking structures.
Pūrākau	Traditional stories, history and narratives
Quadruple bottom line	A way of assessing how well an organisation or business performs economically, environmentally, socially and culturally.
Rainbow communities	Broad umbrella term that covers a diversity of sexual orientations, as well as gender and sex identities.
Rangatahi	Youth, younger generation.
Rangatira	Chief
Rangatira ki te rangatira	Chief to chief.
Rangatiratanga	There are two components: 1. chieftainship, right to exercise authority, chiefly autonomy, chiefly authority, ownership, leadership of a social group, domain of the rangatira, noble birth, attributes of a chief. 2. kingdom, realm, sovereignty, principality, self-determination, self-management - connotations extending the original meaning of the word resulting from Bible and Treaty of Waitangi translations.
Rapid Transit Network (RTN)	Fast, high-frequency public transport such as rail services and busways that are physically separate from the general road network and unaffected by road congestion.
Real-time road user pricing	A dynamic pricing system that can vary the price of travel by time and location depending on the level of congestion.
Receiving environments	The environment upon which a proposed activity might have effects.
Run-off	Water flows resulting from rain water that is not absorbed by permeable surfaces or falls on impermeable surfaces.
Rural production	Primary production activities which have a functional need for a rural location, such as pastoral and dairy farming, horticulture, forestry and mineral extraction.
Rural productivity	The capacity of the region for rural production.
Satellite town(s)	A rural town which has the potential to function semi-independently from the main urban area, providing a full range of services and employment opportunities to the wider rural area. Applies to the towns of Pukekohe and Warkworth.
Sediment	Tiny fragments of organic or inorganic matter suspended in water. Sediment is a pollutant caused by erosion and earth works.
Sense of place	A person's or community's appreciation of the special qualities of their neighbourhood, city or environment that are different from other places.

Word	Description
Sensitive land uses	Land uses (such as housing and schools) that are sensitive to the effects of higher impact activities, e.g. in rural areas noise, odour or dust from farming, quarries or landfills.
Shared spaces	Street spaces in which the traditional segregation between cars, pedestrians and cyclists is minimised, usually through the customisation of street markings and the removal of features such as raised kerbs and footpaths.
Significant landscapes	Landscapes that are considered to be important for environmental, ecological or cultural reasons, for example the Āwhitu Peninsula, the Ōtuataua stone fields and the Franklin volcanic fields.
Social and community innovation	Innovation that originates from individuals or groups in local communities.
Social cohesion	The willingness of members of society to cooperate with each other in order to survive and prosper.
Social exclusion	Exclusion from the social system and its rights and privileges.
Social housing	Housing provided by government agencies or non-profit organisations to people on low or no incomes.
Social infrastructure	The system of services, networks and facilities/assets that support people and communities. It comprises a broad spectrum of community assets and may be: • provided by the public sector, the private sector or non-governmental organisations • open space or supporting services and activities • physical facilities and the people involved in the delivery of services or the actual services themselves • operating at the local, sub-regional or regional level.
Social mobility	Shifting from one social status to another, commonly to a status that is either higher or lower. It refers both to the ability of individuals to change status over time, and for individuals to have a different status to that of their family.
Socio-economic disparity	In general terms, a person's social and economic position in relation to others, based on income, education and occupation.
Spatial inequalities	Unequal distribution of resources and services based on location.
Spatial planning	A form of planning for cities, regions or countries that seeks to provide long-term direction for development and the achievement of social, economic, cultural and environmental well-being.
Stationary energy	Stationary energy includes fuel consumption for electricity generation, fuels consumed in the manufacturing, construction and commercial sectors, and other sources like domestic heating.
Stormwater infrastructure	Infrastructure intended to manage stormwater, including pipes, drains, streams and channels.
Strategic infrastructure networks	Large scale water or transport infrastructure that has a significant influence on the location, timing and scale of growth.
Strengths-based models	Approaches that concentrate on the inherent strengths of individuals, families, groups and organisations to aid recovery and empowerment.
Structural Ageing	There will be numerically and proportionately more people in older age groups over the next few decades
Structural discrimination	When an entire network of rules and practices disadvantages less empowered groups while at the same time serving to advantage the dominant group.

Word	Description
Structure plan	A plan establishing the spatial development pattern of land use, transport and services for a defined area, informed by consideration of opportunities and constraints.
Sustainable procurement	Procurement that meets organisational objectives while having the least negative and most positive impact on social, economic, environmental and cultural well-being.
Swale	A low tract of land, especially one that is moist or marshy. Artificial swales are often designed to manage water run-off, filter pollutants, and increase rainwater infiltration.
Taiao	Natural resources
Tāmaki Makaurau	The Māori name for Auckland. Translates to Tāmaki desired by many.
Tamariki	Children.
Tangata whenua	Indigenous people of the land.
Tangihanga	Funeral.
Taonga	A treasured item, tangible or intangible.
Taonga tuku iho	A treasure passed down through the generations, either tangible (e.g. whenua) or intangible (e.g. Te Reo Māori).
Taurahere	Māori residing outside of their ancestral lands. Used in this plan to describe marae associated with hapū or iwi whose tribal connections are from outside of Auckland.
Te ao Maori	The Māori world view.
Te Tiriti o Waitangi	The Treaty of Waitangi which is the document upon which the British and Māori agreed to found a nation state and build a government.
Tertiary qualifications	Any post-secondary qualification including certificates, diplomas, and bachelor's degrees gained through tertiary study in a private training establishment, polytechnic, wānanga, university or in workplace training.
Tikanga	Correct procedure, custom, lore, method, way, plan, practice, convention, protocol. The customary system of values and practices that have developed over time and are deeply embedded in the social context.
Tino Rangatiratanga	Self-determination, autonomy, self-government.
Transport corridors	Strategic and arterial road, bus and rail alignments, and adjoining land uses.
Transport infrastructure	The fixed infrastructure on and through which people, vehicles and goods move around Auckland including roads, rail lines, cycleways, footpaths, bridges, train stations, busways, busway stations, ferry wharves, and bus shelters.
Tūpuna	Ancestor(s), grandparent(s).
Tūrangawaewae	Ancestral standing place.
Unitary Plan	Auckland Council's regulatory land-use planning document, prepared under the Resource Management Act 1991. The plan replaces existing district and some regional plans from former city, district and regional councils. Contains guidance and rules about how land can be developed and resources used.
Upcycle	Reuse (discarded objects or material) in such a way as to create a product of higher quality or value than the original.
Urban forests	Auckland's urban ngahere (forest) is defined as the network of all trees, other vegetation and green roofs – both native and naturalised – in existing and future urban areas.
Vulnerable communities	Communities with a limited capacity to anticipate, cope with, resist and recover from the impact of a major negative event.
Waahi tapu	Sacred place, sacred site - a place subject to long-term ritual restrictions on access or use, e.g. a burial ground, a battle site or a place where tapu objects were placed.
Wai	Water

Word	Description
Water-sensitive design	Design of developments that focuses on lowering impacts on water and water-based environments.
Watershed	Area of land in which rainfall drains toward a common stream, river, lake, or estuary.
Whakapapa	Genealogy, lineage, descent.
Whānau	Extended family, family group, a familiar term of address to a number of people. Also the primary economic unit of traditional Māori society.
Whanaungatanga	Relationship, kinship, sense of family connection. A relationship through shared experiences and working together which provides people with a sense of belonging.
Whenua	Land, country, earth, ground.
Wrap-around support services	A holistic integrated set of social services to support people most in need.
Zero Waste	A concept that encourages the imitation of sustainable natural cycles where all discarded materials are designed to become resources for other uses.

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