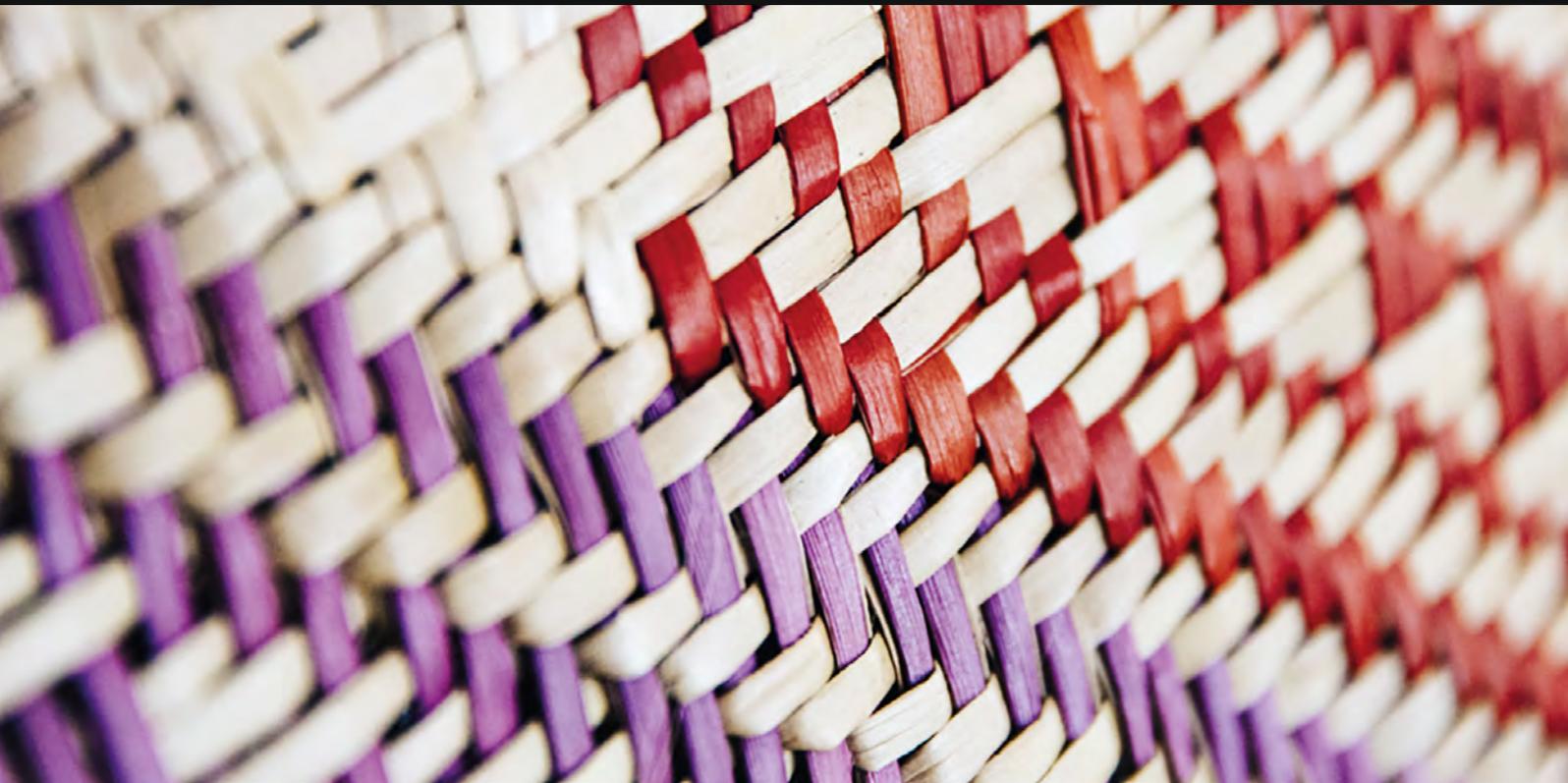


Mahere Tāmaki Makaurau 2050

**AUCKLAND
PLAN
2050**

**PŪRONGO KOKE WHAKAMUA IA TORU TAU
THREE YEARLY PROGRESS REPORT**



February 2020

RIPANGA IHIRANGI

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WHAKARĀPOPOTO MATUA

EXECUTIVE SUMMARY

The Auckland Plan 2050 states that a progress report against the six outcomes will be prepared every three years to support evidence-based decision making required to implement the Auckland Plan’s strategic direction. This report supplements the annual scorecards and provides a more detailed analysis of trends for each outcome detailed in the Plan.

The analysis draws on a range of other reports and data sets to understand where progress has been made and to identify *opportunities for greater progress*. These opportunities are integral to the future of the outcome and are considered together with the wider context and drivers, including current and future national and global trends. This report also references some of the central and local government initiatives that are currently in place that support these *opportunities for greater progress*.

Summary of outcomes progress

BELONGING AND PARTICIPATION		
Progress in the right direction	Mixed progress	Opportunities for greater progress
<ul style="list-style-type: none"> ✓ Neighbourhood safety ✓ Trust in people ✓ Support for diversity ✓ Life expectancy ✓ Participation in the arts 	<ul style="list-style-type: none"> ➔ Most Aucklanders continue to view ethnic and cultural diversity positively, but this varies across Auckland’s communities ➔ Health trends such as life expectancy and smoking have improved, but others such as obesity and mental health have worsened ➔ Physical activity for children and adults has been declining, alongside self-reported health ➔ Household incomes are increasing, but there is less money available after housing costs 	<ol style="list-style-type: none"> 1. Supporting community connection and resilience 2. Improving physical activity and mental health 3. Supporting communities of greatest need
MĀORI IDENTITY AND WELLBEING		
Progress in the right direction	Mixed progress	Opportunities for greater progress
<ul style="list-style-type: none"> ✓ Māori youth participation in education and training ✓ Māori academic achievement in mainstream education ✓ Māori asset base ✓ Auckland Māori’s employment, income and wages 	<ul style="list-style-type: none"> ➔ Income gap is not widening but not closing either ➔ Individual wealth is not growing largely due to lower levels of home ownership ➔ Little progress has been made in increasing the number of Auckland Māori who are te reo proficient ➔ Only half of Auckland’s Māori had visited their ancestral marae over the last year ➔ Many non-statutory co-governance/co-management arrangements have been set up but how effective/enduring they are is still to be determined 	<ol style="list-style-type: none"> 4. Ensuring physical and cultural revitalisation of marae 5. Increasing Māori capacity in decision making and leadership 6. Supporting te reo Māori to flourish for future generations

HOMES AND PLACES

Progress in the right direction	Mixed progress	🔗 Opportunities for greater progress
<ul style="list-style-type: none"> ✓ Dwelling consent numbers and code compliance certificates (CCCs) issued ✓ Dwelling consents for intensive housing ✓ Housing affordability in part 	<ul style="list-style-type: none"> ➡ Some improvement in housing affordability although a large majority of residents do not feel their current housing costs are affordable ➡ Increasing proportion of residents meet the criteria of being homeless ➡ Auckland is one of the most common regions across the country reporting damp homes and rental dwellings are much more likely to be always damp than owner-occupied dwellings ➡ Emissions from residential energy use make up 5.2% of Auckland's total emissions profile 	<ul style="list-style-type: none"> 7. Tackling growth in the intermediate housing market 8. Preventing homelessness 9. Ensuring low carbon, resilient, healthy homes and places

TRANSPORT AND ACCESS

Progress in the right direction	Mixed progress	🔗 Opportunities for greater progress
<ul style="list-style-type: none"> ✓ Public transport accessibility ✓ Public transport boardings ✓ Cycling counts 	<ul style="list-style-type: none"> ➡ The number of deaths and serious injuries in Auckland were increasing annually from 2012, but declined in 2018 ➡ Transport emissions continue to increase annually, largely related to travel by road, but management of transport waste is improving ➡ Perceptions of public transport accessibility, reliability and affordability have not changed overall, but varies across Auckland's communities 	<ul style="list-style-type: none"> 10. Responding to climate change through transport 11. Ensuring equity in access to transport 12. Improving safety on the transport network

ENVIRONMENT AND CULTURAL HERITAGE

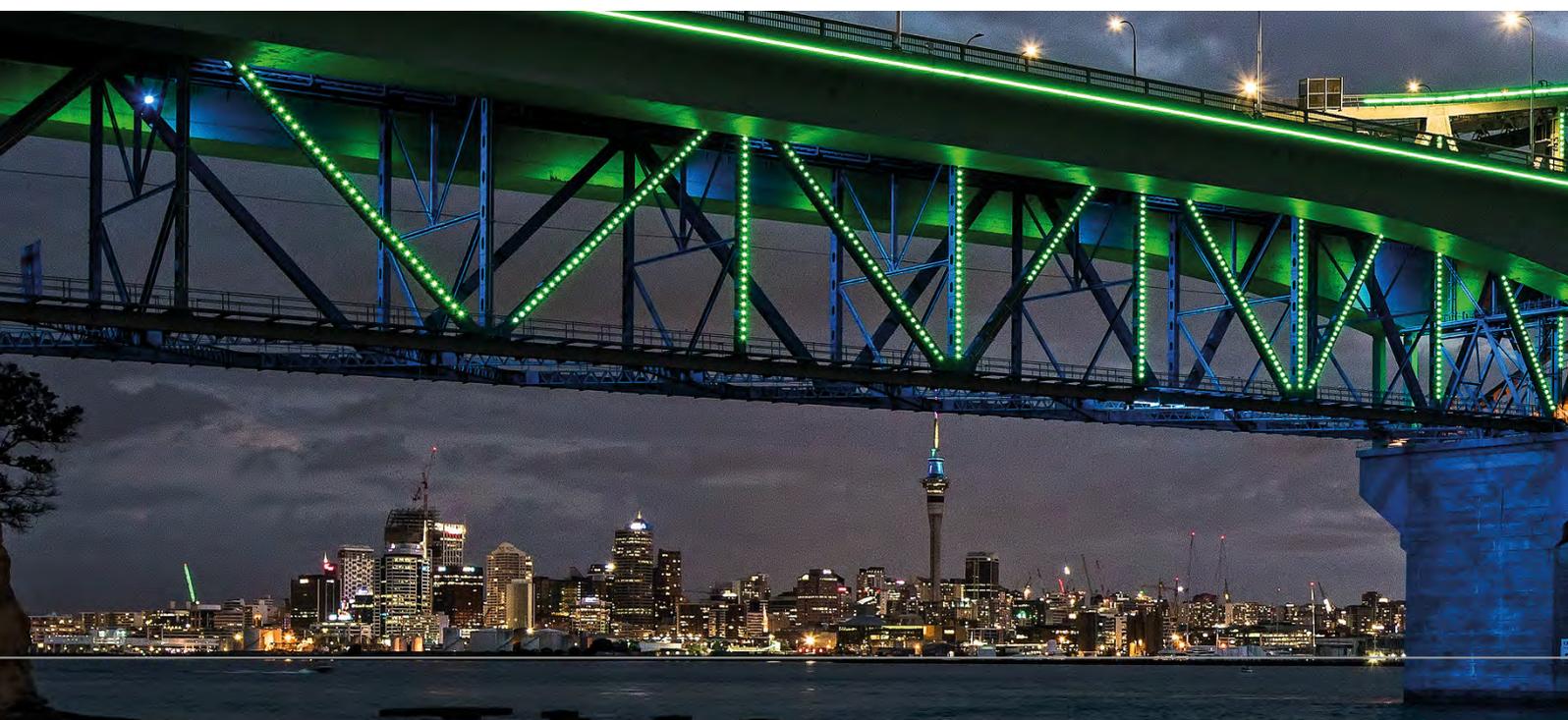
Progress in the right direction	Mixed progress	🔗 Opportunities for greater progress
<ul style="list-style-type: none"> ✓ Domestic waste volumes ✓ Community awareness and engagement in environmental restoration and cultural heritage experiences 	<ul style="list-style-type: none"> ➡ Development is following a quality compact approach but urbanisation is still impacting the natural environment and protection of our cultural heritage ➡ Water quality is improving in some places and worsening in others ➡ Domestic waste per household is reducing but commercial waste to landfill is increasing ➡ More historic heritage places are being protected but only a small percentage of Māori cultural heritage is protected 	<ul style="list-style-type: none"> 13. Transitioning to sustainable urban planning and development approaches 14. Building resilience of our environment, species, cultural heritage and infrastructure to climate change impacts

OPPORTUNITY AND PROSPERITY		
Progress in the right direction	Mixed progress	Opportunities for greater progress
<ul style="list-style-type: none"> ✓ Income, wages and employment ✓ Participation in education ✓ Knowledge intensive employment ✓ Digital access ✓ Tourism spend 	<ul style="list-style-type: none"> ➔ Employment is rising and unemployment is low, though there remain disparities in population groups and areas ➔ Over the last ten years a business' ability to find skilled labour in Auckland has become more difficult but has shown signs of improvement in recent years ➔ Proportion of young people with a higher level qualification has not increased ➔ Knowledge intensive employment is growing steadily but its share of total employment has remained around the same 	<ul style="list-style-type: none"> 15. Addressing the ability to afford everyday needs 16. Ensuring skills for the future 17. Supporting business resilience through innovation

Key Challenges and Emerging Themes

The Auckland Plan 2050 identified three key challenges that Auckland faces now and in the future. These are high population growth, shared prosperity, and environmental degradation. This progress report strongly supports the need to continue to address these challenges as they underpin many of the *opportunities for greater progress*.

Common themes have emerged across all the outcome areas, most prominently equity, climate change transition and community resilience. The significance of equity is evident in spatial and ethnicity trends related to health outcomes, employment and income, Māori decision making, housing affordability and transport safety and access. Transition needed in response to climate change is reflected in sustainable housing, transport emissions, future skills and urban development impacts on the environment. The importance of community resilience emerges in measures of population growth, diversity, urban spaces, marae development and business innovation.



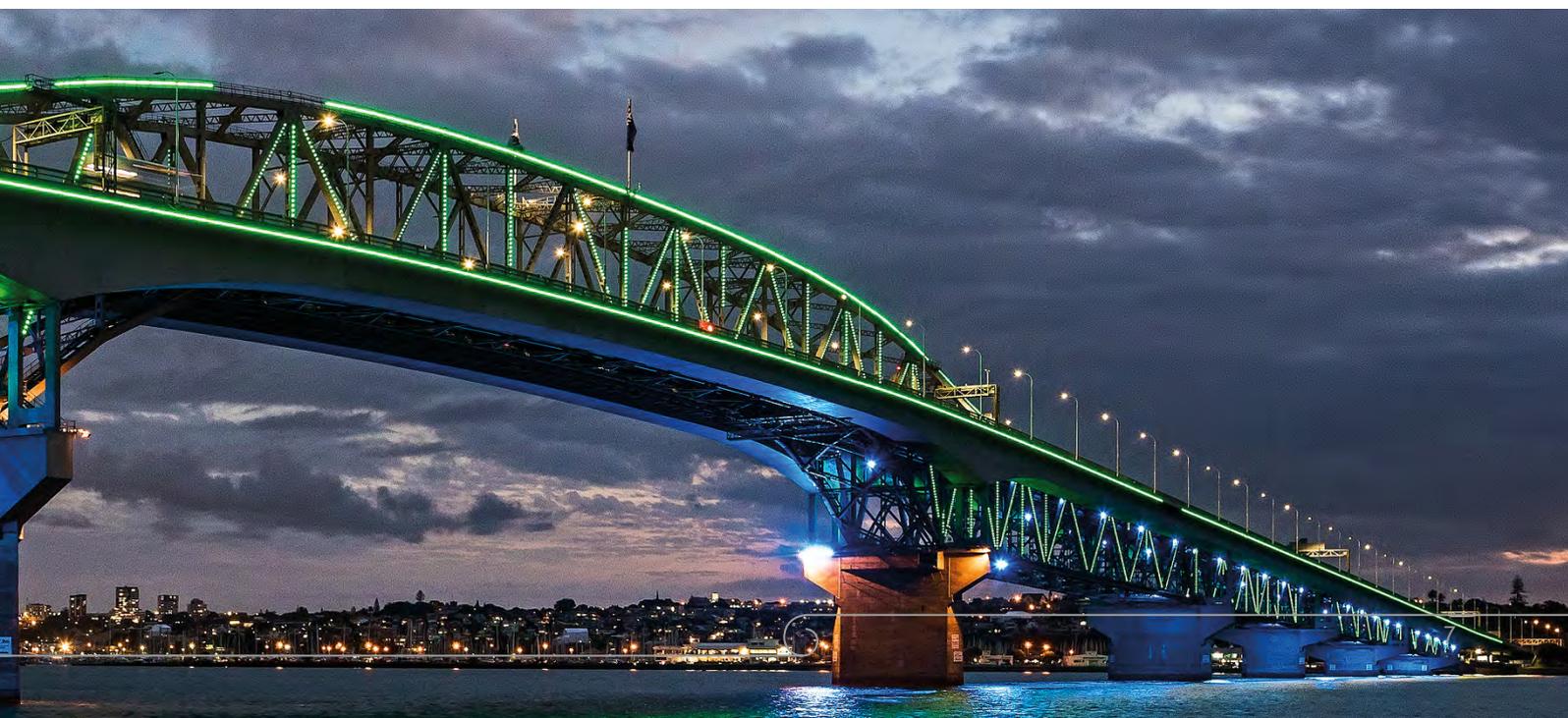
The Development Strategy

The Development Strategy is integral to the Auckland Plan 2050 and shows how Auckland will grow and change over the next 30 years. It takes account of the Auckland Plan outcomes, as well as anticipated growth and opportunities provided in the Auckland Unitary Plan. Monitoring of the Development Strategy is undertaken on an annual basis to measure and report on progress toward achieving the implementation of the strategy. The first monitoring report was delivered in October 2019. It is accessible online through the Auckland Plan 2050 website with links to interactive monitoring dashboards that have been made to supplement the report.

Data and Trend Analysis

The measures, reports and research results used in this report reflect data and information available at the time of writing. To identify trends, data has been analysed as far back as possible and there is variation in the time series of each measure. Many measures are only presented from the time of the Plan's adoption in 2018. Where changes in percentages from year to year are reported as having increased or decreased, it should be noted that these are not necessarily statistically significant and require further time series to determine a real trend.

There have been data constraints, largely due to data availability, that has translated to a lack of identified trends or results in some of the outcome areas. Measures and results are good indicators of progress but do not tell a complete story. Considerations of qualitative data, national and global trends and future considerations have also been a part of the analysis to inform the progress of our outcomes.



TE WHAKAWHANAUNGATANGA ME TE WHAI WĀHITANGA BELONGING AND PARTICIPATION



We know we have achieved this outcome when all Aucklanders are a part of and contribute to society, access opportunities, and have the chance to develop to their full potential.

Progress so far

The trends emerging from the Belonging and Participation outcome measures indicate that we are making positive progress in the following areas:

- ✔ **Trust and reliance on people:** most Auckland residents feel they have someone to rely on for help, and trust in people has increased.
- ✔ **Life expectancy and smoking:** residents of North and West Auckland continue to have the longest life expectancy in the country, and smoking continues to decline.
- ✔ **Diversity:** over half of Auckland residents view the impact of increased ethnic and cultural diversity positively, and the majority of residents continue to feel comfortable about a new neighbour who has a different ethnicity, religion, language or sexual orientation to them.
- ✔ **Neighbourhood safety:** the majority of Auckland residents feel safe in their homes after dark and increasingly safe when walking alone in the neighbourhood after dark.
- ✔ **Participation in the arts:** the number of Auckland residents that have actively participated in the arts in the previous year has increased, with a large proportion agreeing that the arts make Auckland a more vibrant and attractive place to live.

Opportunities for greater progress

The analysis of supporting evidence, including a range of datasets and key trends, identified the following opportunities for greater progress that are integral to the future of this outcome.

- Supporting community connection and resilience
- Improving physical activity and mental health
- Supporting communities of greatest need







Ngā Nekehanga Putanga Outcome Trends

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ⁱ
<p>Direction 1: Foster an inclusive Auckland where everyone belongs</p>	<ul style="list-style-type: none"> • The proportion of Auckland residents that feel a sense of community with others in their neighbourhood has decreased from 61% in 2010 to 50% in 2018. • Regular face-to-face contact with family and friends has declined, although non-face to face contact remained high (79% in 2018). • The percentage of Auckland residents who had positive contact with people in their neighbourhood remains about the same (43% in 2018). • The percentage of Auckland residents who feel they have someone to rely on for help increased from 89% in 2016 to 93% in 2018, and trust in people increased from 58% in 2012 to 62% in 2018. • Around one third of residents have confidence that Auckland Council makes decisions in the best interests of Auckland and believe the public has an influence on council decision-making (29% and 31% respectively in 2018). The latest citizens insight monitor shows residents' satisfaction with council's performance and trust in council decision-making has increased (from 15% and 17% in 2015 to 23% and 24% in 2019). • The voter turnout in Auckland's 2019 local elections was 35%.
<p>Direction 2: Improve health and wellbeing for all Aucklanders by reducing harm and disparities in opportunities</p>	<ul style="list-style-type: none"> • The percentage of Auckland residents who report their health to be excellent/very good/good has been declining since 2010 (although this has remained stable in other social surveys outside of the quality of life survey). • Life expectancy continues to increase across each of the Auckland District Health Board areas. Residents of West Auckland and the North Shore continue to have the longest life expectancy in the country. • In 2018, 92% of Auckland children took part in sport and recreation in any given week. On average they spent 10.2 hours participating. Weekly physical activity is less in the areas covered by Counties Manukau Sport and Sport Waitākere (91% in 2018). • Use of active transport (e.g. walking, cycling and scooting) by children has seen a sustained downward trend from 2011 (49%) to 2017 (45%). • One in seven (15%) of Auckland children were classified as obese in 2019. Children living in the most deprived neighbourhoods are more likely to be obese (26% compared to 3% in the least deprived neighbourhoods). • Around 1 in 3 adults in Auckland are classified as obese. The percentage has increased from 26% in 2017 to 30% in 2019.

ⁱ Data sources are provided in the data sources table at the end of this document.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ⁱ
<p>Direction 2: Improve health and wellbeing for all Aucklanders by reducing harm and disparities in opportunities (continued)</p>	<ul style="list-style-type: none"> • The percentage of adults with diabetes remained at 6% in 2017. • The percentage of Auckland residents who experienced stress that had a negative effect on them increased from 16% in 2014 to 20% in 2018. • 31% of Aucklanders had a World Health Organisation wellbeing score of less than 13 (indicative of poor emotional wellbeing and/or poor mental health) in 2018. Auckland compares poorly to other New Zealand cities. • The percentage of Aucklanders who smoke has declined from 16% in 2012 to 13% in 2017. Census 2018 suggests this has declined further to 11%. • The percentage of Aucklanders who are hazardous drinkers is 15%, compared to 19.5% nationally (2017).
<p>Focus Area 1: Create safe opportunities for people to meet, connect, participate in, and enjoy community and civic life</p>	<ul style="list-style-type: none"> • The majority of Auckland residents feel safe in their homes after dark (91%), in the city centre during the day (90%), and increasingly when walking in their neighbourhood after dark (62% in 2018). Perceived safety in their city centre after dark is also improving from 39% in 2016 to 46% in 2018. • The number of reported victims of crime in Auckland appears to be trending down since early 2017. Theft and burglary make up the largest proportion of victimisations (62% and 28% respectively in 2019).
<p>Focus Area 2: Provide accessible services and social and cultural infrastructure that are responsive in meeting people’s evolving needs</p>	<ul style="list-style-type: none"> • Key barriers to accessing health care include being unable to get an appointment within 24 hours and cost. • In 2017, over half of Auckland residents had been to a community event and 67% of Auckland residents had been to a park or reserve (in the last 12 months).
<p>Focus Area 3: Support and work with communities to develop the resilience to thrive in a changing world</p>	<ul style="list-style-type: none"> • 78% of Empowered Communities activities (i.e. activities involving Auckland Council’s Community Empowerment Unit) were community led (2019). • 74% of Empowered Communities activities build capacity and capability to assist local communities to achieve their goals (2019). • Community groups’ overall satisfaction with their experience of working with council has increased from 62% in 2018 to 66% in 2019.
<p>Focus Area 4: Value and provide for Te Tiriti o Waitangi/the Treaty of Waitangi as the bicultural foundation for an intercultural Auckland</p>	<ul style="list-style-type: none"> • Just under half of Auckland residents rated their knowledge of the Treaty of Waitangi as fair/well (2018). • Almost half of Aucklanders used Māori phrases or words in the previous four weeks (2017). • Around one quarter of residents watched a Māori television programme and 18.5% had sung a Māori song, performed a haka, given a mihi or speech, or taken part in Māori performing arts or crafts in 2017. • Around one in five residents (19%) had been to a marae in 2017.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ¹
<p>Focus Area 5: Recognise, value and celebrate Aucklanders’ differences as a strength</p>	<ul style="list-style-type: none"> • Auckland is becoming increasingly diverse with the percentage of Aucklanders who identified as European continuing to decline from 59% in 2013 to just over half (54%) in 2018. • Between 2013 and 2018, the percentage of Aucklanders who identified as Asian increased from 23% to 28% and the percentage who identified as Pacific increased from 15% to 16%. • Over half (54% in 2018) of Auckland residents viewed the impact of increased diversity in lifestyle and culture as making their local area a better place to live, compared with 17 percent that viewed it as making their local area a worse place to live. Most residents continue to feel comfortable about a new neighbour who has a different ethnicity, religion, language or sexual orientation to them. • Most Auckland residents continue to feel able to express their identity and the percentage of residents who experienced discrimination in the last 12 months stayed the same (17% in 2018). • The percentage of Auckland residents who agree that it a good thing for society to be made up of people from different races, religions and cultures remains high at 74% in 2016, but has declined from 80% in 2013. • Most recent migrants living in Auckland were satisfied with life in New Zealand (85% in 2017) although less satisfied compared to migrants elsewhere in New Zealand.
<p>Focus Area 6: Focus investment to address disparities and serve communities of greatest need</p>	<ul style="list-style-type: none"> • Average annual household incomes are increasing but so are housing costs. • Distinct geographical patterns of deprivation continue to exist across Auckland. The comparison (2013 and 2018) between the proportion of the population living in the most deprived areas presents a mixed picture.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ¹
<p>Focus Area 6: Focus investment to address disparities and serve communities of greatest need (continued)</p>	<ul style="list-style-type: none"> • The percentage of Auckland residents who report not having enough money to meet their everyday needs for things such as accommodation, food, clothing and other necessities has improved in 2018 although still represents almost one fifth of Auckland residents.
<p>Focus Area 7: Recognise the value of arts, culture, sports and recreation to quality of life</p>	<ul style="list-style-type: none"> • Auckland residents' self-reported quality of life remains high (82% in 2018) with just under a third of Auckland residents reporting that their quality of life had increased compared with 12 months prior. • 64% of Auckland residents in 2018 agreed that Auckland is a great place to live, and around the same proportion agreed that the arts make Auckland a more vibrant and attractive place to live. • 30% of Auckland residents in 2018 believed that Auckland or their local area has a rich and diverse arts scene. • The proportion of Auckland residents that have actively participated in the arts each year has been increasing over the last few years to just under half in 2017 and almost three quarters of Auckland residents in 2017 had attended at least one arts event across all arts forms. • The proportion of Auckland adults taking part in sports and recreation in any given week has decreased from 78% in 2013 to 72% in 2018 (4.8 hours per week). • The majority of Auckland residents refer to walking as the most popular recreational activity





Ngā Āheinga mō te Koke Whakamua ki Taumata kē ake

Opportunities for greater progress

Te tautoko i te whanaungatanga i waenga i te hapori me tana manawaroa

Supporting community connection and resilience

Why this is significant

One of the key challenges for Auckland identified in the Auckland Plan is the rate and speed of population growth and social change. Understanding the impact of change on communities is key to promoting a more inclusive Tāmaki Makaurau where everyone belongs.

Te Tiriti o Waitangi provides the bicultural foundation for an intercultural Auckland. Auckland is already diverse, which brings shifts in values and lifestyles, demand for goods and services, and civic engagement and democracy. Our increasing social and cultural diversity poses both challenges and opportunities. It requires us to proactively promote community connection and resilience so every Aucklander has opportunities to experience the social and economic benefits of Auckland's growth and can participate in and enjoy community and civic life.

Continued population growth and demographic change puts pressure on existing social and cultural infrastructure and creates demand for new facilities. We need to ensure that our community services and facilities meet the needs of our more diverse population.

Supporting trends

Between 2013 and 2018, Auckland experienced an 11 per cent population increase. Although almost all local board areas experienced growth, the Papakura (26.3%), Rodney (21%), Upper Harbour (17.1%) and Manurewa (16.3%) local board areas have grown at a faster rate than the rest of Auckland. The Papakura and Upper Harbour local board areas also experienced significant demographic change as the percentage of Aucklanders identifying as European declined while those identifying as Asian increased.

Auckland's demographic profile is quite different from the rest of New Zealand. The percentage of Aucklanders who identified as European continued to decline from 59 per cent in 2013 to 54 per cent in 2018. In 2018, younger people (0-15 years old) continue to outnumber the older population (20% and 12% respectively).

The majority of Aucklander residents continue to view ethnic and cultural diversity positively (54%). However, this varies by local board area. In addition, those local boards experiencing growth and demographic change tended to view ethnic and cultural diversity less positively, with some saying it made Auckland a worse place to live.

Most Auckland residents (71%) believe that it is important to feel a sense of community with others in their neighbourhood. However, only half of Aucklanders feel a sense of community and this has declined over time. This varies across Auckland with residents in some local board areas experiencing a stronger sense of community than others.

Families, friends and neighbours are key sources of social support and give people a sense of belonging. Although face-to-face contact with family and friends declined in 2018, non face-to-face contact remains high. Most Auckland residents (90%) said that they had some kind of positive contact with people in their neighbourhood in the previous 12 months.

Availability of support contributes to mental and physical health. Most Auckland residents (93%) have someone to help them if they were faced with a serious illness or injury or needed emotional support.

Trust in others is an important indicator of how people feel about members of their community. High levels of trust facilitate co-operative behaviour among people and contribute to people's ability to develop positive relationships with others. Overall, 62 per cent of Auckland residents felt that people can be trusted, although there is variation across the region.

Strategic context

There are numerous factors that drive population growth and social change, including natural increase, immigration, and migration to and from other parts of New Zealand. Auckland has experienced year-on-year population growth, driven largely by natural increase and migration from overseas. However, since 2012, increasing numbers of people have been leaving Auckland to move to other areas in New Zealand, especially Tauranga, Waikato District, Whangarei and the Far North¹.

Globally, societal change has been a driving factor in governments doing more to promote greater social inclusion and a more connected society. Growing ethnic and cultural diversity has highlighted the importance of building strong community connections and the need for communities to come together across ethnicity and race-based divides. Delivering social inclusion is also viewed as contributing to a nation's Gross Domestic Product (GDP) through health and social care savings. A recent United Nations (UN) report also highlighted the role of volunteers in strengthening community resilience².

In 2019, New Zealand was ranked eighth out of 156 countries in the United Nations Sustainable Development Solutions Network (2019) *World Happiness Report*. Social support was one of the main factors for New Zealanders ranking so highly. The report noted that the happiest and most well-connected societies are also the most resilient.

Other cities internationally are developing social inclusion strategies to guide investment in the infrastructure that communities need to stay connected. They are also developing tools to measure progress towards social inclusion, including contact and friendship with minority groups. The Government's Living Standards Framework takes a broad approach to measuring wellbeing and continues to evolve.

Auckland Council has made significant progress in ensuring that the foundations are in place to support community connection and resilience. There is an opportunity to enhance more effective implementation through the refresh of existing strategies and the roll out of supporting programmes.

Central and local government initiatives

Central government is currently tackling social inclusion through its focus on wellbeing. *The Measurement of Social Connectedness and its Relationship to Wellbeing* (MSD, 2018) is intended to provide the basis for future work to explore how social connectedness affects resilience and wellbeing for New Zealanders and how the development and effectiveness of these networks might be supported by government.

The government is also supporting the Office of Ethnic Communities to promote social cohesion, inclusiveness and diversity. \$9.4 million over four years was allocated as part of the 2019 Wellbeing Budget, which follows an additional \$1.8 million announced in April 2019.

Fit for purpose social infrastructure is vital to the delivery of essential public services. In 2018, the government announced additional funding to upgrade Auckland's aging hospital facilities including Middlemore, Auckland City and Starship hospitals and the Greenlane Clinical Centre. In late 2019, the government announced additional funding for repairs to state schools and other building work across New Zealand.

In addition, the government has developed a range of initiatives targeted at children and young people, older people, and disabled people. These include initiatives to support the Child Poverty Reduction Act 2018, such as the Child and Youth Wellbeing Strategy. The Ministry for Youth Development funds a range of programmes and services that promote identity, belonging, connectedness and the strengths of young people. Better Later Life – He Oranga Kaumātua 2019 to 2034 identifies key areas for action to support New Zealand's aging population, including enhancing opportunities for participation and social connection. The Ministry of Social Development funds a range of projects that promote the inclusion and contribution of older people to community life. The government's report to the United Nation's Disability Committee outlines what the government has done over the past four years to put the Disability Convention into action and identifies areas for improvement.

Auckland Council has a number of strategies, plans and policies that aim to support social inclusion such as the Thriving Communities Plan (currently being refreshed) and I Am Auckland (Council's strategy for children and young people). An age-friendly plan is also being developed to support greater participation and inclusion of older Aucklanders. Other strategies such as Toi Whītiki (Council's arts and culture strategy) and the Auckland Sport and Recreation Strategic Action Plan aim to increase participation in arts and culture and sport and recreation, which lead to improved wellbeing and social connection. As part of the Investing in Aucklanders project, staff engaged with over 600 Aucklanders to hear what makes them feel they belong and identified enablers and barriers to inclusion. The research highlighted the importance of community places, activities and social networks in promoting connection. These findings, based on Aucklanders' lived experience of inclusion, are informing the development of up to five pilots that will test the types of activities that make a difference to Aucklanders feeling included.

The Enabling Council Strategic Framework is a whole of council programme to 'transform council's culture, systems, policies and practices to enhance the achievement of community and social outcomes'. The programme delivers on Our Strategy 2022 'Connecting with our communities' game-changer through key internal change projects and initiatives to enable delivery of community-related Auckland Plan outcomes. Initial areas of focus include improving the experience of community groups, embedding social procurement to enhance social outcomes, and improving local outcomes through place-making. It seeks to support community-first thinking, working in more joined-up and integrated ways, and encouraging innovation and experimentation. Council's capacity-building initiatives also help community organisations to be self-reliant, resilient and sustainable.

A number of local boards are exploring the use of the Welcoming Communities framework, which is being promoted by central government (Ministry of Business, Innovation and Employment), as a way of welcoming newcomers (such as migrants and refugees) into their local communities.

Other initiatives include the Inclusive Auckland Framework, Auckland Council's plan to be an inclusive organisation that promotes and celebrates diversity within its workforce through the design and delivery of inclusive services, as well as through encouraging diversity of political representation and civic engagement. Auckland Council became the first council in Aotearoa New Zealand to be awarded the Rainbow Tick Certification. As part of the Pride Festival 2020, Auckland Council's Proud Centres invite the community to submit ideas for events that enable people to experience inclusivity and diversity in their own communities and foster pride in their own place.

Social and community infrastructure are hubs for the delivery of services and provide places where Aucklanders can connect and interact. Auckland Council's Community Facilities Network Plan guides council's strategic approach to the provision of community facilities over the next 20 years such as the recent investment in the Avondale multi-purpose community facility and Te Manawa – Westgate's Integrated services hub. Council will be working closely with Kāinga Ora, through the Auckland Housing and Urban Growth Joint Programme, to ensure the adequate provision of social and community infrastructure to meet the needs of new communities resulting from the government's housing developments and where significant future urban development is being planned.

Auckland Council's Community Investment principles are set out in the Facility Partnership Policy 2018 and seek to support facility partnerships that can enable the council, co-investors and the community to provide more of the facilities Auckland needs, faster and more effectively.

The Parks and Open Spaces Provision Policy guides council's approach to the acquisition of new parks and open space, particularly to address the needs of growth and our increasingly diverse communities. This policy informs investment decisions to create a high-quality open space network that contributes to Aucklanders' quality of life. For example, the acquisition of land at Scott Point for the creation of New Zealand's first fully sustainable sports park will help guide the future provision of parks as well as serving 20,000 new residents.

The development and adoption of strategies such as open space network plans also guide the development of existing parks and open space to improve access and respond to growth in Auckland. Ten local boards have currently adopted their own open space network plans.

Te whakapai ake i te korikori tinana me te oranga hinengaro

Improving physical activity and mental health

Why this is significant

Good health is critical to wellbeing and enables people to participate more fully in society. It also has wider benefits for Auckland, including lower health care costs and increased productivity. Participating in sport and recreation plays a critical role in enabling residents to be more active and improve their quality of life, health and general wellbeing. Evidence shows that more active lifestyles help to combat obesity and related health outcomes. Participation can also have a positive impact on physical and mental health, social connection and educational outcomes.

Declining physical activity and related high levels of obesity, stress and poor mental health continue to persist in Auckland and remain a concern, particularly for young people.

Supporting trends

Self-rated health is a widely used indicator of health status and has a strong relationship with objective measures of health status. Although most Aucklanders (78%) report their health to be excellent/very good/good, this has declined from 88 per cent in 2010ⁱⁱ. Māori and Pacific people are less likely to rate their health positively (68% and 69% respectively).

The percentage of Auckland residents who said that they had been physically active five or more days over the previous seven days has declined, and Auckland's young people have the lowest scores in the country for both weekly physical activity and time spent being active (10.2 hours in 2018). Auckland children using active transport has seen a sustained downward trend.

In 2018, almost a third of Aucklanders had a World Health Organisation wellbeing score of less than 13, which is indicative of poor emotional wellbeing and/or poor mental health. Auckland compares poorly with other New Zealand cities. Suicide rates are also an indicator of mental health and wellbeing. In 2018/19, the number of suicides in New Zealand reached its highest level ever, with the highest number of suicides being in Auckland.ⁱⁱⁱ This was driven by an increase in the numbers of young people, particularly in the 15-19 year age group.

Strategic context

The next 20 years will bring sizeable shifts to New Zealand's population in terms of age, ethnicity and geographic spread. Environmental, social, technological, and cultural changes will provide both opportunities and challenges. Challenges include the impact of climate change on the health of vulnerable population groups³, technological and research advances, significant shifts in demand for health services, and social and cultural changes (e.g. expanded self-monitoring and options for accessing health services).

Health behaviours and socio-economic factors account for approximately 30 per cent and 40 per cent respectively of a person's health and wellbeing status, and the physical environment accounts for about 10 per cent⁴. The social determinants of health include housing, employment, poverty, social attitudes and discrimination.

Although health outcomes have generally improved in recent years, health inequalities persist. Poor health outcomes for Māori and Pacific people are still unacceptably high compared with the rest of the population, and rates of youth suicide remain a problem. Of all ethnic groups, Pacific people are amongst those most affected by inequalities in the socio-economic determinants of health, including living in areas of high deprivation, being unemployed and having low weekly earnings. Although life expectancy continues to increase across each of Auckland's District Health Board areas, there is a 7-8 year gap between Pacific and other ethnicities (excluding Māori)⁵.

ii However, Aucklanders' self-reported health remained stable at 78% according to the New Zealand General Social Survey and at 87% in the New Zealand Health Survey.

iii Annual provisional suicide statistics for deaths reported to the Coroner between 1 July 2007 and 30 June 2019.

New Zealand has the third highest adult obesity rate in the world (OECD, 2017). In 2018/19, one in three adult New Zealanders and one in nine children were classified as obese⁶. A recent study⁷ found that a third of the variation in obesity prevalence between communities could be explained by the socio-economic and urban composition of the community. A child's family and neighbourhood conditions, including family make-up, levels of deprivation, and rural versus urban, accounted for half of the differences in obesity rates between Māori and European children, and a third of the disparity between Pacific and European children. The study also confirmed poverty as a major driver of disproportionate obesity rates among Māori and Pacific pre-schoolers. The findings highlight the potential health impact of redressing wider inequities in society and reinforce the need to move beyond individualistic framing of obesity to a more holistic view.

In Auckland, obesity rates have continued upwards for adults and in children 14 years and under. Adult obesity increased from 21 per cent in 2014 to 30.4 per cent in 2019. In 2017, approximately one quarter of the population in Auckland and Waitematā DHBs and almost 40 per cent of residents in the Counties Manukau DHB area are determined to be obese⁸.

Mental health remains a concern and Auckland compares poorly to other New Zealand cities in relation to emotional wellbeing, alongside an increasing proportion of Auckland residents who experienced stress that had a negative effect on them (20% in 2018).

Recreation and sport provide a key mechanism, when combined with good nutrition, to address increases in diseases such as obesity, diabetes and cardiovascular disease. They improve individuals' wellbeing and reduce costs to the wider community. Recreation and sport encourage regular activity and provide physical and psychological health benefits, such as higher levels of self-esteem, motivation and self-worth. They provide an element of fun, providing respite from everyday hassles and challenges⁹.

Central and local government initiatives

Health, disability and supporting improved mental health are key priorities for the government. The government announced a wide ranging review of New Zealand's health and disability system in 2018. The review is designed to future proof health and disability services and ensure that it delivers equitable health outcomes for all New Zealanders.

The government released its response to He Ara Oranga, the report from its Inquiry into Mental Health and Addiction in May 2019. This included "significantly" increasing access to publicly-funded mental health and addiction services for people with mental health and addiction needs. The Mental Health and Wellbeing Commission Bill proposes to establish a Mental Health and Wellbeing Commission to contribute to improving equity for Māori, Pacific peoples, disabled people, rainbow communities, and other groups that experience poorer mental health and wellbeing outcomes. The government increased funding for mental health services, including alcohol and drug addiction services, as part of its Wellbeing Budget 2019. A specific focus was on promoting the mental wellbeing of the under 24s.

The government also released its Every Life Matters – He Tapu te Oranga o ia Tangata - Suicide Prevention Strategy 2019-2029 and Action Plan 2019-2024 in September 2019. The action plan details actions across the suicide prevention continuum that aim to increase protective factors and reduce risk factors for the population of Aotearoa New Zealand. The Government has also committed additional funding to suicide prevention in the 2019 Wellbeing Budget.

Auckland Council has a key role in making bylaws to protect, promote and maintain public health and safety and enabling health promoting environments such as the endorsement of the Safe Communities Foundation NZ for Pan Pacific Safe Community accreditation and healthier food and beverage offerings in council's leisure facilities. Healthy Auckland Together is a coalition of 26 organisations, including Auckland Council, with a focus on encouraging physical activity and good nutrition¹⁰.

Council's investment in parks, sports and recreation facilities and walking and cycling infrastructure encourages Aucklanders to be active more often. The council works with key agencies to support leadership and development of the play, active recreation and sports sector, such as council's strategic partnership with Aktive Auckland Sport & Recreation.

Auckland Council's newly adopted *Increasing Aucklanders' Participation in Sport Investment Plan 2019 – 2039* is a targeted, strategic approach for future investment to improve participation in community sport. In addition, the recently established Sport and Recreation Facilities Fund will enable communities to access \$120 million set aside in the Long-term Plan 2018-2028 for community-based projects, including the development of sports and recreation facilities. The council also supports a range of regional sports and recreation organisations to deliver regional projects through grant funding.

Te tautoko i ngā hapori whakaraerae Supporting communities of greatest need

Why this is significant

Disparities in income, employment, health and education outcomes continue to exist. As successive generations of Auckland whānau experience socio-economic deprivation, the impact is more visible and harder to change as poverty and inequality of outcomes become more entrenched.

Progress and challenges

Although average annual household incomes in Auckland have increased, housing costs are also on the rise. This impacts on income households can spend on other essentials. Although 41 per cent of Aucklanders have enough money to meet their everyday needs, an additional 35 per cent have 'just enough'. The percentage of Aucklanders who do not have enough money to meet their everyday needs for things such as accommodation, food, clothing and other necessities has improved but still represents almost one fifth of Aucklanders. Furthermore, 39 per cent of residents in the Māngere-Ōtāhuhu and 32 per cent in the Ōtara-Papatoetoe local board areas report not having enough money to cover the costs of their everyday needs.

The recently released New Zealand Deprivation Index 2018¹¹ demonstrates that, although some areas of Auckland have experienced positive change, the underlying geographical pattern of deprivation continues to exist and may take generations to shift. The comparison (2013 and 2018) between the proportion of the population living in the most deprived areas presents a mixed picture with Waiheke, Waitemātā and Papakura local board areas experiencing a decline in the percentage of residents living in the most deprived areas (Deprivation Index 8,9 and 10 areas) while others, such as Henderson-Massey, Whau, Howick and Maungakiekie-Tāmaki local board areas, have experienced an increase in the percentage of residents living in the most deprived areas. Each of these local board areas also experienced moderate levels of population growth (9-11%)¹².

Strategic context

Our children and young people can be among the most vulnerable in society. The first official Child Poverty Report was released in May 2019 as part of the government's Wellbeing Budget¹³. It found that nearly one in six of New Zealand's 1.1 million children live in households below the poverty line, which is relative to incomes across the population and which takes no account of housing costs. When housing costs are factored in, nearly one in four children live below the line. One in seven experiences material hardship, nearly half of which experience severe material hardship.

In 2018, it was estimated that a quarter of a million children (23%) live in households with low incomes (i.e. disposable equivalised income less than 50 per cent of the median after housing costs). Although the rate has been gradually decreasing since June 2015, the proportion of children in deepest poverty has not decreased over the past 10 years¹⁴.

In 2018, it was estimated that approximately 148,000 children (13%) were living in households that were unable to afford six or more essentials for a decent standard of living (material hardship), while 6 per cent of children (approximately 65,000) were living in households experiencing severe material hardship.

In 2019, it was estimated that 15.1 per cent of Auckland children (57,900) were living in households with low incomesⁱⁱⁱ. Once housing costs were factored in, 22.3 per cent or 85,600 were classified as living in households with low incomes. This percentage compared unfavourably with other regions other than Northland and Bay of Plenty. Furthermore, 13.5% of Auckland children (approximately 51,500) were living in households experiencing material hardship and 6.2% (23,600) were experiencing severe material hardship¹⁵.

Hospitalisation rates for respiratory conditions for children living in areas with the highest social and material deprivation scores (NZDep2013) were three times as high as the hospitalisation rates for children living in areas with the lowest deprivation scores. The proportion of households with children experiencing severe-to-moderate food insecurity was significantly higher for lower income households. More than half (56%) of children included in households receiving income-replacement financial assistance lived in households experiencing severe-to-moderate food insecurity. In 2017–2018, over 30 per cent of these households were spending more than half their income on housing costs. Living costs for people in the lowest income households, such as beneficiaries and superannuants, have also been rising faster than those across all households¹⁶.

Poverty interferes with the capacity of children to enjoy their right to an adequate standard of living. Adequate household financial and material resources are important for children's positive health, educational and social-behavioural outcomes.

Cities are increasingly taking the lead in the fight against poverty and social exclusion. The Deloitte report *Building family resilience and wellbeing (2019)* included recommendations on creating a social service model that breaks intergenerational cycles of poverty, societal disadvantage and exclusion. Several communities in Australia are currently partnering with state and Commonwealth governments to trial place-based approaches to tackling the cycle of disadvantage.

A place-based approach addresses a set of problems that are specific to a location or community. It empowers the local community itself to develop holistic answers to these problems by giving them a degree of control and accountability. A core principle is tailoring place-based solutions to the unique strengths and needs of each community and devolving accountability, decision-making, funding and service delivery to the local level.

Central and local government initiatives

Central government has prioritised reducing child poverty and improving child wellbeing and has established child poverty reduction targets for each primary measure of child poverty. Initiatives intended to lift Māori and Pacific incomes, skills and opportunities are also intended to address inequality of outcomes for these ethnic groups. The government has increased welfare spending through its Families Package. Demand for Ministry of Social Development (MSD) services has increased over the past year and it is providing direct financial support to one in four New Zealanders. As at 30 June 2019, MSD was providing support to 1.25 million people – including working-age people, whānau, families, students and seniors¹⁷.

iii Less than 50% median equivalised disposable household income before housing costs (BHC) for the financial year.

Hardship assistance expenditure has grown rapidly since late 2017, and doubled between December 2017 and December 2019 quarters, from around \$80 million to more than \$160 million, with the biggest increases for emergency housing grants. Hardship grants for food have doubled over the past two years, from \$14.4 million during the December 2017 quarter to \$30.3 million in the December 2019 quarter¹⁸.

The government's Social Welfare Reform agenda is designed to make the social welfare system fairer and accessible for all New Zealanders. *Wakamana Tāngata – Restoring Dignity to Social Security in New Zealand*¹⁹ recommended significant and large-scale reform and includes 42 recommendations to ensure the welfare system moves beyond being a 'safety net' to enabling 'whakamana tāngata' – restoring dignity to people so they can participate meaningfully with their families and communities. The government was to consider the report alongside the recommendations of the Tax Working Group. The Tax Working Group noted that according to the OECD, New Zealand's tax and transfer system reduced income inequality by less than the average across the OECD. The government released its initial response in May 2019. Its three priority areas are addressing financial support with a focus on child wellbeing, supporting people who are able to be earning, learning, caring or volunteering and improving access to affordable housing. The government provided budget funding of more than \$600 million over four years to improve beneficiary incomes. Funding was also provided for frontline MSD staff over four years to help support more people into work (June 2019).

The government included an extra \$94 million to house the homeless as part of the Wellbeing Budget. As well as helping people into stable housing, the Housing First programme provides wraparound support services to deal with the problems that may have led people to be homeless in the first place (e.g. mental health issues and addictions). It connects them with health and social service providers such as mental health counselling, budgeting advice, and drug and alcohol addiction treatment.

Increasingly, Auckland Council policies are incorporating principles around 'equity' and 'access and affordability' to guide and prioritise what we do. For example, the Sports Investment Plan and the Facility Partnership Policy include equity as a key investment principle. This may result in a shift from 'universal services' to more strategically targeted services and investment that aim to address inequities of outcomes.

The Southern Initiative (TSI) and The Western Initiative (TWI) are examples of targeted, place-based investment to address social inclusion and inequities in areas of the city with the highest levels of socio-economic deprivation. The programme has a focus on supporting local community enterprise, social procurement, and supporting youth skills development and employment. The aim is to achieve long-term and transformational social change in these communities.

Auckland Council has also played a key role in advocating for improved outcomes for communities most in need through submissions to government on issues such as homelessness, the Child Poverty Reduction Bill, the government's Child and Youth Wellbeing Strategy and Strategy for an Ageing Population. Preventing homelessness is covered in more detail in the Homes and Places section of this report.

TE TUAKIRI MĀORI ME TE ORANGA MĀORI IDENTITY AND WELLBEING



We know we have achieved this outcome when a thriving Māori identity is Auckland’s point of difference in the world and prosperity advances for Māori and benefits all Aucklanders.

Progress so far

The trends emerging from the Māori Identity and Wellbeing measures indicate that we are making positive progress in the following areas:

- ✔ **Māori employment, income and wages:** increasing and higher than the Māori national average.
- ✔ **Māori youth in education and training:** participation is increasing and achievement in mainstream education is improving.
- ✔ **Size of Māori asset base:** collective wealth is building as Māori asset base is growing.

Opportunities for greater progress

The analysis of supporting evidence, including a range of datasets and key trends, identified the following opportunities for greater progress that are integral to the future of this outcome.

- Ensuring physical and cultural revitalisation of marae
- Increasing Māori capacity in leadership and decision making
- Supporting te reo Māori to flourish for future generations





Directions for improving outcomes for Māori are included across Auckland Plan 2050 outcomes and therefore progress or otherwise in these areas will also have an impact on Māori. Trends and results that are specific to Māori (for example, health, economic, and road safety statistics) are detailed alongside each of the outcome areas.

It is important to establish and maintain a robust data set for Auckland's Māori but the range of specific and enduring data sets for the Auckland region are relatively limited. There are new metrics being developed internal to council (Unitary Plan monitoring framework, Māori Outcomes framework) and external to council (Stats NZ – Indicators Aotearoa New Zealand, Te Kupenga) that could potentially provide for more robust data sets. The Independent Māori Statutory Board, through the Māori Plan, has developed a monitoring framework²⁰ which complements the Auckland Plan monitoring framework with many shared measures.



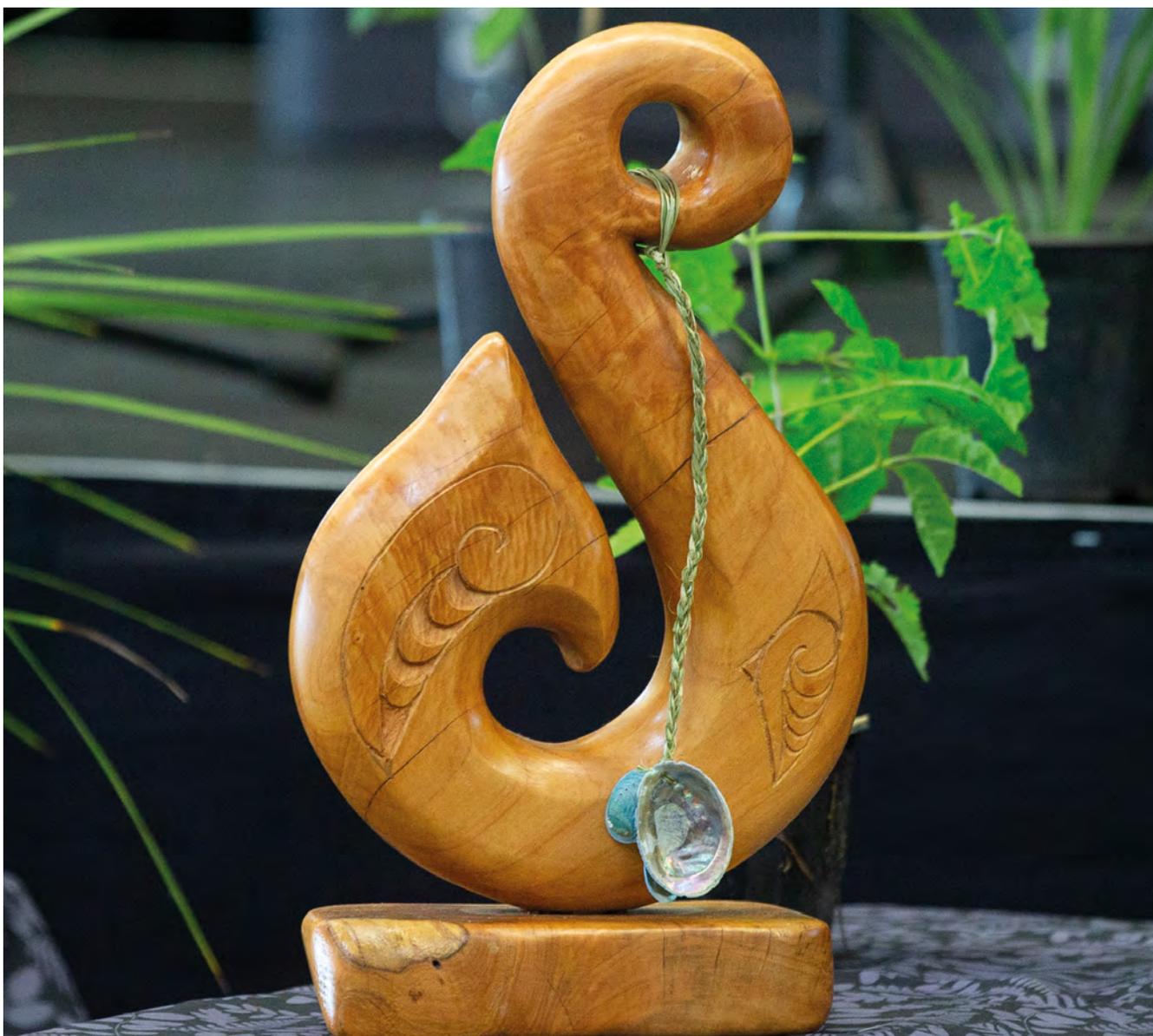


AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^v
<p>Direction 1: Advance Māori wellbeing</p>	<ul style="list-style-type: none"> • Māori home ownership is lower than average and continuing to decline. • Education achievements for young Māori in mainstream education are improving with the NEET rate gradually improving in the past decade. • The income gap between Māori / non- Māori has remained about the same. The average household income of Aucklanders remains higher than the Auckland Māori average. • The average personal income for Auckland Māori is higher than among Māori across the rest of New Zealand, but there is still an income gap between Māori and non-Māori. • Health outcomes (physical and mental) for Māori continue to be worse than the rest of the population.
<p>Direction 2: Promote Māori success, innovation and enterprise</p>	<ul style="list-style-type: none"> • Māori asset base is growing with 30% held by Māori collectives (including post treaty settlement governance entities, Māori land trusts and Māori incorporations) • Māori Small to Medium Enterprise (SME) sector continues to face challenges in accessing capital to finance their innovation and growth initiatives • Secondary Schools curriculum is not well designed to provide Māori centric entrepreneur learning for rangatahi. • Areas where Māori communities are most prominent tend to be heavy in manufacturing and production-based employment opportunities.
<p>Direction 3: Recognise and provide for te Tiriti o Waitangi outcomes</p>	<ul style="list-style-type: none"> • The Auckland Unitary Plan Independent Hearings Panel 2013 ruling resulting in the non-inclusion of the mana whenua sites of value presents a challenge to the acknowledgement by council of the Rangatiratanga "of mana whenua. The scheduling of mana whenua sites of value through the plan change process provides a mechanism to rectify this. • Local board agreements are in place to enable shared decision making opportunities between mana whenua and local boards and grow opportunities for Māori collectively. • There remains a lack of Māori representation in elected roles. • 7% of Māori hold management positions (Chief Executives, general managers, legislators). • The proportion of Māori respondents who agree the public have some/ large influence on council decision making process remains about the same at almost 30% in 2018. • Proportion of Māori respondents who agreed that they have confidence in their local council's decision making decreased from 32% in 2016 to 26% in 2018.

^v Data sources are provided in the data sources table at the end of this document.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^y
Direction 4: Showcase Auckland's Māori identity and vibrant Māori culture	<ul style="list-style-type: none"> • A majority (88%) of Māori in Auckland know their iwi, which is comparable to the national average. However, just under half are registered with their iwi, which is lower than the national average and the 15-24 and 25-34 age groups are significantly lower than other age groups. • Inclusion of New Zealand History at schools as a result of the National Curriculum review. • There is limited data to show how actively Māori are engaging with their customs, arts and culture, but it is generally recognised that Māori culture plays an important role in Tāmaki Makaurau.
Focus Area 1: Meet the needs and support the aspirations of tamariki and their whānau	<ul style="list-style-type: none"> • Connection to iwi is declining. • Participation in education delivered through Māori education medium has been slowly declining. • Barriers continue to exist in accessing support and services. The unintended consequences from policies in the past have disproportionately impacted Māori.
Focus Area 2: Invest in marae to be self-sustaining and prosperous	<ul style="list-style-type: none"> • Around half of Auckland's Māori had visited their ancestral marae, which is slightly lower than the national percentage in 2013. • The number of mana whenua and mataawaka marae that received support to renew or upgrade marae infrastructure has been above the annual target.
Focus Area 3: Strengthen rangatahi participation in leadership, education and employment outcomes	<ul style="list-style-type: none"> • Participation in decision making (voting in local/general elections) is higher than national average but lower in younger age group. • Employment of Māori youth (7%) in council is low in comparison to Auckland's Māori youth population. • There were 3 out of 21 youth in the previous council Youth Advisory Panel who identified as Māori. • Participation in mainstream education has improved which is critical for the overall outcome. • Participation in apprenticeships has increased and is a key pathway for employment, preferred by rangatahi.
Focus Area 4: Grow Māori intergenerational wealth	<ul style="list-style-type: none"> • Collective asset base is growing, mainly through treaty settlements and land-holding. • Individual asset base is not growing in line with increasing incomes due to lower home ownership rates.
Focus Area 5: Advance mana whenua rangatiratanga in leadership and decision-making and provide for customary rights	<ul style="list-style-type: none"> • Partnership with central government is complex for Māori largely due to the divergent nature of central government agencies. • Partnerships with local government are being established although it is unclear at this stage how effective they are.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ⁹
<p>Focus Area 6: Celebrate Māori culture and support te reo Māori to flourish</p>	<ul style="list-style-type: none"> • Half of Auckland’s Māori rated their te reo Māori proficiency as being able to speak no more than a few words or phrases in 2013. • There has been no significant progress in improving Auckland’s Māori te reo Māori proficiency over the past few years. • Te reo Māori is being seen in more places and spaces with growth in demand from both Māori and non-Māori seeking the Level 1 te Reo Māori courses through AUT, Te Wānanga o Aotearoa and Unitec.
<p>Focus Area 7: Reflect mana whenua mātauranga and Māori design principles throughout Auckland</p>	<ul style="list-style-type: none"> • History and presence is progressively being incorporated in Auckland’s urban landscape. <p>There are examples of how the Te Aranga Design Principals are being applied in large-scale land development²¹.</p>



Ngā Āheinga mō te Koke Whakamua ki Taumata kē ake

Opportunities for greater progress

Te whakatītina i te whakarauora ā-ōkiko, ā-ahurea hoki o te marae

Ensuring physical and cultural revitalisation of marae

Why this is significant

Marae across Auckland are centres of Māori identity and mātauranga, providing the physical and spiritual connections to whānau, hapu, iwi and Māori communities. Marae are essential to enable and support Māori life and play a critical role in maintaining and extending te ao Māori into urban areas. Marae play a community resilience role, including adapting to provide emergency housing and defence responses. Using marae for other community purposes could divert resources and focuses for marae as the place where cultural knowledge can be transferred between generations – in particular, the revitalisation of te reo Māori and tikanga Māori.

Supporting trends

While a large majority (88%) of Māori in Tāmaki Makaurau know their iwi, connection is declining with just under half being registered with their iwi, lower than the national average. Māori rangatahi have a significantly lower registration than other age groups. Sense of community is also declining among Māori and only half of Auckland's Māori had visited their ancestral marae which is slightly lower than the national percentage. The role of marae is critical to build connectedness between whānau, hapu, iwi and Māori communities.

The number of mana whenua and mataawaka marae that received support from the council to renew or upgrade marae infrastructure was above the annual target but many more marae lack the necessary infrastructure to function fully as a community hub. There is still more that needs to be done in governance and management of marae if they are to be thriving and prosperous²².

Strategic context

The key drivers for marae development include governance of marae, management of marae and physical infrastructure and funding. Many Auckland marae are not in great condition and lack the necessary infrastructure to function fully as a community hub. Investing in the physical structure/infrastructure of the marae should also include investment into marae governance, leadership and financial literacy to ensure the hau kāinga can maintain their marae as the embodiment of their social, cultural and economic aspirations^{vi}. This reflects the council's legislative obligations to invest in Māori capability and their capacity to realise the principles of Te Tiriti o Waitangi.

Māori trustees have requested an emphasis on financial literacy and control mechanisms be included in marae governance training initiatives through Te Puni Kōkiri (TPK) to address the current lack of te ao Māori based governance training support. A key element to effective marae management is an understanding of the separate role and functions of the marae trustees and the marae committee tasked with the day to day management of the marae. This is often confused and results in a lack of cohesive planning for the marae.

This has impacted on the maintenance, repair and overhaul of marae infrastructure. Auckland Council's marae development fund and the Oranga Marae fund have gone some way to address these issues while raising the importance of supporting marae to develop marae plans.

With the majority of Māori living in Auckland being mataawaka, the tendency has been to focus on urban marae and urban authorities as a means of engaging mataawaka. However, the majority of mataawaka in Tāmaki are not associated with urban marae or Māori urban organisations. Any focus on mataawaka pathways needs to include other Māori and Māori communities not associated with urban marae or mataawaka associations.

^{vi} The Status of Marae, Te Puna Kōkiri (2009) provides a comprehensive overview that forms much of the evidence base for this outcome.

Central and local government initiatives

To address some of these issues, marae and central/local government agencies are working closely together and key programmes that are already underway include:

- Māori Land Court (MLC) Trustee Training provides monthly governance training sessions for marae trustees. These are free programmes and provide governance leadership and financial literacy development at an introductory level.
- Oranga Marae offer a programme of support, advice and investment for marae delivered jointly by Te Puni Kōkiri/Department of Internal Affairs. It gives whānau and hapū advice and support to help develop their marae and achieve their goals. This support may include building projects and activities to revitalise cultural knowledge. This replaces the Lottery Marae Heritage and Facilities Fund.
- Heritage New Zealand assists whānau, hapū and iwi initiatives to preserve taonga through the Māori Buildings Conservation Programme.
- Auckland Council has led funding to support marae to be sustainable cultural hubs for Māori and the wider community. This is also one of the priority Māori outcomes for council.

Te whakapakari ake i ngā pūkenga arataki o te iwi Māori me te whakaputa whakatau

Increasing Māori capacity in leadership and decision making

Why this is significant

Our rangatahi make up half of Māori in Auckland and it is critical to provide succession pathways into leadership roles. This is done by creating opportunities to participate as leaders in decisions (civic/local) that affect them and have the appropriate communication channels that work for them. Many young Māori see opportunities in working for local and central government as a way to lead, but employment of Māori youth in the Auckland Council is low in comparison to Auckland's Māori youth population.

Supporting trends

Māori participation in decision making in Auckland (voting in local/general elections) is higher than the national average but lower in younger age groups. The number of Māori candidates in the last local body election was higher than previous elections, although it was not realised in the final election results. The number of Māori in leadership roles, both in the public and private sectors, has been generally lower in comparison to the Auckland average. Only a small percentage of Auckland Council's youth employees (aged under 25 years old) have identified as being Māori and 3 out of 21 identified as Māori in the Youth Advisory Panel. Māori are underrepresented in management positions such as chief executives, general managers and legislators.

The proportion of Māori respondents who felt that they have some or a large influence on the council decision making process remains about the same at about one third of Māori residents. The proportion of Māori respondents who felt that they have confidence in their local council's decision making has dropped to below one third in 2018.

Strategic context

The key drivers for decision making include providing the opportunity to participate in decision making and having the capacity and capability to participate and lead.

Partnership and collaboration with central government is complex for Māori largely due to the divergent nature of central government agencies that each have different agendas. Iwi have often been involved inconsistently and this has been further complicated by a limited understanding of the different context for iwi at governance, strategic, operational and implementation levels of a programme or project.

In the same way, although local government partnerships are being established, it is unclear at this stage how effective they are. In an effort to understand this better, Auckland Council is developing a report on mana whenua engagement indicators that emphasises quality over quantity.

Prior to the establishment of the Mana Whenua Kaitiaki Forum (MWKF) there had been a lack of consistent strategic level partnership in the council's relationships with iwi. Auckland Council's engagements were largely transactional because it engaged as a result of a programme or a project to discuss the council's plans and aspirations. The MWKF is seeking to focus on strategic levels of partnership and addressing engagement at the implementation stage. In general, local board boundaries do not match iwi rohe which can result in a multiplicity of relationships at the local level.

Without changes to the electoral system a lack of Māori representation in elected roles will continue. Māori leaders are constrained by a sheer lack of numbers and a pathway to appeal to non-Māori voters for what many see as Māori interests. Māori leadership development is still catching up with succession planning with Kaupapa Māori centric leadership development being integral to improve this outcome.

Central and local government initiatives

The central government response is led from Te Puni Kokiri (TPK) to enable rangatahi (as future Māori leaders) to participate in leadership development opportunities by leading discrete areas of policy and innovation, including addressing levels of rangatahi participation in employment, education and training. TPK also aims to influence through leadership, education, and employment programmes led by other agencies, such as He Poutama Rangatahi and the reduction of child poverty. TPK invests in promoting enhanced rangatahi leadership, education and employment outcomes, including through initiatives such as cadetships.

Building capacity and capability is critical to all Māori and initiatives should focus on areas that are of value to Māori and enable opportunities for leadership and influence.

Te tautoko i te reo Māori kia puāwai i ngā reanga e whai ake nei

Supporting te reo Māori to flourish for future generations

Why this is significant

Māori language is fundamental to a thriving Māori identity for Tāmaki Makaurau. There is currently widespread commitment to increase fluency in day-to-day usage of te reo Māori to ensure this taonga tuku iho flourishes for generations to come.

Supporting trends

Te reo Māori is being seen in more places and spaces, and there are genuine efforts for the revitalisation of te reo. However, retaining and growing te reo Māori speakers has not improved in the past few years and enrolment in the Māori medium of education has remained static. Half of Auckland's Māori rated their te reo Māori proficiency as able to speak no more than a few words or phrases.

Strategic context

An estimated 2000 languages worldwide have already become extinct, and language revitalisation is necessary to preserve linguistic diversity. Te reo Māori, being an official language of New Zealand, is a key element of Māori culture and constitutes part of the broader cultural identity of New Zealand. The proportion of Māori language speakers declined markedly over the last century, particularly following the rapid urbanisation of the Māori population.

The key drivers for te reo Māori revitalisation include conversations with other speakers (whānau), Māori-medium learning to allow immersion within a structured learning environment, and exposure to te reo Māori in public spaces and places and communication mediums (i.e. seen, heard and spoken).

Central and local government initiatives

Central government has adopted *Maihi Karauna: Crown's Strategy for Māori Language Revitalisation 2018-2023*^{vii}, to focus on Aotearoa Whānui in order to create the societal conditions for intergenerational transmission and the widespread use of te reo Māori as a living language. This is supported by the Maihi Māori Strategy²³ which focuses on revitalising te reo Māori in homes, communities and whānau as a mother tongue or first language and the growth of intergenerational transmission within whānau.

The Māori Language in Education Strategy²⁴ provides a connected and cohesive approach to strengthen the Māori language through the education pathways. With Māori visiting their hau kāinga on short visits, our education institutions are often the only means of accessing te reo Māori learning so it is the main channel of influence. There has been growth in demand from both Māori and non-Māori in seeking the Level 1 te reo Māori courses through Auckland University of Technology (AUT), Te Wānanga o Aotearoa and Unitec. Each of these programmes holds waitlists averaging 60 people for each semester. A new approach is the advent of online te reo Māori courses. The demand for te reo Māori learning courses is high and exceeds the existing institutions' capacity.

Auckland Council has adopted a Māori Language Policy that outlines the council's commitment to te reo Māori being seen, heard, spoken and learnt and it is supported by the Māori Language implementation plan. This is also one of the priority Māori outcomes for council.



vii Te Puni Kōkiri (2019) *Maihi Karauna is the Crown's Strategy for Māori Language Revitalisation 2019 – 2023*.

NGĀ KĀINGA ME NGĀ WĀHI HOMES AND PLACES



We know we have achieved this outcome when Aucklanders live in secure, healthy, and affordable homes, and have access to a range of inclusive public places.

Progress so far

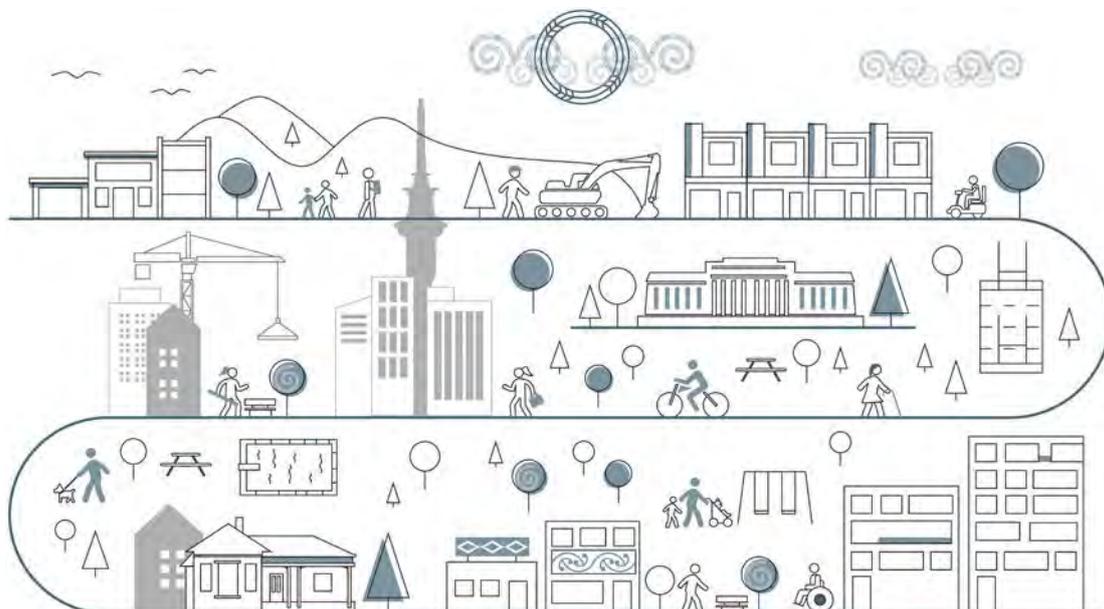
The trends emerging from the Homes and Places outcome measures indicate that we are making positive progress in the following areas:

- ✔ **Dwelling consents:** number of dwellings consented is rising steadily, with over 15,000 (a record number) issued in 2019.
- ✔ **Dwelling consents for intensive housing:** a strong shift towards denser, attached housing, with the rate of increase in building consents for apartment and townhouse-style dwellings almost doubling that of standalone houses over the past year.
- ✔ **Number of completed homes:** a substantial increase in the number of new homes being built in Auckland – over 13,000 code compliance certificates (CCCs) were issued in 2019.
- ✔ **Housing affordability:** while home ownership is still out of reach for many, affordability has improved since 2015 due to regulatory changes, foreign buyer ban, industry capacity and ongoing economic strength in Auckland.

Opportunities for greater progress

The analysis of supporting evidence, including a range of datasets and key trends, identified the following opportunities for greater progress that are integral to the future of this outcome.

- Tackling a growing intermediate housing market 🔍
- Preventing homelessness 🔍
- Ensuring low carbon, resilient, healthy homes and places 🔍





It is important to acknowledge that funding and financing infrastructure projects to enable accelerated delivery of housing is one of Auckland’s biggest challenges. Auckland is growing fast, but infrastructure is not keeping pace. A key challenge for the council is how to continue to support the infrastructure levels needed while still maintaining prudent financial settings.

There has been some progress in this area recently, however, including the creation of a Special Purpose Vehicle to fund infrastructure for a new housing development in Milldale. The Special Purpose Vehicle is a commercial model enabling government and private sector financing of bulk housing infrastructure to support housing developments coming onto the market at a larger scale and sooner than they otherwise would have under the status quo, without putting pressure on the council balance sheet. The Milldale model is a working example of a funding and financing tool that will be introduced more widely in 2020, through the Infrastructure Funding and Financing Bill.

Given Auckland’s scale, it is critical this progress is maintained and we see continued investment in the infrastructure needed to meet the needs of a growing population. Addressing the infrastructure deficit and the other key issues identified above will require different ideas and approaches, and collaboration between the different actors in the system. An example is the Auckland Housing and Urban Growth Joint Programme, a collaborative approach between Auckland Council and central government to delivering shared housing and urban growth priorities.





AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{viii}
<p>Direction 1: Develop a quality compact urban form to accommodate Auckland's growth</p>	<ul style="list-style-type: none"> • Auckland's population continues to grow at a strong rate. The city is projected to account for more than half of New Zealand's population growth to 2043, and 87% of growth in the 15 to 64 years age range. • The number and location of dwelling consents issued in 2019 broadly follows the implementation of the quality compact approach set out in the Development Strategy (95% of dwelling consents were issued in the existing and future urban areas and 28% inside the 1500m catchment of the rapid transport network). • In 2019 over 90% of code compliance certificates (CCCs) were issued for dwellings in the existing and future urban areas.
<p>Direction 2: Accelerate the construction of homes that meet Aucklanders' needs and preferences</p>	<ul style="list-style-type: none"> • More than 15,000 dwelling consents were issued in Auckland in 2019, an all-time record and an 18% rise in consents issued year-on-year. • The number of new homes being completed in Auckland has also been rising steadily, with over 13,000 code compliance certificates (CCCs) issued in 2019. • In 2019, multi-unit dwellings (apartments, townhouses etc.) represented over half of total dwellings consented. • The number of consents issued for more intensive dwellings like apartments and townhouses is increasing at a faster rate than consents for standalone houses. • The value of residential activity in Auckland is increasing and by 2024 is forecast to reach 39% above 2018 levels. • Over 96,000 dwelling units are expected to be consented in Auckland in the six years from 2019 to 2024. Almost 60% of these are expected to be multi-unit dwellings. • Nearly 80% of Aucklanders say the type of home they live in suits their needs and the needs of others in their household.
<p>Direction 3: Shift to a housing system that ensures secure and affordable homes for all</p>	<ul style="list-style-type: none"> • Housing affordability is at its best in almost six years and 26% better than in June 2015, but remains a significant challenge for many residents. • The median house price in Auckland is now around 8.6 times the median annual household income. • Housing costs as a percentage of household income have not changed significantly since 2008 and remain at around 18%. However, the data includes all households, including those with fully paid off homes, and therefore may not be a full reflection of the reality of housing costs for many people.

^{viii} Data sources are provided in the data sources table at the end of this document.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{viii}
<p>Direction 3: Shift to a housing system that ensures secure and affordable homes for all (continued)</p>	<ul style="list-style-type: none"> • 44% of Aucklanders do not think their current housing costs (including things like rent or mortgage, rates, house insurance and house maintenance) are affordable. There is significant age disparity, with those aged 65 and over saying costs are affordable and those aged 25 and under saying their costs are unaffordable. • The share of potential first home buyer households in Auckland who would be spending over one third of their income on housing costs decreased slightly from 88% in 2017 to 86% in 2018. • The share of renter households in Auckland spending over one third of their income on housing costs has remained about the same (31%) in 2018. • The number of empty dwellings in Auckland rose by 18 per cent, to almost 40,000, between 2013 and 2018. • The number of people on the Public Housing Register in Auckland rose to 5,326 in November 2019, an increase of 36% since June 2018. Nearly half of those on the register came from five local board areas (Māngere-Otahuhu, Manurewa, Ōtāra-Papatoetoe, Maungakiekie-Tāmaki, and Henderson-Massey). • The government spent almost \$100 million on emergency housing special needs grants in the first three quarters of 2019 – double what was spent in 2018. Over \$42 million of this was spent in Auckland. • Housing subsidies are expected to rise from \$2 billion per year presently to almost \$3 billion by 2022. • There were 1,171 transitional housing places in Auckland at the end of November 2019, an increase of 4% on the previous year. • The number of public houses (32,326) in Auckland increased by just over 4% in the year to September 2019. • Residents receiving the Accommodation Supplement in Auckland (99,257) increased by 6% in the year to December 2019. • Almost 4,000 public housing tenancies were being delivered by Community Housing Providers in September 2019, up 17% on the previous year. • Levels of overcrowding in Auckland households remain high, with over 200,000 people living in a crowded household. • Around half of crowded houses in New Zealand are in the Auckland region, compared with around one-third in 1991. Rates of crowding were highest in Māngere-Ōtāhuhu. • 45% of Pacific people and 25% of Māori in Auckland live in a crowded home, compared with around 10% of the total population.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{viii}
<p>Direction 3: Shift to a housing system that ensures secure and affordable homes for all (continued)</p>	<ul style="list-style-type: none"> • The Auckland region saw one of the largest increases in homelessness between 2006 and 2013 (35%), with 20,296 Aucklanders meeting the definition of homeless (living without shelter, in temporary accommodation or in uninhabitable housing) in 2013. • People identifying as Pacific, Māori, or Asian are over-represented in the Auckland homeless population.
<p>Direction 4: Provide sufficient public places and spaces that are inclusive, accessible and contribute to urban living</p>	<ul style="list-style-type: none"> • 78% of Aucklanders think their local area is a great place to live. • The proportion of Auckland residents who feel a sense of pride in the way their local area looks and feels stayed about the same (61% in 2018). Those in higher socio-economic areas are more satisfied with their local area than those in lower socio-economic areas.
<p>Focus Area 1: Accelerate quality development at scale that improves housing choices</p>	<ul style="list-style-type: none"> • Labour productivity in the building and construction sector has been poor – increasing on average just 1% per year from 1998 to 2018. • Of the construction firms established in 2009, only 23% were still trading in 2019. • There has been strong growth in residential building construction, with the sector employing 30,300 people – 52.4% more than in 2014. • In 2013, 32% of new New Zealand houses incorporated some form of prefabrication, compared to 90% in Sweden and 3% in Australia. Less than 2% of all buildings were completely prefabricated.
<p>Focus Area 2: Increase security of tenure and broaden the range of tenure models, particularly for those most in need</p>	<ul style="list-style-type: none"> • The percentage and number of households in rentals in Auckland is increasing while owner-occupiers are decreasing.
<p>Focus Area 3: Improve the built quality of existing dwellings, particularly rental housing</p>	<ul style="list-style-type: none"> • Auckland is one of the most common regions across the country reporting damp homes - almost a quarter of Aucklanders have problems with damp some or all of the time. • Mould is also a problem for many Aucklanders, with almost 25,000 homes always having mould over A4 paper size always present. • Rental dwellings are about seven times more likely to be always damp compared to owner-occupied dwellings. Mould is also more common in rental homes. • Over half of Aucklanders say their house or flat is colder than they would like.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{viii}
<p>Focus Area 4: Invest in and support Māori to meet their specific housing aspirations</p>	<ul style="list-style-type: none"> • Māori home ownership (around 27%) is lower than average and continuing to decline. Renting rates for Māori continue to be higher than average. • Full findings from <i>Ira Mata Ira Tangata: Auckland's Homeless Count</i>, show that nearly 43% of those living without shelter and nearly 40% of those living in temporary accommodation were Māori. • In 2013, around one in five Māori lived in crowded households.
<p>Focus Area 5: Create urban places for the future</p>	<ul style="list-style-type: none"> • No trends to report.



Ngā Āheinga mō te Koke Whakamua ki Taumata kē ake

Opportunities for greater progress

Te whakamātau i te māketē whare waenga e tupu tonu ana

Tackling a growing intermediate housing market

Why this is significant

One of the Auckland Plan's key challenges is ensuring shared prosperity for all Aucklanders. Auckland's future economic and social prosperity will be underpinned by its ability to provide secure and healthy housing that people can afford to own or rent, and in which they can feel at home.

While Auckland's housing affordability has improved since 2015²⁵, it has fallen sharply from the levels of the early 2000s and many people remain locked out of the home ownership market by steep prices and the need for large deposits. A large and growing share of working families and professionals are competing for inferior quality and insecure private rentals. The inability of these households to attain home ownership, or high quality, secure rentals, is impacting on the city's ability to attract and retain essential workers like teachers, police and nurses.

With fewer households transitioning to owner occupation, those who have traditionally relied on the private rental sector, such as Māori, Pacific people, sole parents and retired renters, are being increasingly marginalised, forced into lower quality homes, into overcrowded situations, onto the social housing waiting list, or into homelessness.

Supporting trends

Housing affordability in Auckland has improved since 2015 due to a range of factors, including implementation of the Auckland Unitary Plan, controls on foreign ownership, tighter loan-to-value restrictions, an increase in industry capacity, and ongoing economic strength with income growth and low unemployment. However, the continuing high cost of homes means that housing is still out of reach of many. The median house price in Auckland grew by 34 per cent in the five years to October 2019. Home ownership rates are falling and over 40 per cent of Auckland households now rent²⁶.

The intermediate housing market (working renting households that pay over 30% of their income on housing and can't afford to buy a home and/or don't qualify for public housing) has seen significant growth in recent years. The number of households in the intermediate housing market in Auckland increased by approximately 109% between 2001 and 2018²⁷. By 2028 the intermediate housing market is expected to account for 17.7% of all households in Auckland, up from 10.9% in 2001²⁸. The intermediate housing market is also becoming more diverse – increasingly comprised of people employed in higher paid occupations, working families with children, and older renters.

Strategic context

The size of the intermediate housing market is driven by a number of factors, including house price trends, household income, mortgage interest rates, bank lending criteria, and population growth.

There is a sharpening divide in the incomes and wealth of homeowners and those in the intermediate housing market. Owners benefit from the untaxed wealth generated by house price increases and low interest rates. Meanwhile, renters often live in poorer quality homes with less security and are unable to access New Zealand's primary source of wealth accumulation. Traditionally, the stability of home ownership and healthier state of owned homes has been associated with a range of positive educational, health and social outcomes. A key challenge with a growing intermediate housing market will be ensuring renters can gain the benefits traditionally associated with home ownership and avoid the hazards that often accompany renting.

Growth in the intermediate housing market and lack of adequate affordable housing has consequences for Auckland's labour market and economy. More renting households consist of couples with children or older renters. Increasingly the people living in these households are employed in higher paid occupations. The inability of these households to attain secure and high-quality rentals or home ownership is impacting on the city's ability to attract and retain essential workers, particularly in occupations such as teaching, police or nursing, though these are by no means the only ones affected. This is leading to Aucklanders moving to regions with better job opportunities and lower costs of living²⁹. Failure to provide adequate, affordable, local housing options for those in the intermediate housing market can impact on the availability of labour and efficiency of the labour market, and also lead to sub-optimal settlement and commute patterns, such as car dependency, dormitory suburbs, and lower productivity³⁰.

With home ownership rates falling and expected to continue to fall without further intervention, better and more stable tenancy arrangements will be vital in the future. Alternative models such as build-to-rent, shared equity schemes, co-housing, papakāinga, prefabricated houses, relocatable dwellings, and others all need to be viable options to reflect the needs and aspirations of different groups and communities such as Māori, Pacific people, older people, and first time buyers. The build-to-rent scheme in Hobsonville by the NZ Super Fund, Ngāi Tahu Property and New Ground Capital is a good example of a new model.

Central and local government initiatives

Central government is currently tackling housing affordability in a number of ways, including taking a more active role in housing development through Kāinga Ora – Homes and Communities, assisting first time buyers through various financial schemes, putting controls on property speculation and foreign ownership, and increasing the incomes of low income families through minimum wage increases and initiatives such as the Families Package. In September 2019, the government announced a \$400 million progressive home ownership scheme that could include rent-to-buy and shared equity plans to open up home ownership to a greater number of people. Recent changes to legislation relating to housing quality, including the Healthy Homes Act which introduced minimum standards for heating, insulation, ventilation, moisture and drainage, and the Residential Tenancies Act, which will limit rent increases to one per year, end 'no-cause evictions', and change lease arrangements to give tenants more security of tenure, will all help make renting better for those in the intermediate housing market.

Auckland Council is focusing work on the intermediate housing market as it is a significant part of the population and has a "knock on" effect on the housing continuum. As people move into more secure rental or home ownership, people at the lower end of the housing continuum – including those that are homeless – are able to access more housing options. In 2019, Auckland Council agreed to take an 'intervene and lead' position and role on affordable housing. The affordable housing work programme is investigating:

- opportunities to improve council's existing systems and processes
- new incentives and initiatives open to council
- developing new and/or strengthening existing partnership opportunities
- planning changes open to council
- opportunities to implement particular aspects of the Independent Māori Statutory Board's Kāinga Strategic Action Plan
- opportunities for increasing the current stock of housing for older people.

This builds on existing council activities that support the delivery of affordable homes, including delivering a mix of housing types on surplus council land, providing grants/assistance to support papakāinga and Māori housing, and the Haumarū Housing venture providing affordable housing services for older people.

The council has a support role in affordable housing. Rather than building houses, it works with central government, community housing providers, developers, iwi, and others to deliver housing that fits the needs of Aucklanders. The council also gives input into central government plans and policies related to housing to ensure Aucklanders are given a voice.

Te ārai atu i te kāingakoretanga

Preventing homelessness

Why this is significant

One of the worst impacts of the Auckland housing crisis has been the increase in homelessness in the city. The Statistics New Zealand definition of homelessness includes those in precarious housing situations – people living without shelter, people in temporary accommodation or sharing temporarily, and people living in uninhabitable dwellings such as garages and sheds.

Homelessness is associated with a range of poor social and economic outcomes for individuals, families and communities. Children experiencing homelessness are at risk of multiple negative consequences such as malnutrition, infectious diseases, dental health issues, behavioural issues and poorer educational attainment. Homelessness can make it hard for individuals to find a job, stay healthy, and maintain relationships. With people often experiencing feelings of isolation, homelessness can also increase people's chances of experiencing mental or physical health problems. As someone's problems become more complex, anti-social behaviour, involvement with the criminal justice system and acute health services become more likely. Homelessness can also have a negative impact on local communities, with increased rough sleeping, begging and street drinking.

The immediate and long-term costs of homelessness can be significant, so a systematic and coordinated effort to address the many, inter-related determinants of homelessness is required.

Supporting trends

While the true scale of homelessness in Auckland is unknown, given the city's housing affordability issues and the rising levels of demand for emergency housing and public housing over the last few years, it is expected that homelessness has significantly increased.

Analysis of 2013 census data by the University of Otago found that 20,296 people were homeless in Auckland, an increase of 26% since 2006³¹. Based on the average increase between censuses, and excluding other external factors, this conservatively projects homelessness could reach 26,522 by 2021³².

Homelessness is increasingly affecting groups who have not traditionally been at risk. Nationally, in 2013, 52% of those who were homeless were working or studying³³. The over-represented groups are amongst the most disadvantaged – low income households, sole parent households, young people, and older people without their own home who are struggling to pay rent. Māori are five times more likely than Pākehā to be homeless. Pacific people are also over-represented in homelessness figures, emergency and transitional housing and rental accommodation³⁴.

Even as the rate of state house building has increased recently, the waitlist for public housing is continuing to rise, with over 5300 people on the waitlist in Auckland at the end of 2019 – up from 1726 at the end of 2015³⁵. Government expenditure on emergency housing is also increasing rapidly, with emergency housing grants increasingly being used for longer term accommodation.

Strategic context

Homelessness is a complex area and can result from multiple factors, including:

- lack of social and affordable housing
- growth in the intermediate housing market putting pressure on private rental availability
- discrimination in the rental market
- poverty and unemployment
- low income, including stagnating benefit levels
- complex personal issues, including mental health, substance abuse, family violence, and criminal history.

The true scale of homelessness in Auckland is largely unknown. Auckland's first region-wide homeless count, *Ira Mata, Ira Tangata*, took place in 2018, and estimated that 800 people were living without shelter³⁶. However, this was not a comprehensive account of homelessness in the region but rather a snapshot of the minimum number of people experiencing unsheltered and temporary homelessness at one point in time. Rough sleepers are the most visible and the thin edge of the wedge, but much homelessness is hidden. Homeless figures are likely to be conservative and under-counted as people don't like to reveal their true housing circumstances and the number in uninhabitable housing like garages and sheds is unknown. A better understanding of the scale and the nature of the problem would inform a more effective response. It would also be helpful if organisations used a consistent definition and had a consistent approach to collecting data.

Homelessness is increasingly affecting groups who have not traditionally been at risk – including working households, sole parent households, young people and older people without their own home. To enable effective targeting of initiatives, better data is needed on how homelessness affects these groups – for example young people tend not to identify themselves as homeless and frequently move between family, friends, transitional housing and the street.

Much of the effort to tackle homelessness today is focused on responding to immediate needs for emergency housing, with limited focus on prevention and early intervention initiatives. Taking a prevention approach means programmes that aim to reduce the risk for groups who are more vulnerable, such as domestic violence prevention. An early intervention approach means providing support for people who are clearly at risk of, or who have recently become, homeless. This includes working with agencies to stop the flow of individuals from mental health care, child protection and the criminal justice system into homelessness.

Central and local government initiatives

Efforts to address homelessness continue to evolve. Over the past two years, central government's response to homelessness through Housing First, transitional housing and public housing has been ramped up significantly.

Internationally, more and more cities and countries are turning to the proven 'Housing First' model to tackle chronic homelessness, an approach in which homeless people are given immediate access to housing without prerequisites like sobriety or a willingness to participate in services. The model is typically designed for people with complex needs and who are the least likely to be able to proactively seek and obtain housing on their own. The Housing First model is being increasingly rolled out across New Zealand, with the Government investing an additional \$197 million in the Housing First programme through its 2019 budget. Auckland Council has contributed \$1.75 million towards establishing Housing First in Auckland.

In February 2020, the government announced a homelessness action plan backed by \$300 million of extra funding. The package includes 1000 additional transitional housing places, extra funding for the Sustaining Tenancies programme, and \$20 million to work with Māori to prevent homelessness and expand housing supply.

In 2017, Auckland Council agreed that homelessness should be "rare, brief, and non-recurring" and has placed homelessness high on its agenda. Council is looking to strengthen its levers to end and prevent homelessness through working with government and non-government partners on the development of a regional, cross-sectoral homelessness plan, '*Kia Whai Whare Tatou Katoa*'.

Council is also supporting a range of other initiatives to tackle homelessness, including the Housing First Auckland collective, Auckland City Mission's HomeGround housing and social services project, the redevelopment of James Liston Hostel, and Rainbow Youth homelessness.

Because of the many and complex drivers of homelessness, such as supply and affordability issues or health and social issues, the solutions to homelessness will require a collective approach and cooperation across local and central government, iwi and Māori organisations, housing providers and others. A clear vision and purpose, effective leadership, common data and evidence, a plan with shared ownership, mutually reinforcing activities, shared measurement and monitoring, and open communication will be key. The recently established Inner City Auckland Homeless Initiative is an example of this kind of approach.

Te whakarite i ngā wāhi me ngā kāinga e iti ana te tuku atu i te waro, e kaha ana, e hauora ana anō hoki

Ensuring low carbon, resilient, healthy homes and places

Why this is significant

Climate change is one of the most significant issues facing Aucklanders. We are already starting to see higher temperatures, increased drought, more intense rainfall events and sea level rise. A new study has shown that a typical New Zealand home emits five times as much carbon dioxide as it can afford to, if the world is to stay inside 2-degree Celsius warming. Housing needs to shrink its carbon footprint by 80% to do its bit to meet the Paris climate accord³⁷. Because New Zealand houses have a life expectancy of around 100 years³⁸, it is also essential that buildings constructed today are able to deal with climate changes forecast for the long term. Houses will need to respond to higher temperatures, different rain and wind patterns, and potentially increased flooding and storm events. Houses also need to be designed, constructed and demolished in such a way as to minimise waste and emissions of carbon dioxide.

The way we design our places and make land use and planning decisions will also be key in responding to climate change. A quality, compact city presents a greener way to live with better and lower-carbon transport choices, and fewer impacts on air and water quality.

Supporting trends

The emissions of buildings and homes in New Zealand are significant and increasing. New Zealand's built environment is estimated to be responsible for 20 per cent of the country's carbon footprint³⁹. Emissions from residential energy use make up 5.2% of Auckland's total emissions profile⁴⁰. Between 2009 and 2016, Auckland's overall emissions increased by 5.6%. If this trend continues, Auckland's emissions will increase by almost 30% by 2050⁴¹.

Construction and demolition waste currently account for 40% of Auckland's total waste stream, and this is expected to increase with a growing population⁴². The standard way of constructing and demolishing houses is harsh on the environment. A significant amount of energy and material is used in a new build, and each home constructed generates around four tonnes of waste⁴³.

The 2018 Census results show that almost a quarter of Auckland houses were damp some or all of the time, and rental dwellings were more likely to be always damp compared to owner-occupied dwellings. As with dampness, mould was more common in the homes of those who were renting. In Auckland, almost 25,000 homes always had mould over A4 paper size. 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, as well as an increased risk of depression and other forms of mental illness.

Strategic context

Much of Auckland's existing housing stock is unsustainable, inefficient and unhealthy. Currently, about 66 per cent of housing emissions are from existing houses, which greatly outnumber new homes^{ix}. The majority of existing dwellings are built to the minimum insulation standard required by law, resulting in significant heat loss and higher energy costs, often for homeowners or renters who can least afford it. The poor design of our houses also increases the risks of overheated living spaces during hotter weather. By 2030, warming temperatures from climate change will increase the overheating problem by an estimated 61%⁴⁴. Retrofitting existing homes is essential to make them more resilient to climate change, to reduce their emissions, and to make them healthier to live in.

Auckland will likely require another 320,000 dwellings to be built by 2050. This major housebuilding drive presents an opportunity to rethink how we design our communities and how we build and power our homes to result in high-performing homes and places. High-performing homes both optimise Aucklanders' health and wellbeing and help deliver on Auckland's goal of net zero emissions by 2050.

The quality of Auckland's housing is driven primarily by the Building Code, which outlines the minimum legal standards to which buildings must be constructed. The Building Code is seen as being behind international standards, and poor when it comes to its energy-efficiency requirements^x. Other countries, such as the UK, which announced in 2006 that all new homes would have to be zero carbon by 2016, and which has recently announced a Future Homes Standard to increase the energy efficiency requirements for new homes from 2020, are far ahead of New Zealand in tightening building codes to help decarbonise their built environments.

Central and local government initiatives

Some change is underway in tackling the quality of our existing housing stock. The Healthy Homes Guarantees Act introduced new minimum requirements for heating, insulation, ventilation, moisture and drainage from July 2019. Auckland Council delivers a range of programmes to achieve healthy housing outcomes, including an eco-design advisor service which employs qualified home performance specialists to advise landlords and tenants on creating warm, dry and energy efficient homes; the Retrofit Your Home funding assistance programme which provides loans to homeowners for heating and insulation solutions; and local board projects such as Healthy Rentals.

Increasingly, there is also a recognition that houses being constructed today are homes that will still exist in 50-100 years and standards set for these homes need to set us on the right path in order to avoid major retrofitting in the future. Panuku Development Auckland has introduced Homestar 6 rating as a minimum requirement on its residential sites (Homestar 7 in Wynyard Quarter) as part of its commitment to climate change and sustainability^{xi}. Kāinga Ora has also introduced minimum Homestar 6 certification for new builds (except apartments) contracted from 1 July 2019, and for apartments from 1 January 2021.

Panuku Development Auckland has also been taking a sustainable approach to master planning, with two Panuku neighbourhoods achieving a Green Star–Communities rating in 2019^{xii}. The Opanuku Precinct in Henderson and the Unlock Takapuna programme have been independently rated for their commitment to sustainability, planning for climate change and building community resilience.

ix 'Existing' homes are defined as those built before 2018; 'new' homes are those built between 2018 and 2050.

x The New Zealand Building Code has been criticised by the OECD for being less stringent than the building codes of many OECD countries and by the International Energy Agency which says the Code is below the standards required in most IEA countries with comparable climates.

xi Homestar is a comprehensive, independent national rating tool, run by the Green Building Council, that measures the health, warmth and efficiency of New Zealand houses. A 6 Homestar rating or higher provides assurance that a house will be better quality - warmer, drier, healthier and cost less to run - than a typical new house built to building code which is generally rated around a Homestar 4.

xii Green Star - Communities is one of a handful of internationally recognised sustainability rating tools for communities and precincts. Owned by the Green Building Council of Australia (GBCA), the tool has been adapted alongside NZGBC for use in a New Zealand context.

Auckland Council is leading on the development of a region wide climate action plan. *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan* sets strategic direction and priorities for mitigating emissions and adapting to the impacts of climate change. A number of priority areas in Auckland's Climate Plan address the new and existing built environment, looking into improving the health, energy efficiency and resilience of our buildings and infrastructure, as well as addressing sustainable future growth.

Moves towards a regenerative, circular economy where products and assets are designed to be more durable, and to be repaired, refurbished, reused and disassembled are also important in tackling the huge amount of waste and embodied carbon produced in the construction, maintenance and demolition of homes. Central government is facilitating the large-scale manufacturing of high-quality prefabricated houses with changes to the Building Act introducing a new, streamlined nationwide consenting process for prefabricated buildings. Prefabricated housing has many benefits, including greater efficiency, low material waste, good moisture control, higher structural quality, and reduced local impacts due to less time spent constructing on site.





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Via Panama Rd

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Ngā Nekehanga Putanga Outcome Trends

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{xiii}
<p>Direction 1: Better connect people, places, goods and services</p>	<ul style="list-style-type: none"> • In the 12 months to July 2019, 24% of the arterial network was considered congested in the morning peak. This is down from a peak of 25% in 2017, despite recent strong population growth.
<p>Direction 2: Increase genuine travel choices for a healthy, vibrant and equitable Auckland</p>	<ul style="list-style-type: none"> • Many parts of Auckland remain highly dependent on private vehicles and traffic volumes have generally grown in recent years although a recent dip in fuel sales in Auckland suggests this trend may be changing⁴⁵. • Total fuel sales for the 12 months to August 2019 were 6.1% lower than the 12 months to August 2018. • Petrol sales for the 12 months to August 2019 were 5.6% lower and diesel sales 6.9% lower than the 12 months to August 2018 • In terms of household budgets average weekly expenditure on transport increased from 12% to 14% between 2010 and 2016. • Nearly two thirds of Auckland residents agree that public transport is easy to get to (63% in 2018). • About half of Auckland residents agree that public transport is frequent (53% in 2018). • Just under half of Auckland residents agree that public transport is reliable (45% in 2018). • Over a third (39%) of Māori residents agreed that public transport is affordable, 63% that it is frequent, and 49% that it is reliable.
<p>Direction 3: Maximise safety and environmental protection</p>	<ul style="list-style-type: none"> • Between 2012 and 2017, there were annual increases in deaths and serious injuries, peaking at 828 before dropping to 649 in 2018. • Transport emissions contribute the largest proportion (44%) of Auckland’s greenhouse gas emissions, of which on-road transport contribute 86%. Between 2012 and 2016 transport emissions increased from 4,362 ktCO₂e to 4,939 ktCO₂e.
<p>Focus Area 1: Make better use of existing transport networks</p>	<ul style="list-style-type: none"> • Just over a quarter (27% in 2018) of Auckland residents said they always or frequently use public transport. • Our young people (school leavers and those under 25 years) use public transport much more frequently than other residents.
<p>Focus Area 2: Target new transport investment to the most significant challenges</p>	<ul style="list-style-type: none"> • No trends to report. • Investment in rapid transit, strategic roading, greenfield transport infrastructure, safety programmes, walking and cycling and bus and ferry improvements are discussed further in this section.

^{xiii} Data sources are provided in the data sources table at the end of this document.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{xiii}
<p>Focus Area 3: Maximise the benefits from transport technology</p>	<ul style="list-style-type: none"> • Since mid-2018 Auckland has seen a rapid increase in the number and type of small personal transport devices, often described as “micromobility”. This has been most visible in the increasing utilisation of both rental and private e-scooters but has also included increasing use of other types of micromobility devices such as e-skateboards and monowheels. Whilst the number of micromobility trips are low, they are increasing. • The number of p-endorsements (required for carrying passengers in private vehicles) has increased from 6,215 in 2010 to 15,528 in 2018⁴⁶, which is likely to be due to the increased availability and popularity of ride-hailing apps. • Ride-hailing adds vehicle kilometres travelled (VKT) to the transport system, and this additional VKT makes a material difference to congestion levels.
<p>Focus Area 4: Make walking, cycling and public transport preferred choices for many more Aucklanders</p>	<ul style="list-style-type: none"> • Total public transport totalled 103.2 million boardings for the 12 months to December 2019, an increase of 7.6% (from 2018). • Rail boardings increased 6.0%, or 1.2 million boardings (on the 12 months to December 2018)⁴⁷. • Bus boardings totalled 75.0 million for the 12 months to December 2019, an increase of 8.6%, or 5.9 million boardings, on the 12 months to December 2018. • Ferry boardings totalled 6.2 million for the 12 months to December 2019, an increase of 2.0%, or 0.1 million boardings, on the 12 months to December 2018. • Cycling counts have increased, totaling 3.77 million in the 12 months to June 2019, an increase of 8.9% on the previous year. • Less than half of Auckland residents agree that public transport is affordable (42% in 2018).
<p>Focus Area 5: Better integrate land-use and transport</p>	<ul style="list-style-type: none"> • In 2019, almost 28% (4,244) of total dwellings consented were consented within 1500m of the rapid transport network. • 30,000 more homes enabled to be built in major greenfield growth areas, many near rapid transport network – Warkworth, Silverdale/Dairy Flat, Northwest and South.
<p>Focus Area 6: Move to a safe transport network, free from death and serious injury</p>	<ul style="list-style-type: none"> • Between 2012 and 2017 the number of deaths and serious injuries in Auckland was increasing annually, reaching a peak of 813 in 2017. Those figures dropped to 649 in 2018⁴⁸. • From 2014-2018, Rodney and Franklin Local Boards had the highest numbers of people killed or seriously injured on Auckland’s roads. Waitemata and Otara-Papatoetoe Local Boards had the highest densities of deaths and serious injuries by road kilometre. • The majority of Auckland residents strongly agree that public transport is safe to use (72% in 2018). 61% of Māori residents strongly agree that public transport is safe.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{xiii}
Focus Area 7: Develop a sustainable and resilient transport system	<ul style="list-style-type: none">• Compared internationally, New Zealand’s use of transport is emissions-intensive. New Zealand has the ninth highest per capita transport emissions of all countries with populations over 1 million.• The transport sector is one of Auckland’s most significant sources of greenhouse gas emissions (GHGs), largely related to travel by road, and emissions continue to increase annually.• Management of waste from the transport network is improving, with 82% of waste from construction and demolition projects recycled, and 35% of material used in road corridor maintenance contracts recycled.



Ngā Āheinga mō te Koke Whakamua ki Taumata kē ake

Opportunities for greater progress

Te urupare ki te hurihanga āhuarangi mā te ikiiki

Responding to climate change through transport

Why this is significant

Climate change is one of the most significant challenges facing Auckland. Its impacts on natural systems and human communities are already being felt, and analyses of probable impacts demonstrate that more vulnerable members of Auckland's communities are likely to be disproportionately affected⁴⁹. Changing weather patterns with extreme weather, increased rainfall intensity and sea-level rise will impact Auckland's and New Zealand's transport network's infrastructure. Sea levels are already rising and may rise by one metre by 2100 depending on the extent of changes to average temperatures and the effects of complex environmental feedback loops. Severe weather will increasingly impact our environment, communities and infrastructure including roads, rail, community facilities and both water supply and management,^{50,51}. The degree of change we will face is directly influenced by ongoing emissions.

Delivery of the Transport and Access Outcome is vital to addressing climate change, both through reducing emissions (mitigation) and ensuring our networks and infrastructure are fit for purpose into the future (adaptation).

Supporting trends

Auckland has and continues to experience rapid population growth that is estimated to be 2.4 million by 2050. With that growth comes an increase in travel demand; there is already an increase in travel demand and increasing volumes of freight being moved by road.

The transport sector is one of the region's most significant sources of greenhouse gas emissions (GHG) representing 44% (4,939 ktCO₂e) of total gross emissions in 2016⁵², with 86% of those emissions related to travel by road, and these have increased steadily over the long-run.

There has been some progress in areas such as public transport and active travel. For example, since 2010, the number of system-wide public transport boardings has increased at a rate consistently exceeding population growth and cycle movements has increased along major corridors, along with additional cycleways and tracks being installed. However, despite these improvements, gross and per capita vehicle registrations have risen over recent years, and vehicle kilometres travelled per capita have remained static.

Strategic context

The key challenge when addressing climate change is the scale and pace of change required to mitigate emissions and build resilience to future impacts.

Reducing the emissions generated by the transport sector continues to be a challenge, considering increasing travel demand and low occupancy use of light vehicles. There are also increasing numbers of air travellers which are forecast to increase to 8.2 billion globally by 2037, double 2017 figures. Much of that growth is expected to come from the Asia-Pacific region⁵³.

There has been relatively little change over time in vehicle fuel efficiency and a slow uptake of electric or hybrid vehicles; currently the transport fuels we use are almost entirely fossil fuels. SUVs, utes and other larger vehicles continue to be very popular for both commercial and private passenger travel. New Zealand itself is a lag market for vehicles in which older cars from overseas are imported into the country; the average age for light fleet vehicles is 14 years. The truck fleet also tends to be older, with an average age of 17.8 years⁵⁴. Together, these factors mean decarbonisation of our existing fleet is likely to take considerable time.

As set out in the Auckland Plan, a shift away from fossil fuel powered vehicles is needed, as well as a reduction in distance travelled and the need to travel. This will require a move toward a transport network which prioritises – and is built for – active and public transport and one which provides zero carbon choices⁵⁵ and more integrated land use.

A further challenge is that major transport assets are exposed to the impacts of climate change and so resilience planning and investment are also required.

Central and local government initiatives

The Climate Change Response (Zero Carbon) Amendment Act (the Act) passed in 2019 is the government's main policy for mitigating emissions and adapting to the impacts of climate change. The Act requires that government develop and implement policies for climate change adaptation and mitigation. It is anticipated that the Act will influence future land transport investment and decision-making^{xiv}. Emissions budgets arising from the Act may require significant change in the land transport system, the vehicle fleet and our travel choices, particularly in urban areas. A shift in transport modes away from private, carbon-fuelled vehicles towards shared, energy-efficient vehicles is anticipated in line with regional climate related policy and strategy.

The Emissions Trading Scheme (ETS) is central government's main tool for meeting domestic and international climate change targets. The scheme aims to reduce greenhouse gas emissions by applying a 'cap and trade' approach. The relevance for transport is through "liquid fossil fuels (including petrol and diesel suppliers)" where the obligation is on the companies importing the fuel rather than on the drivers of fossil-fuelled vehicles⁵⁶. All sectors of the economy must report to the government on their annual greenhouse gas emissions.

The Government Policy Statement on Land Transport 2018/19-2027/28 (GPS) sets out the government's priorities for expenditure from the National Land Transport Fund over the next 10 years. The Ministry of Transport is currently working on the GPS 2021 which will refine the GPS 2018 to achieve the government's priorities on land transport. The draft GPS 2021 is expected to be released for public engagement in early 2020.

The GPS (2018) identifies environment as one of the four strategic priorities for land transport. It states that the environment objective ensures that the development of the land transport system reduces greenhouse gas emissions, as well as adverse effects on the local environment and public health. Climate positive policy and investment is likely to lead to wider benefits across all four priority areas of safety, access, environment and value for money⁵⁷.

In response to a greater focus in the GPS (2018) on resilience, New Zealand Transport Agency (NZTA) developed a resilience framework in 2018. As well as including impacts of climate change, the framework seeks to enable communities to withstand and absorb impacts of unplanned disruptive events, perform effectively during disruptions, and respond and recover functionality quickly⁵⁸.

As part of its infrastructure upgrade package announced in January 2020 the government included funding for key walk and cycleways including the Northern Pathway and Skypath projects⁵⁹. Already across Auckland, bus and ferry improvement projects are being implemented such as the new Network for Auckland buses, Ferry basin redevelopment and the Albany Station Park and Ride extension programme to allow more people to use express bus services into city centre⁶⁰.

Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan identifies the key priorities for delivery of climate action across the region. Delivery of these priorities will get Auckland on the path to net zero emissions by 2050 and prepared for climate change impacts. The priority in this framework related to transport establishes actions to deliver clean, safe and equitable transport options, for example making public transport more appealing and rapidly increasing access to bicycles and micro-mobility to encourage mode switch. Other priorities within Auckland's Climate Plan include actions to support resilience of the transport network.

xiv Note: the Act sets a target of net zero for long-lived domestic sourced gases (mainly carbon dioxide and nitrous oxide) by 2050 or sooner and for short-lived gases (mainly methane) to sustainable levels but not zero.

Auckland Transport has taken steps towards mitigating emissions. From 2014, 57 electric trains were introduced to the Auckland Transport rail network, reducing use of diesel and carbon emissions. 15 additional electric trains have been ordered and are expected to be in service by the end of 2020 and the final section of rail line will be electrified. Auckland Transport's Low Emission Bus Roadmap has set a pathway to transition Auckland's bus fleet to full zero emissions by 2040, procuring only zero emission buses from 2025. Energy use has been reduced through LED retrofits for streetlights, traffic signals, train stations and carparks. Collectively these will lead to annual savings of around \$2.1 million. It is estimated that optimising the road network has delivered 500,000 litres of fuel savings and 500 tonnes of CO₂ emission savings per year.

Auckland Council is engaging with the Climate Change Commission (CCC) to align analyses and strategic recommendations between the national and regional levels. The CCC is a Ministerial advisory committee created by the New Zealand Government to give effect to the Zero Carbon Act, including developing the first three five-year national emissions budgets, which are to be finalised on 1 February 2021.

Te whakarite i te āheinga tōkeke ki te ikiiki

Ensuring equity in access to transport

Why this is significant

Improving access to essential opportunities such as jobs and education helps improve prosperity and lift people out of poverty. However, the areas within Auckland which are facing the greatest challenges in accessing employment and other opportunities are also some of the most economically deprived communities, such as south and west Auckland⁶¹. With more than a million people projected to be living in the western and southern parts of Auckland by 2046, there are significant implications in these areas being excluded from the benefits of Auckland's expanding employment base.

Without good alternative mobility options in some areas of Auckland, residents are forced to rely on private vehicles for most trips, which can lead to transport costs taking up a large and unaffordable part of the household budget. Public transport fares in Auckland have also been increasing annually, leading to increased financial pressures on low income communities⁶².

Supporting trends

South, west and east Auckland continue to have less transport choice, resulting in a high reliance on private vehicles and lower use of public transport⁶³. A study that compares Auckland's public transport system with Brisbane, Perth and Vancouver found that Auckland's public transport system favours more affluent neighbourhoods⁶⁴. Auckland provides better service for short journeys, which benefit those who live in prime locations close to major employment areas, which is partially due to centralised job locations. Residents that are further away from major employment areas tend to perceive accessibility, affordability, frequency and reliability much less positively than those close to major employment areas.

Strategic context

When transport investments are made equitably, individuals and families in all communities can participate in, and benefit from, economic growth and activity throughout the region, regardless of car ownership, ethnicity, income level, gender, age and ability⁶⁵. Some of the key factors that drive, or have an impact on, equity are:

- Growth resulting in people needing to travel further to access social and economic opportunities, particularly in the south and west of Auckland. These areas also experience higher exposure to transport-related externalities such as traffic collision⁶⁶.

- There are no displacement policies in place to ensure that existing communities can benefit from public and private sector investment within their locations.
- Auckland's climate is changing and becoming more disruptive, putting pressure on already vulnerable communities through its impacts and consequential regulatory and policy responses.

In Auckland, the Auckland Transport Alignment Project (ATAP) Foundation Report highlighted significant accessibility challenges in the west and south over the next 10 years, in part due to their distance from where employment growth is expected to occur. In comparison, access to employment by car and transport for those living in the central part of Auckland appears to improve throughout the next 30 years, reflecting the growth in employment in central Auckland. As a result, specific interventions were put in place in the recommended transport package (ATAP 1.0) to improve accessibility in the west and south over the next three decades, such as advancing the Northwest rapid transit network and light rail between the City Centre and Māngere.

The impacts of climate change will exacerbate the issue, with south and parts of west Auckland likely to experience the greatest impacts, whilst also having the least ability to adapt to those impacts⁶⁷. The potential legislative and regulatory responses to climate change could also impact these communities more through for example congestion charging⁶⁸ and transition to low emission vehicles⁶⁹.

In recognition of the role of transport investment to improve socio-economic outcomes, recent strategic transport documents such as the ATAP Better Travel Choices Mode Shift Plan (2019)⁷⁰ have increased their focus to improve transport choice in locations within the south, east and west. These areas include Manukau, Middlemore, Māngere, Glen Innes and Glen Eden, being areas with spare capacity on the public transport network and where travel demand is expected to grow.

It is important that transport decisions are supporting, as well as being supported by the Development Strategy and land use planning.

An overarching challenge for transportation projects is that current assessment tools and business processes are not well equipped to prioritise equity as an outcome. In addition, whilst existing measures such as access to employment and spatial distribution of deaths and serious injuries provide some insight into transportation equity, they do not give a full picture of how the benefits and costs of transport projects are distributed amongst different communities, for which new measures would be required.

Central and local government initiatives

Access is identified as one of the strategic priorities in the GPS 2018 which sets out the government's objective to develop a land transport system that provides increased access to economic and social opportunities, enables transport choice and access, and is resilient⁷¹. It identifies that having a transport system that promotes equitable access and liveability is vital for creating safer, more attractive and more accessible urban environments. It also identifies that the land transport system needs to enable a range of lower cost and more space efficient transport choices so all people can easily access employment, education, recreational and social opportunities.

In response to the current GPS, the New Zealand Transport Agency (NZTA) is currently reviewing its Investment Decision-Making Framework (IDMF) which is used to develop, assess and prioritise funding transport investment proposals. The review is considering the principles of the GPS (2018) with the view of putting people and place, rather than vehicles and networks, at the centre of decision-making. Anticipated changes from the review include:⁷²

- All transport modes and alternatives (including walking, cycling, public transport and new transport options such as electric scooters and the use of technology) are considered when planning and investing in land transport.
- The inclusion of social, economic, cultural, and environmental outcomes in transport planning and investment, and consideration of the wider impact of transport proposals on communities, the environment and surrounding transport infrastructure.

The Confidence and Supply agreement between the Labour and Green parties included an increase in investment in safe walking and cycling, frequent and affordable passenger transport, rail, and sea freight, with the aim of supporting affordability but also an efficient and sustainable transport network⁷³. The 2019 budget allocated \$4.6 million to investigate a Green Transport Card to reduce the cost of public transport, prioritising people in low-income households and people on a benefit. It would entitle Community Services Card holders to public transport fare concessions. The work is due to take place in 2020.

Other measures within the agreement may include reprioritising spending from the National Land Transport Fund to increase investment in rail infrastructure, cycling and walking in cities and regions, beginning work on light rail from the city to the airport in Auckland, and making safe cycling and walking – especially around schools – a transport priority.

The Auckland Transport Alignment Project (ATAP) was established in 2016 (with a 2018 update) to provide a long-term strategic approach to address Auckland’s transport challenges and represents the shared transport vision for Auckland of the government and Auckland Council. Through ATAP, \$28 billion of investment was allocated for a ten-year period, funded from the National Land Transport Fund, Crown funding, Auckland Council and the Auckland Regional Fuel Tax. The government recently (2020) announced that it would fully fund the accelerated delivery of \$3.48 billion of transport projects in Auckland (from the timeframes envisaged in ATAP 2018). The implication of this announcement for the wider ATAP investment programme are still being worked through. Auckland Transport has also progressed several projects using Auckland Council’s Local Residential Growth Fund.

Investment includes a wide range of projects across rapid transit, strategic roading, greenfield transport infrastructure, safety programmes, walking and cycling and bus and ferry improvements⁷⁴. It is not currently clear how equity outcomes will be assessed and prioritised for these projects.



Te whakapai ake i te haumarū i te whatunga ikiiki

Improving safety on the transport network

Why this is significant

Improving road safety is one of the key strategies for unlocking increased public and active transport in urban environments, as well as generating significant health, access and environmental benefits⁷⁵. Road safety is a continuing challenge for Auckland with a general upward trend in deaths and serious injuries and where preventative measures have not kept up with a growing population⁷⁶.

Trauma resulting from road crashes has significant financial, economic and a wide range of less tangible costs to society which impact on Aucklanders' ability to thrive and prosper now and as Auckland continues to grow. These costs include reduced quality of life, reduced productivity and raised medical and other resource costs⁷⁷.

Supporting trends

Between 2012 and 2017, the number of deaths and serious injuries in Auckland increased annually reaching a peak of 64 road deaths and 749 serious injuries in 2017 with a total estimated social cost of \$1.3 billion⁷⁸. Those figures dropped in 2018 to 54 road deaths and 595 serious injuries on the transport network. These figures tend to be higher among Māori, Pacific children, and people living in more socio-economically deprived areas⁷⁹.

Strategic context

A recent Road Safety Business Improvement Review⁸⁰ stated that road safety performance in Auckland in recent years, particularly since 2014, is of concern, and Auckland is experiencing what could be described as a crisis in road safety performance.

Nearly half of people who die or are seriously injured on the transport system are motorcyclists, cyclists and pedestrians, reflecting the higher vulnerability of those users⁸¹. Work commissioned by Auckland Transport in 2013 also identified that Māori residents experience a significantly higher risk of road traffic injury than any other ethnic group⁸². Key findings included:

- Māori children experience a 65% higher road traffic injury risk than any other ethnic group, for Pacific children that figure is 31%.
- The highest rates of harm for Māori come from car / van occupant injuries, pedestrian injuries and other modes, whilst those number of motorcyclist injuries per capita are lower when compared to other ethnic groups.
- In the last five years 18% of all people who lost their lives on the transport network were Māori, a disproportionate level of harm as Māori make up 11% of the overall population. When including serious injuries this figure is 14%⁸³.
- The report also identified socio-economic differences in the proportion of deaths and serious injuries in Auckland, where there is a higher risk of road traffic injury for people living in more socio-economically deprived areas in the urban areas of the south and west of Auckland, and particularly in rural areas⁸⁴. In more deprived areas, there is a three times higher injury rate than children living in the least deprived areas. This is also higher for Māori and Pacific children in these communities.

Whilst the deaths and serious injuries figures provide a picture of physical harm, they do not measure the psychological impact on whānau and communities.

Central and local government initiatives

A key priority of the government Policy Statement on Land Transport 2018/19-2027/28 (GPS 2018) is for “A safe system, free of death and serious injury” which outlines the commitment to deliver a new road safety strategy and signals a greater focus on investing in safety improvements on high risk state highways and local roads⁸⁵.

In December 2019, the government launched Road to Zero: NZ’s road safety strategy 2020-2030. This strategy proposes a target of 40% reduction for deaths and serious injuries by 2030, which on current trends may mean 750 fewer deaths and 5,600 fewer serious injuries nationally⁸⁶.

Through the National Land Transport Programme, the government has stated it will invest \$4.3 billion between 2018 and 2021 to reduce deaths and serious injuries on New Zealand roads. Investment will be across a range of activities from road policing and promotion of road safety to specific projects on local and high-risk roads⁸⁷.

In response to the direction set by the GPS, the Regional Land Transport Plan, which reflects the intent of the Auckland Transport Alignment Project (ATAP), has increased funds for road safety projects to \$800 million over the next ten years. 2018/19 was the first delivery year under the new road safety budget within which Auckland Transport will deliver an accelerated programme of safety investment.

Improving safety of the transport system is a key priority for Auckland Transport and there are several activities underway to realise this⁸⁸. For example, following recommendations made in a 2018 Road Safety Business Improvement Review, Auckland Transport commissioned a Road Safety Programme Business Case that was finalised in August 2019. This contains a combination of investment in infrastructure and non-infrastructure responses which include key programmes for safe speeds and safe roads, and roadsides and educational campaigns for speed and vulnerable road users.

In 2019 Auckland Transport adopted *Vision Zero for Tāmaki Makaurau* that sets a new transport safety vision with no deaths or serious injuries (DSI) on Auckland’s transport network by 2050, with an interim target of no more than 250 deaths and serious injuries by 2030. This extends the ATAP target of reducing deaths and serious injuries by 60%, from 813 in 2017 to 325 by 2027.

Vision Zero is based on the principle that it isn’t acceptable for people to be killed or seriously injured when using the transport network. It doesn’t mean there will be no crashes but acknowledges that humans make mistakes and so the transport system needs to be designed in such a way as to reduce the likely consequences of those mistakes⁸⁹.

Both Auckland Transport’s Statement of Intent and *Vision Zero Strategy* identify the high risk of road traffic injury to Māori. Through their Statement of Intent, Auckland Transport has committed to delivering projects that specifically contribute to Māori wellbeing. Projects include continued implementation of Auckland Transport’s Māori Responsiveness Plan (MRP)⁹⁰ which includes delivery of their Te Ara Haepapa road safety programme that is focused on Māori drivers, passengers and pedestrians. *Vision Zero* further builds on these with its 13 strategic priorities, two of which specifically focus on impacts relating to Māori⁹¹:

- Ensuring Māori participation and representation in governance decision-making and leadership.
- Expanding Te Ara Haepapa Māori designed and led programmes including sustainable funding pathway and development of a monitoring and evaluation framework using Māori methodology.





Ngā Nekehanga Putanga Outcome Trends

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{xv}
<p>Direction 1: Ensure Auckland’s natural environment and cultural heritage is valued and cared for</p>	<ul style="list-style-type: none"> • 26km of tracks in regional parks now meet a “kauri safe” standard and were reopened in 2018/2019⁹². • Under the Unitary Plan, 14% of land use capability⁹³ (LUC) class 1 land has been or will be encroached upon for various forms of development, as well as 31% of LUC class 2 and 18% LUC class 3 land^{xvi}. • While there has been limited recent vegetation clearance in Auckland, native ecosystems have been almost totally cleared in the past from some parts of the region e.g. Manukau ecological neighbourhood has only 1.2% native forest cover⁹⁴. • Auckland averages 4 new plant species naturalizing in the region every year and is one of the world’s weediest cities. • There have been significant increases in weed and pest animal control in and around local and regional parks and increased control of priority pest plants and animals in priority ecosystems across the region⁹⁵. • Year on year increases in public awareness, understanding and appreciation for Auckland’s cultural heritage⁹⁶. • Visitors to cultural heritage attractions have increased⁹⁷. • Most (9 out of 12) water quality variables are improving in more sites than they are worsening⁹⁸. • E.coli levels are improving in 50% of streams, worsening in 40% of streams, and undetectable in 10%⁹⁹. • Sediment accumulation in estuaries is increasing and numbers of benthic invertebrates are decreasing¹⁰⁰. • Proportion of time beaches were safe for swimming in summer was 81% in 2019, above the goal of 78%.
<p>Direction 2: Apply a Māori world view to treasure and protect our natural environment (taonga tuku iho)</p>	<ul style="list-style-type: none"> • No trends to report.
<p>Direction 3: Use Auckland’s growth and development to protect and enhance the natural environment</p>	<ul style="list-style-type: none"> • No trends to report.
<p>Direction 4: Ensure Auckland’s infrastructure is future-proofed</p>	<ul style="list-style-type: none"> • Storm surge and sea level rise are already affecting Auckland’s people and infrastructure. A 1m sea level rise is projected by the end of this century^{xvii}. • Almost one quarter (23%) of Auckland’s buildings are exposed to flood hazards. It is estimated that 16,000 buildings are at risk of floor flooding in a 100-year flood event¹⁰¹.

^{xv} Data sources are provided in the data sources table at the end of this document.

^{xvi} Land use capability is the hierarchical classification system used in assessing the capability of certain land areas to sustain continuous production (Landcare Research 2000). The land is assessed in terms of versatility for productive use; factors that limit the land’s capability for productive use; and characteristics that determine productive use. LUC Class 1 land is “land with virtually no limitations for arable use and suitable for cultivated crops, pasture or forestry. LUC Class 2 is land with slight limitations for arable use and suitable for cultivated crops, pasture or forestry. LUC Class 3 is land with moderate limitations for arable use, but suitable for cultivated crops, pasture or forestry.

^{xvii} This figure is taken from RCP 8.5, the worst-case scenario for climate change. Representative concentration pathway (RCP) is a greenhouse gas concentration (not emissions) trajectory adopted by the IPCC for its Assessment Reporting framework. Under this scenario the world’s average temperature would increase by 4.9 degrees C.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{xv}
<p>Focus Area 1: Encourage all Aucklanders to be stewards of the natural environment, and to make sustainable choices</p>	<ul style="list-style-type: none"> • 299,000 hectares under group stewardship by June 2019 above the goal of 130,000 with at least 58,000ha of pest control or restoration being carried out in these areas¹⁰². • Council is leading formal engagement with over 500 conservation advocates and nearly \$1.5 million in funding provided to 100 community groups for community-led pest control and ecological restoration coordination work, tools and resources¹⁰³. • 64%¹⁰⁴ of schools in Auckland engaging in sustainability education programmes. This is more than the LTP target of 58%¹⁰⁵. • The number of conservation projects recommended for council funding in the 2019/2020 regional environment and natural heritage grant programme has increased from 25 to 38 projects and the average grant value per project has increased¹⁰⁶. • The number of grant applications from council's waste minimisation and innovation fund has decreased slightly since 2017/2018. However, the quality of applications received has improved¹⁰⁷.
<p>Focus Area 2: Focus on restoring environments as Auckland grows</p>	<ul style="list-style-type: none"> • Over the last 15 years there has been an increase (+ 400ha) in native ecosystems in the Auckland urban area. This has mostly come about through expansion planting around the margins of larger native remnants and removing exotic forest and scrub and replanting with native forest plants¹⁰⁸.
<p>Focus Area 3: Account fully for the past and future impacts of growth</p>	<ul style="list-style-type: none"> • Transport and stationary energy account for 43.6 per cent and 26.6 per cent of gross emissions. Carbon dioxide (CO₂) contributed 83.1 per cent, methane (CH₄) 10.5 per cent, nitrous oxide (N₂O) 1.7 per cent, and other GHGs 4.7 per cent. • Commercial waste to landfill is growing. The combined commercial and domestic waste to landfill per year per person was 922kg which is above the goal of 877kg. • Domestic waste per household has met or exceeded reduction targets. • Without further intervention, Auckland could be generating 2.7 million tonnes of waste to landfill annually by 2040 – nearly two-thirds more than we produced in 2016¹⁰⁹.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{xv}
<p>Focus Area 4: Protect significant natural environments and cultural heritage from further loss</p>	<ul style="list-style-type: none"> • The climate in Auckland is changing, with extreme weather events becoming more common and more severe. Storm surge and sea level rise are already affecting Auckland’s places and ecosystems¹¹⁰. • Analysis of trends in beach profiles has demonstrated significant erosion of beaches across the region (west coast, open east coast, Hauraki Gulf, Firth of Thames) in response to storm events. This has implications for increased frequency of extreme wave events. • There has been recorded significant increasing trends in sea surface water temperature in the Kaipara, Manukau, and Waitematā Harbours. This is consistent with climate change predictions for the Auckland region. • Increased numbers of historic heritage places are being protected but only a small percentage of identified Māori cultural heritage is protected¹¹¹. • 70 protected cultural or historic heritage places are in flood-sensitive areas and a further 242 are in flood-prone areas. • Around 220 protected heritage buildings requiring seismic strengthening within 35 years. • 989 protected heritage places are in sea spray areas.
<p>Focus Area 5: Adapt to a changing water future</p>	<ul style="list-style-type: none"> • The overall demand for tap water in Auckland is rising. A growing population, expanding businesses and high tourist numbers are all having an impact. • Over the past 20 years, the regions consumption has increased by 100 million litres a day (over 36%)¹¹².
<p>Focus Area 6: Use green infrastructure to deliver greater resilience, long-term cost savings and quality environmental outcomes</p>	<ul style="list-style-type: none"> • Transport emissions contribute the largest proportion (44%) of Auckland’s greenhouse gas emissions of which on-road transport contribute 86%. Transport emissions have increased from 4,362 ktCO₂e in 2012 to 4,939 ktCO₂e in 2016. • 28% of dwellings were consented within 1500m of the rapid transport network (RTN) in the last 12 months and 30,000 more homes have been enabled to be built in major greenfield growth areas, many near rapid transport networks.

Ngā Āheinga mō te Koke Whakamua ki Taumata kē ake

Opportunities for greater progress

Te whakawhiti atu ki ngā whakamahere tāone toitū me ngā tikanga whakawhanaketanga

Transitioning to sustainable urban planning and development approaches

Why this is significant

One of the key challenges articulated in the Auckland Plan is reducing environmental degradation. Historic and current land use and infrastructure decisions mean that our ecosystems, cultural landscapes and marine environment have been significantly stressed by urban development. As a result, some of our ecosystems and species are at risk and we may lose important aspects of the wide ranging economic, social and cultural benefits that the natural environment provides. Auckland's environmental degradation impacts on Māori wellbeing; through harming the whenua, wai, sites of cultural heritage, wāhi tapu and taonga and reducing the amenity and other values of ecosystems.

Management of our cultural heritage in the face of urban development pressures is also a challenge. Our heritage is fundamentally irreplaceable – once we lose it, we cannot recreate or recover it. There are many unprotected Māori cultural heritage sites in Tāmaki Makaurau, many of which are under threat or degraded. Few sites are adequately recognised and yet mana whenua retain strong, enduring and living connections with their cultural heritage which is also part of Tāmaki Makaurau Auckland's identity.

Heritage assets and the natural environment are public goods, making a tangible contribution to Auckland by creating a sense of place and identity for the community and through ecosystem services.

Supporting trends

Our ongoing environmental efforts have contributed towards some improvements in rural streams, and fresh and marine water quality variables at many sites. We have improved pest control well above our goals and there has been a significant increase in council support to community groups and landowners providing tools for biodiversity management and restoration. There has also been increasing resident awareness, understanding and appreciation of Auckland's cultural heritage.

Auckland's growth is largely following the quality compact approach. The pattern of consented activity within the existing urban area is for higher density development and has become more focused in locations in and around centres and along major public transport corridors. Some growth is occurring in identified future urban areas (with some preference for lower density houses however), and growth in rural areas has been limited although consents are still increasing.

Despite recent trends, Auckland's land use, activities and infrastructure decisions have resulted in declining biodiversity through habitat and vegetation loss. Some of our water quality is still poor, and sediment accumulation in our estuaries is increasing.

Urban development has posed challenges for cultural heritage protection, particularly Māori cultural heritage. There are a small number of sites protected, as cultural values are not well understood and the scope and scale of the work to protect additional sites is significant. More generally, large areas within Auckland have little or no recorded heritage sites, particularly in the north and south.

Strategic context

Auckland's population growth is putting pressure on the environment through urbanisation. The impacts of our activities and side effects of the city's functioning and development have meant that the state of our environment is generally in decline. 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 growth drives further urbanisation through new housing and business land and infilling of existing brownfields sites.

Urban development means changes to the receiving environments of that development (i.e. waters, soils, and air quality) through infilling of streams, removal of vegetation, loss of productive soils and pollution. This can put pressure on Auckland's ecosystems and contribute to reductions in ecosystem health undermining environmental outcomes. Those changes can be significant or minimal depending on the choices we make. Over time, the effects are cumulative. Urban development and growth also mean more people moving into, out of and around the region. This movement can enable the introduction of pest plants and animals. Pests can increase predation and compete with native species.

In Auckland, while gross emissions have not increased at the rate of population growth and economic growth¹¹³, the transport sector is still one of Auckland's most significant sources of greenhouse gas emissions (GHG), largely related to travel by road and this continues to increase annually. There has been some progress in areas such as public transport and active travel and reduction (through reuse) of waste from some parts of the transport. By achieving a compact urban form (through intensifying both brownfields and greenfields development) we can further shorten trips and decrease travel distances, better enable active transport choices and further reduce emissions. *Responding to climate change through transport* is discussed further in the Transport and Access section of this report.

Auckland's land use decisions have also put pressure on the boundaries of our urban areas leading to rural land fragmentation and urban sprawl. Our versatile land has reduced through this conversion. This can limit Auckland's local food production or shift growers onto more marginal land. This has impacts on food security due to increases in transport costs, greater use of fertilisers or changes in production methods.

If Auckland achieves current water efficiency targets, we can delay bringing new water sources online until approximately 2031¹¹⁴. However, population growth will continue to drive demand for safe, reliable drinking water beyond supply by 2050¹¹⁵.

Total amounts of waste to landfill will also continue to climb as Auckland's population grows even as per capita targets are achieved. Waste generation and resource depletion puts significant pressure on the environment. Moving to circular and regenerative models of consumption and resource use will help to address these issues.

Our historic built heritage is densest in the city centre and along now modern transport routes. Urban development in these areas requires us to make choices about how we accommodate protection of this heritage and increasing growth and development demands.

Central and local government initiatives

The Ministry for the Environment's 2016/17 Performance Improvement Framework review noted that New Zealand "can no longer afford to 'run the same race faster' but need[s] to 'run a new race' (transformation)".

There is a large environmental and urban development reform programme focussed on improving environmental outcomes in the context of increasing growth pressures underway. It will potentially significantly change our legislative framework for environmental decision-making.

Current and proposed national level environmental initiatives include:

- a systems-level review of the resource management system which questions whether environmental and development outcomes should have their own legislation or be considered in an integrated way national direction on highly productive (i.e. rural) land
- provision of climate change guidance
- review of the national environmental reporting system
- steps to improve New Zealand's freshwater management
- new national direction on New Zealand's indigenous biodiversity and strategic guidance and action plans on biodiversity
- phase out of some single use plastics and identifying further opportunities to reduce the effects of plastics on ecosystems and species
- work on new product stewardship schemes and a range of other proposals to reduce waste to landfills.

The Parliamentary Commissioner for the Environment has identified two other key projects for 2020:

- developing a set of core environmental indicators to be included within New Zealand's regulatory framework
- understanding how environmental data and indicators can be used in policy processes to support current and future wellbeing.

The *Ka Muri, Ka Mua Cultural Monitoring Framework* is an interagency approach that integrates western science with mātauranga Māori. This approach to monitoring and evaluation is sensitive to intellectual property challenges and enables a strategy of Māori values through the enabling of a co-management approach to restoration of the mauri of our already degraded environments, habitats and cultural landscapes. To date there has been no systems level regional evaluation of progress according to Māori values. Tangata whenua are protective of tikanga, customs and practices as these are critical to the emergence of their own identity.

The \$452 million Auckland water quality targeted rate provides investment over ten years for new stormwater infrastructure and initiatives to reduce wastewater, sediment and other pollutants contaminating our waterways and marine environment. The investment is dedicated to achieving cleaner harbours, beaches and streams reducing public health risk from wastewater overflows and pollutants and improving the ecology of our waterways.

The \$311 million natural environment targeted rate supports council and community-led pest control and ecological restoration and has the potential to arrest decline in priority habitats and ensure additional protection of threatened species and ecosystems.



Te whakapakari ake i te kaha o tō tātou taiao, o ngā koiora, o ngā wāhi whai mana me ngā hanganga tukuaru ki ngā pānga kino o te hurihanga āhurea

Building resilience of our environment, species, cultural heritage and infrastructure to climate change impacts

Why this is significant

The Auckland Plan 2050 identified climate change as one of two specific issues that will have the biggest effect on our environment. There is a certain level of climate change that is already locked into the global climate system due to global emissions to date. The effects of climate change are already being felt but over time will become more severe and pronounced. We can expect climate change effects (i.e. sea level rise, flooding, erosion etc.) to undermine exposed infrastructure, habitats and sites of cultural heritage and affect ecosystems (and species).

Habitats that are already stressed are more susceptible to the negative impacts of climate change. This means we need to try and future-proof infrastructure, restore ecosystem health, protect exposed environments (or otherwise provide for the ecosystems and species within them) and protect heritage and cultural landscapes before further irreversible harm occurs.

Supporting trends

The climate in Auckland is changing, with extreme weather events becoming more common and more severe. Although there is significant year-to-year variability in Auckland's temperature, there was a trend of about 1.6° C increase in annual mean temperature between 1910 and 2016¹¹⁶. Auckland's temperature is projected to continue to increase¹¹⁷ and hot days (maximum temperature > 25°C) have been increasing over time and are projected to continue increasing everywhere in the Auckland region¹¹⁸.

Significant increasing trends in sea surface water temperature have been recorded in the Kaipara, Manukau, and Waitemata Harbours and ocean acidification is already threatening Auckland's marine ecosystems¹¹⁹, including culturally, economically and ecologically significant species. Changes to the oceans will have impacts on the distribution, species composition, and health of marine life in the Auckland region¹²⁰.

Storm surge and sea level rise are already affecting Auckland's places and ecosystems. Over this century approximately 1.5-2.5% of Auckland's land area could be exposed to sea level rise. This includes 80% of coastal ecosystems¹²¹. Analysis of trends in beach profiles has demonstrated significant erosion of beaches across the region (west coast, open east coast, Hauraki Gulf, Firth of Thames) in response to storm events. This has consequential implications for increased frequency of extreme wave events.

Almost one quarter (23%) of Auckland's buildings are exposed to flood hazards¹²². It is estimated that 16,000 buildings are at risk of floor flooding in a 100-year flood event. In addition, Auckland has 70 protected heritage places in flood-sensitive areas, a further 242 protected heritage places in flood-prone areas and 989 protected heritage places in sea spray areas¹²³. Further, all transport asset categories are exposed to sea level rise scenarios to some degree¹²⁴.

Strategic context

Vulnerable species populations will experience more heat related stress. Temperature changes will also likely influence plant growth and the types of plants able to grow. Increased terrestrial and water temperatures may induce lethal life cycle or changes in distributions of some species, as well as creating an environment that will allow more pests (both animals and plants) and water and vector-borne diseases to thrive in Auckland.

Auckland is also projected to become more drought-prone¹²⁵. The current 2020 summer season exemplifies drought conditions. The Auckland region in 2020 has seen the longest period of no rain on record, the lowest flows on record for several rivers across the region, and very low groundwater levels in multiple aquifers. A reduction in moderate-intensity rainfall is likely to reduce annual recharge to aquifers, in turn causing lower stream flows, while also leading to increased water demand for irrigation. The intersection of water demand and water scarcity places increased pressure on both aquifer and stream water resources, which support Auckland's unique ecosystems.

Extreme rainfall events are likely to increase in intensity in Auckland. Extreme, rare rainfall events may cause significant damage to land and infrastructure and both rainfall and drought may affect Auckland's hydrology. Groundwater recharge may decline. Coastal aquifers may also be affected by sea-level rise in terms of flow velocities and salinity. Extreme rainfall events could increase the amount of sediment from land delivered to receiving environments.

Areas of urban development are also likely to become more hazard prone (due to insufficient understanding of the likelihood of current or potential hazards). Poor urban development can also further exacerbate climate change impacts (i.e. through increasing flooding risk, creating urban heat islands, embedding energy inefficiencies).

The key climate change impacts on our cultural heritage are increases in the likelihood of coastal erosion and inundation affecting coastal sites, particularly Māori archaeological sites.

Central and local government initiatives

New Zealand has several greenhouse gas emissions reductions targets. Our international targets are 5% reduction below 1990 gross emissions for the period 2013-2020 and a 30% reduction below 2005 (or 11 per cent below 1990) gross emissions for the period 2021-2030. Our domestic targets are net zero emissions of all greenhouse gases other than biogenic methane by 2050 and 24 to 47% reduction below 2017 biogenic methane emissions by 2050, including 10% reduction below 2017 biogenic methane emissions by 2030.

Meeting New Zealand's commitments under the Paris Agreement, including our target of reducing emissions by 30% below 2005 gross emissions for the period 2021-2030 includes:

- implementing a new domestic emissions reduction target
- developing a national adaptation plan that sets out the government's objectives, strategies and policies for adapting to the effects of climate change
- supporting work in the climate finance space (investment and expenditure both public and private that contributes to either climate mitigation or adaptation)
- reporting on greenhouse gas (GHG) emissions analysis for all policy proposals that go to Cabinet and meet certain qualifying criteria.

Auckland Council has undertaken a climate change risk assessment providing information about the risk and vulnerabilities the Auckland region may face under a changing climate regime. The eight reports in the series consider various components of key risks across sectors and systems of interest: people (heat vulnerability, climate change and air quality), society (social vulnerability and flooding), and natural environment (terrestrial and marine ecosystems), as well sea level rise at regional and local scales. They provide an indication of the expected trends and challenges across these sectors and systems of interest and give us a better understanding of the issues for Auckland and how we might respond.

Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan identifies the key priorities for delivery of climate action across the region. Delivery of these priorities will get Auckland on the path to net zero emissions by 2050 and prepared for climate change impacts.

Environmental restoration activities delivered in Auckland (for example the million trees project, stream restorations etc.) can also deliver a range of climate change resilience benefits.

NGĀ HUARAHI WĀTEA ME TE TŌNUITANGA OPPORTUNITY AND PROSPERITY



We know we have achieved our outcome when Auckland is prosperous with many opportunities and delivers a better standard of living for everyone.

Progress so far

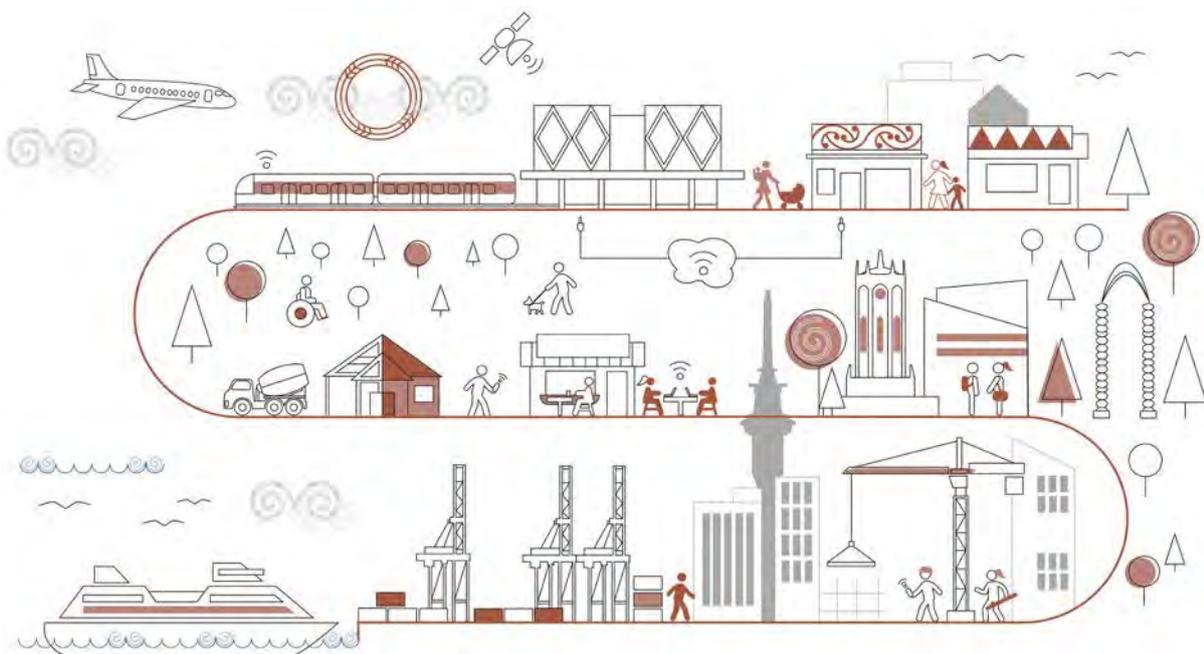
The trends emerging from the Opportunity and Prosperity outcome measures indicate that we are making positive progress in the following areas:

- ✓ **Employment, income and wages:** unemployment rates remain low and income and wages are continuing to improve for Auckland residents, including our Māori population.
- ✓ **Participation in education:** rates in early childhood and tertiary education for the majority of communities are increasing.
- ✓ **Digital access:** availability and use of digital technology is improving.
- ✓ **Tourism spending:** amount of visitor spend is increasing.
- ✓ **Knowledge intensive industries:** employment in Auckland’s knowledge-intensive industries continues to grow faster than the national increase.

Opportunities for greater progress

The analysis of supporting evidence, including a range of datasets and key trends, identified opportunities for greater progress that are integral to the future of this outcome.

- Addressing the ability to afford everyday needs
- Developing skills for the future
- Supporting business resilience through innovation







Ngā Nekehanga Putanga Outcome Trends

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{xviii}
<p>Direction 1: Create the conditions for a resilient economy through innovation, employment growth and raised productivity</p>	<ul style="list-style-type: none"> • Auckland has a strong economic sector and remains the largest and fastest growing regional economy in New Zealand. • Employment is rising and unemployment remains low, though there remain disparities in population groups and areas. • The average wage is increasing overall, but living costs in Auckland remain high –largely due to housing costs • Although improving, one in five Auckland residents state their income is not enough to meet everyday needs and 44% (in 2018) do not agree that housing is affordable. • Productivity levels (GDP) are low compared to OECD cities but are increasing. • Growth in business is planned for with 1,400 ha of business-zoned land in urban areas. The amount of business-zoned land across the region has remained constant.
<p>Direction 2: Attract and retain skills, talent and investment</p>	<ul style="list-style-type: none"> • The average weekly wage has been increasing since 2015 and annual earnings have increased by 31% in the last 10 years. • Employment in Auckland’s knowledge-intensive industries continued to grow faster than New Zealand as a whole (2.3% compared with 1.7% nationally per annum) and comprised 35% of the working population. • The biggest industries contributing to knowledge intensive employment have been in hospitals, computer system design, consulting services and primary education. • Skill shortages remain in areas such as education, engineering, accountancy, medical technology, outdoor recreation and metal and motor trades. • The percentage of highly skilled workers has grown slowly over the last ten years. • Over the last ten years a business’ ability to find skilled labour in Auckland has become increasingly more difficult but has shown signs of improvement in recent years. • Overall, the number of skilled migrants coming into the Auckland region had been steadily increasing over the last decade but declined from 2017 due to changes in immigration policy.
<p>Direction 3: Develop skills and talent for the changing nature of work and lifelong achievement</p>	<ul style="list-style-type: none"> • The proportion of young people with a higher level qualification (39% in 2018) has stayed around the same since 2014. • Since 2017, Auckland’s existing jobs and skills hubs have helped more than 1,500 people into work and are focused on the construction and infrastructure sector.

^{xviii} Data sources are provided in the data sources table at the end of this document.

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{xviii}
<p>Focus Area 1: Harness emerging technologies and ensure equitable access to high quality digital data and services</p>	<ul style="list-style-type: none"> • The majority of lower income residents use the internet, with only a small percentage (4.7%) being low level or non-users. • Almost half of Auckland residents use three device types to connect to the Internet. • Fibre technology is being rolled out at a faster pace than expected, with 90% of the 2022 target already completed (562,534 Auckland homes) over the last few years and a 61% uptake of ultrafast broadband where it is available. • Ultrafast Broadband is over halfway complete in Auckland's rural areas.
<p>Focus Area 2: Ensure regulatory planning and other mechanisms support business, innovation and productivity growth</p>	<ul style="list-style-type: none"> • Auckland continues to rank highly in world cities in relation to its business sophistication, ease of doing business (1st of 190), and innovation (110th of 500). • Knowledge intensive businesses are growing slowly, estimated at over one third of the employment share of all businesses. • Many businesses are involved in some kind of innovation each year (82% in 2018). • The proportion of Auckland businesses that have undertaken research and development or introduced new and improved goods or services to the market each year has increased since 2015 but this is showing signs of slowing. • Growth in employment in the creative industries is slow but positive on average and has been growing somewhat more strongly in Auckland than New Zealand as a whole.
<p>Focus Area 3: Advance Māori employment and support Māori business and iwi organisations to be significant drivers of Auckland's economy</p>	<ul style="list-style-type: none"> • Māori are experiencing increased wages and less unemployment. • The proportion of Māori who are not in employment, education or training is decreasing over time and the gap between Māori and non-Māori is closing. • A higher proportion of Māori residents (compared with non-Māori) do not feel like their income is enough to meet their everyday needs. • Māori economic aspirations (particularly small to medium enterprises) continue to be more reliant on government funding and enterprise grants than traditional banking and lending institutions.
<p>Focus Area 4: Leverage Auckland's position to support growth in exports</p>	<ul style="list-style-type: none"> • Exports through Auckland's sea and air ports have a current value of \$11.9 billion and make up around 20% of New Zealand's total export value. The growth in value made a recovery in 2018 but in 2019 reached its lowest (-11.5%) since 2013. • Auckland has seen an average of 6.6% growth in international visitor arrivals over the last five years (to 2019).

AUCKLAND PLAN 2050 DIRECTIONS AND FOCUS AREAS	DATA AND TRENDS ^{xviii}
<p>Focus Area 4: Leverage Auckland’s position to support growth in exports (continued)</p>	<ul style="list-style-type: none"> • Tourism spend for 2019 was \$8.82b, up 4.1% on the previous year. Domestic spend was \$4.03b for the year (up 0.4%), and international spend was \$4.79b (up 7.5%). Spend on accommodation services in 2019 increased (10.3%) compared to last year.
<p>Focus Area 5: Increase educational achievement, lifelong learning and training, with a focus on those most in need</p>	<ul style="list-style-type: none"> • The number of young people who are not in employment, education or training (NEET) has fluctuated but is about the same as it was ten years ago. Significantly higher proportions of those aged 20 to 24 years are NEET than those aged 15-19 years. • The percentage of residents that have achieved a higher qualification (bachelor’s degree or level 7, or higher qualification) has increased from 25% in 2013 to 31% in 2018. • Participation rates in early childhood, schooling and tertiary education are increasing in the majority of communities. Those enrolling in tertiary education one year after leaving school is 66% (in 2018). • There remain substantial prosperity gaps between local board areas in relation to skills (qualification levels), labour force (employment), and household prosperity.



Ngā Āheinga mō te Koke Whakamua ki Taumata kē ake Opportunities for greater progress

He whakaaro mō te āhei ki te hoko i ngā matea o ia rā Addressing the ability to afford everyday needs

Why this is significant

One of the key challenges in the Auckland Plan is shared prosperity; that is, 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. To meet this challenge, residents need adequate income and reasonable costs of living to be able to meet everyday needs¹²⁶. The most recent survey of Auckland residents indicates that around one in five residents (19%) do not feel their income is able to meet their everyday needs. The ability to afford the cost of living is dependent on wages, qualifications, employment, skills, and access to employment.

Supporting trends

While Aucklanders are experiencing an increase in income and wages, higher employment rates and lower unemployment rates, we are still experiencing high costs of living alongside the challenge to budget and live within one's means. A large proportion of residents say that housing is not affordable and many struggle with essential costs such as heating. According to the latest Auckland prosperity index¹²⁷, certain local boards within Auckland are challenged with insufficient skills for employment and lower household prosperity. Housing costs continue to be a significant issue within the Auckland region, which directly affects discretionary income and the ability for some residents to afford day-to-day expenses.

Strategic context

There are numerous factors that drive, or have an impact on, affordable living. On the global scale, Auckland is perceived as a great place to live, attracting many new migrants, but this rapid increase in population and consequent demand for housing has contributed to Auckland being rated as one of the most unaffordable developed cities due to high housing costs and comparatively lower average household incomes¹²⁸. Auckland's population growth is linked to concentrating employment and business in its urban areas, however access to employment and increasing income does not always translate to the ability to meet Auckland's increase in basic expenditure, such as fuel and electricity and especially housing costs. Impacts of housing costs have been seen in higher household occupancy rates and moves towards the edges of the city, resulting in longer and more expensive commutes. There are, however, recent indications from building consent data that this trend is reversing to more uptake of high density housing such as apartments and townhouses as a more affordable and sustainable option. This is in line with the Auckland Plan Development Strategy.

Recent economic and labour-market changes in New Zealand have favoured people with higher education, and those employed in the services sector, particularly in Auckland. While there have been reductions in the employment share of middle-skilled jobs in New Zealand, there has not been an increase in low-skilled jobs as seen in other developed countries¹²⁹. This could make it harder for those with lower skills to find employment and leads to an increasing income disparity between communities within Auckland. Those that struggle the most with meeting everyday needs include young adults, those on a low income, those with no formal education, those who are living in rental housing, Māori, Pacific people, and those that have recently migrated to Auckland. An overwhelming majority (69%) of these communities rate their quality of life as poor.

Lower prosperity in south Auckland reflects higher proportions of the population that are beneficiaries, who have higher unemployment rates, lower skill levels and lower household incomes. Many of these areas (i.e. Maungakiekie-Tāmaki, Māngere-Ōtāhuhu, Ōtara-Papatoetoe, Manurewa, and Papakura) perform well in terms of business activity, highlighting the fact that employment opportunities exist but the resident population faces barriers in accessing these opportunities¹³⁰.

Central and local government initiatives

Central government has developed initiatives to address various labour market issues that could have a positive impact on income for some workers. These initiatives include incremental lifts in minimum wage, extending paid parental leave, creating a process to address pay equity through the Equal Pay Amendment Bill and designing a process for enabling Fair Pay Agreements. There has also been increased funding for an inclusive labour market through the Oranga Mahi programme, Work and Income and within the welfare review.

The Auckland Council family has invested in place-based initiatives to address inequities in participation in the workforce in areas of the city with the highest levels of economic deprivation through The Southern Initiative and The Western Initiative. Programmes such as the Māori and Pasifika Trades Training programme focuses on people who face challenges in the labour market and for whom a career could have life-changing and inter-generational impacts. It targets young people not in education, employment or training, sole parents and people who have experienced long-term joblessness or sporadic low paid employment. The Southern Initiative has also been a catalyst for social procurement practice across local and central government through initiating practice that increases female participation, closes the gap between Māori and Pacific people's wages and the rest of Auckland, and increases business opportunities for Māori- and Pacific-owned enterprises.

Other contributions initiated by Auckland Tourism, Events and Economic Development (ATEED) include the Local Economic Regeneration that began with an Employment Precinct Strategy for the Tāmaki Regeneration Company area and provides a framework for activity in the Tāmaki Employment Precinct over the next 20 years. Auckland Council has implemented a living wage for all its employees and has programmes such as Kia Puāwai, Ngā Puna Pūkenga and the Healthy Waters social contracts to assist unemployed people into permanent employment. The council's sustainable procurement objectives and targets also support supplier diversity, local suppliers, and quality employment for targeted communities.

In an effort to address Auckland's high housing costs and address some of the adverse consequences, the council has made significant investment in areas such as homelessness, affordable long-term housing services for older people, and ongoing provisions for growth through the Auckland Unitary Plan. *Tackling the growing intermediate housing market and preventing homelessness* is discussed further in the Homes and Places section of this report. *Supporting communities of greatest need* is discussed further in the Belonging and Participation section of this report.

Te whakawhanake pūkenga mō anamata

Developing skills for the future

Why this is significant

Auckland is experiencing significant changes in its economic environment, influenced by high and increasingly diverse population growth and technological transformation resulting in industry and business shifts and a more dynamic working environment. This translates to a changing structure of occupations and business practice that will require a workforce ready to meet the challenge of transformation. A skilled workforce will enable innovation and help drive growth in high-value industries, resulting in a high-functioning and resilient economy¹³¹. A labour market that is not only able to efficiently match workers with jobs, but also provide the capacity to transfer skills across occupations and industries, will benefit the individual, local businesses and the health of the Auckland community.

Supporting trends

The percentage of highly skilled workers in Auckland has remained about the same over the last ten years and businesses' ability to find skilled labour in Auckland has become more difficult, alongside challenges to find people with soft skills such as problem solving and critical thinking. Although participation rates in early childhood, schooling and tertiary education have increased overall, the percentage of young people not in education, employment or training (NEET) has remained about the same over the last ten years. Similarly, the proportion of young people with a higher level qualification has not increased over the last five years.

Strategic context

Auckland is forecasted to grow in higher skilled employment opportunities in industries such as professionals, managers, and technicians and trades. Furthermore, the introduction of advanced technology is likely to reduce the reliance on technical skills and increase the need for uniquely human skills such as critical thinking, creativity and communication¹³². Emerging skill areas such as data science, customer experience design, digital and cybersecurity are increasingly required across industries and organisations. Businesses increasingly recognise the need for highly skilled people in these emerging areas and yet data suggests that Auckland's highly skilled workers and corresponding higher levels of qualifications are not increasing at the required rate of change.

It will be important for education providers and employers to understand and prepare for climate related changes in their workforce as many of Auckland's core industries such as manufacturing and retail will be affected. Some skills will become less relevant while others may be reinvented for the zero-carbon economy.

Recent research of New Zealand employer demand shows a growing need for skills in information, creativity and health, with core skills in high demand across all jobs in New Zealand¹³³. This research suggests that many workers have the capacity to adapt to dynamic work environments through transferable skill sets that enable transition from an occupation or industry in decline into areas experiencing growth. Knowing which occupations and roles share the same core skills can broaden employers' hiring pool, expand career opportunities and help educators to craft the most relevant curricula and courses to support transitions between related occupations. It could also allow policymakers and employers to fine-tune their employment strategies in New Zealand's changing labour market.

Less formal learning and development is important for enabling working-aged adults to maintain the skills they already have, adapt to a changing labour market, and progress in their careers. More extensive data are required to adequately cover the wide range of on-the-job learning or work-related training that does not result in a formal qualification. However, the relatively high number of poorly qualified individuals has implications for Auckland's ability to leverage the skills of workers to increase innovation and productivity¹³⁴.

Auckland's education and training systems and institutions will need to reflect this future demand for different and higher skills. For highly skilled jobs and management positions, employers still look for tertiary qualifications and yet in periods of high employment, more school leavers opt out of tertiary options to enter the workforce¹³⁵. Upskilling and retraining of the adult workforce will continue to be integral to keeping pace with the change. As the life span of skills reduces, and new ways of working emerge, many of the technical skills learned in our youth will become outdated.

Central and local government initiatives

Central government addressed the future of skills through its Wellbeing Budget with investment in initiatives that help young people with pathways to industry training opportunities and key workplace skills, such as the School Leaver's Toolbox, Mana in Mahi, and He Poutama Rangatahi. The Sector Workforce Engagement Programme has also benefited some communities in Auckland by providing a fully funded service for job seekers and employers and has recently (2019) invested in two more jobs and skills hubs in Manukau and Glenfield.

Through the vocational education reform, six Workforce Development Councils will be established by the end of 2022 which will improve advice to central government on investment in vocational education and determine the appropriate mix of skills and training for the industries they cover. Alongside these reforms, fifteen Regional Skills Leadership Groups, including one in Auckland, will also be established in 2020 to better articulate, to central government and locally, current and future regional workforce skills needs, opportunities and barriers. Innovative education providers such as Mind Lab and 21C Skills Lab are based on a vision to transform New Zealand education by aligning digital skills and capabilities with the demands of the contemporary world.

Local contributions initiated by ATEED include the Local Economic Regeneration, BuildAKL and the We're Hiring campaign (designed to attract high-skilled offshore construction and technology talent to Auckland). The Southern Initiative also manages the Youth Connections programme that supports young people into high-quality, sustainable employment and works with businesses and education and training organisations to build pathways to new careers.

The focus should remain on keeping our school leavers engaged in the education and training system and our current workforce engaged in further learning to achieve higher levels and more transferable skills and qualifications to meet the skill demand for the future.

Te tautoko i te aumangea o ngā pakihi mā te auahatanga Supporting business resilience through innovation

Why this is significant

Rapid technological change and globalisation are shifting societal norms and the way we work. Auckland's readiness to keep pace with digital transformation and automation is crucial for its ability to compete in the global market. Climate change will also continue to impact businesses with the need to make decisions on how to address climate risks and look for innovative opportunities to reduce emissions, transition sunset industries and prepare for workforce changes. It is important for businesses to understand and prepare for a fair and just transition and be able to reinvent themselves for a low emissions economy.

These shifts in our economic environment suggest a significant challenge for businesses unless they can build resilience to disruption and keep pace with the transformation through innovation and entrepreneurship supported by quality research and development.

Supporting trends

Auckland's business community is predominantly comprised of small and medium-sized businesses and continues to struggle to be internationally competitive. Current productivity levels are comparatively low, and our economy is heavily reliant on increased domestic consumption to drive growth. Auckland's businesses suggest there are numerous constraints to early uptake and implementation of new technologies and innovative practices due to factors such as the capital and skills required for early adoption¹³⁶.

Employment in knowledge intensive businesses and the creative sector has increased steadily and is growing somewhat more strongly in Auckland than in New Zealand but the share of total employment in these sectors has not increased significantly. Auckland has comparative advantages in knowledge intensive industries related to advertising, finance, corporate head office management and investment. Auckland continues to rank comparatively higher in world cities in relation to its business sophistication, ease of business, and innovation and yet business confidence indicators remain relatively low. Many Auckland businesses report being involved in innovation and research and development, although this number appears to have declined recently.

Strategic context

Knowledge intensive sectors represent an increasing share of Auckland's employment and economic output and will most likely be the primary source of future productivity growth. These industries have greater scope to create wealth both for Auckland through higher GDP and for individuals through increased wages. The largest knowledge-intensive industries in terms of employment in 2018 were hospitals, with computer systems design and related services, management advice and other consulting services, and primary education also contributing significantly to knowledge intensive employment across Auckland. For the 20 largest knowledge-intensive industries, Auckland provided on average 42% of New Zealand's employment in those industries – significantly above its share for all industries (of 34.4%)¹³⁷.

Entrepreneurship and innovation supported by research and development are important for economic growth and for sustaining a dynamic economy capable of competing successfully on the international stage. A diverse business environment is better able to absorb cyclical downturns and changing market trends and, where there is high business confidence, people are more inclined to venture into entrepreneurial activities as they see an economy that is able to support new ideas.

The effects of climate change on businesses will require innovative transitions. Many of Auckland's core industries like manufacturing and retail will be affected by changes to consumer behaviour, and disruption to supply of products and services. There will be greater demand for low carbon goods and services and possible damage to commercial assets. Broader social impacts, like the effect of rising temperatures on health, could also affect workforce productivity. However, climate change can also present new opportunities. For example, some regions may grow crops not possible before and new technologies and materials for energy distribution, mobility or food production may be discovered.

Many large businesses measure their emissions and may have reduction targets, but most are yet to identify the impacts, risks and opportunities of climate change to their businesses and business models. Businesses and governments would be well-served by coinvesting in and retraining their workforces, with likely benefits beyond those preparing for climate change. Recent research suggests that cities that accelerate climate action by supporting cleantech start-ups and corporate innovation could supercharge urgent global efforts to reduce greenhouse gas emissions and mitigate the worst impacts of the climate crisis¹³⁸.

Globally, there has been an increase in innovation investments with the use of intellectual property (IP) reaching record highs in 2017 and 2018. Global research and development expenditures had been growing faster than the global economy, more than doubling between 1996 and 2016. However, as at 2019, public research and development expenditures in some high-income economies have been growing slowly or not at all which is concerning given its central role in funding basic research and development and other blue sky research, core to future innovations¹³⁹.

According to the global innovation index, New Zealand remains in line with expectations for its level of development and is ranked number 25 of all 129 economies covered. New Zealand's institutions rank well for innovation in terms of political and operational stability, regulatory environment and business environment (ranking number 1 in its ease of starting a business) and market sophistication. However, New Zealand ranks much lower in research and development and in its knowledge, technology and creative outputs¹⁴⁰. Auckland continues to rank comparatively higher in world cities in relation to its business sophistication, ease of business and innovation, with a high proportion of its businesses involved in innovation each year and an increasing proportion of businesses having undertaken research and development or introduced new and improved goods or services to the market each year, although this appears to have recently declined¹⁴¹.

Central and local government initiatives

Central government has addressed innovation for the future through its Wellbeing Budget with a focus on research and development and has invested extensively in operational funding for early stage capital market development through the Venture Capital Fund, and further capital into the commercialisation of innovation and other initiatives to support businesses to become more productive and develop high-value, low-emissions products. As part of this investment, the Wellbeing Budget provides further capital to support, incubate and grow start-ups including through the new Technology Incubator Programme and additional funding has gone into the Pre-Seed Accelerator Fund and Commercialisation Partner Network.

Government is developing Industry Transformation Plans (ITPs) for selected sectors of the economy where significant growth opportunities exist, or for sectors that are facing significant disruption to workers and/or firms. ITPs will describe an agreed vision for the future state of the sector and outline the actions required to realise this vision, including investment, innovation and better skills development. ITPs which are particularly relevant to Auckland include Food and Beverage, Construction and Digital.

The Future of Work Tripartite Forum was established in 2018 to co-ordinate the decision-making of government, business and unions in seizing the opportunities of the future of work. In the coming year, the Future of Work Forum will be focusing on four key priorities:

- Shaping the strategic direction and focus of Industry Transformation Plans
- Identifying priorities to facilitate in-work training and lifelong learning
- Identifying priorities to support workers who are displaced or at risk of displacement
- Advising on options for better protecting non-standard workers

Auckland's economic development agency, ATEED, works with new and existing Auckland businesses to help them start up, grow, innovate and export. Its current innovation projects and initiatives include the GridAKL innovation precinct at Wynyard quarter, bringing like-minded technology companies together in the same area. ATEED also plays a strategic role in delivering the Young Enterprise Scheme that provides business skills for the next generation of business leaders.

Auckland Council is currently developing actions within its *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan*. One of the plan's priorities has the goal of leading climate-smart innovation and a fair and just transition to a zero carbon, climate-resilient economy. Relevant actions within this priority will involve establishing a climate innovation system, accelerating business transition to zero carbon and building resilience, and embedding circular principles into Auckland's economy.

NGĀ PUNA RARAUNGA

DATA SOURCES

OUTCOME	MEASURE	SOURCE
BELONGING AND PARTICIPATION	Auckland survey respondents that agree/strongly agree they have a sense of community in one's own neighbourhood	Auckland Council Quality of life Survey
	Auckland survey respondents that had positive contact with people in their neighbourhood in the last 12 months i.e. a visit or asking each other for small favours	Auckland Council Quality of life Survey
	Auckland survey respondents that agreed/strongly agreed they feel a sense of community with others in their neighbourhood	Auckland Council Quality of life Survey
	Auckland survey respondents that had face-to-face contact with family at least once a week	Statistics New Zealand, New Zealand General Social Survey
	Auckland survey respondents that had non face-to-face contact with family at least once a week	Statistics New Zealand, New Zealand General Social Survey
	Auckland survey respondents that stated that people can almost always/usually be trusted	Auckland Council Quality of life Survey
	Auckland survey respondents that feel very/fairly safe in their own home after dark	Auckland Council Quality of life Survey
	Auckland survey residents that agree/strongly agree they feel they have someone to rely on for help if faced with physical injury or illness, or if in need of support during an emotionally difficult time	Auckland Council Quality of life Survey
	Number of eligible voters that voted in the Auckland Council elections	Auckland Council
	Auckland survey respondents that agree/strongly agree they are confident that council makes decisions in the best interests of the city	Auckland Council Quality of life Survey
	Auckland survey respondents that believe the public has some/large influence on council decision-making	Auckland Council Quality of life Survey
	Auckland survey respondents that are satisfied with council's performance and have trust in council decision-making	Auckland Council, Citizens insight monitor
	Auckland survey respondents that rate their health as excellent/very good/good	Auckland Council, Quality of life survey
	Number of years a new-born could expect to live if they were subject throughout their lives to the age-specific mortality patterns prevailing over a three year period centred on their birth year	Statistics New Zealand, Life expectancy tables
	Auckland survey respondents that scored 13+ on their rating of the extent to which each of five emotional wellbeing indicators has been present or absent in their lives over the previous two week period, on a six point scale ranging from 'all of the time' to 'at no time'	Auckland Council Quality of life Survey
	Adults (15 years of age and over) with obesity as a percentage of the population (Auckland)	Ministry of Health, New Zealand Health Survey
	Auckland survey respondents that rate their health as excellent or very good	Ministry of Health, New Zealand Health Survey
	Number of current smokers (tobacco) as a percentage of the population (Auckland)	Ministry of Health, New Zealand Health Survey
	Number of hazardous drinkers as a percentage of the total population (Auckland)	Ministry of Health, New Zealand Health Survey
	Auckland children that took part in sport and recreation in any given week and average hours spent participating in sport and recreation	Sports New Zealand, Active New Zealand Survey

OUTCOME	MEASURE	SOURCE
BELONGING AND PARTICIPATION (continued)	Auckland residents that agreed/strongly agreed they had experienced stress that had a negative effect on them over the last 12 months	Auckland Council, Quality of life survey
	Number of Auckland adults over 15 years of age with diabetes	Ministry of Health, New Zealand health survey
	Number of Auckland children 5-14 years of age in the household that usually use active modes of transport (walking, cycling, scooter, skating etc) to get to school	Ministry of Health, New Zealand health survey
	Number of Auckland children 0-14 years of age with obesity as a percentage of all 0-14 year olds	Ministry of Health, New Zealand health survey
	Auckland survey respondents that feel very/fairly safe walking alone in their neighbourhood after dark	Auckland Council, Quality of life survey
	Auckland survey respondents that feel very/fairly safe in their own home, neighbourhood and city centre after dark	Auckland Council, Quality of life survey
	Number of burglary victimisations (Auckland)	New Zealand Police
	Number of theft victimisations (Auckland)	New Zealand Police
	Auckland survey respondents stating their most common barriers to accessing health care	Ministry of Health, New Zealand health survey
	Auckland survey respondents that had been to a park or reserve in the last 12 months	Statistics New Zealand, New Zealand general social survey
	Auckland survey respondents that had been to a community event in the last 12 months	Statistics New Zealand, New Zealand general social survey
	Percentage of Empowered Communities activities (in Auckland) that are community led and build capacity and capability to assist local communities to achieve their goals)	Auckland Council
	Auckland community groups' satisfaction with their experience of working with council	Auckland Council, Community group experience survey
	Auckland survey respondents that rated their knowledge of the Treaty of Waitangi as fair/well	Auckland Council - Residents survey
	Auckland survey respondents that used Māori words or phrases in the past 4 weeks	Statistics New Zealand, New Zealand general social survey
	Auckland survey respondents that participated in Māori cultural activities in the last four weeks i.e. watched a Māori television programme, participated in kapa haka, sung a Māori song, performed haka, given a mihi or speech, or taken part in Māori performing arts or crafts	Statistics New Zealand, New Zealand general social survey
	Auckland survey respondents that has visited a marae over the last 12 months	Statistics New Zealand, New Zealand general social survey
	Auckland survey respondents that viewed the impact of increased diversity in lifestyle and culture as making their local area a better or worse place to live	Auckland Council Quality of life Survey
	Percentage change in population from 2013 to 2018	Statistics New Zealand, Census of population and dwellings
	Percentage change in ethnicity from 2013 to 2018	Statistics New Zealand, Census of population and dwellings
Percentage change in children (0-14 years of age) from 2013-2018	Statistics New Zealand, Census of population and dwellings	
Percentage change in older persons (65 years of age and over) from 2013-2018	Statistics New Zealand, Census of population and dwellings	
Auckland migrants' satisfaction with life in New Zealand on a scale from 0 to 10, where 0 is not at all positive and 10 is very positive (Positive = 7 or more out of 10)	Ministry of Business Innovation and Employment, Migrants' survey	

OUTCOME	MEASURE	SOURCE
BELONGING AND PARTICIPATION (continued)	Auckland survey respondents that agree/strongly agree it is a good thing for any society to be made up of people from different races, religions and cultures	Auckland Council, Quality of life survey
	Auckland survey respondents that reported experiences of discrimination over the last 12 months	Statistics New Zealand, New Zealand general social survey
	Auckland survey respondents that feel very comfortable/comfortable about a new neighbour who spoke a different language to them	Statistics New Zealand, New Zealand general social survey
	Auckland survey respondents that feel very comfortable/comfortable about a new neighbour who was a different religion to them	Statistics New Zealand, New Zealand general social survey
	Auckland survey respondents that feel very comfortable/comfortable about a new neighbour who had a different sexual orientation to them	Statistics New Zealand, New Zealand general social survey
	Auckland survey respondents that feel very comfortable/comfortable about a new neighbour who had a different ethnicity to them	Statistics New Zealand, New Zealand general social survey
	Auckland survey respondents that agree/strongly agree they feel able to express their identity	Statistics New Zealand, New Zealand general social survey
	Weighted average deprivation index score by local boards in Auckland	Department of Public Health, University of Otago, Wellington
	Average annual household income (Auckland)	Statistics New Zealand, Household Economic Survey
	Average annual housing costs (Auckland)	Statistics New Zealand, Household Economic Survey
	Auckland survey respondents' rating on how well income meets everyday needs (percentage that stated 'not enough money')	Auckland Council Quality of life Survey
	Auckland survey respondent that state that their quality of life is good/very good	Auckland Council Quality of life Survey
	Auckland survey respondents that agree/strongly agree that Auckland has a rich and diverse arts scene	Auckland Council Quality of life Survey
	Auckland survey respondents that have been to a community event in the past 12 months	Statistics New Zealand, New Zealand general social survey
	Auckland survey respondents that agree/strongly agree that the arts make Auckland a more vibrant and attractive place to live	Auckland Council Quality of life Survey
		Auckland survey respondents that have actively participated in the arts in the previous 12 months
Auckland survey respondents (5-17 years of age) that were physically active in sport and active recreation at least once in the past week		Sports New Zealand, Active New Zealand Survey
Average time that Auckland survey respondents (5-17 years of age) spent being physically active in sport and active recreation in the past week		Sports New Zealand, Active New Zealand Survey
Auckland survey respondents (18 years of age and over) that were physically active in sport and active recreation at least once in the past week		Sports New Zealand, Active New Zealand Survey
Average time that Auckland survey respondents (18 years of age and over) spent being physically active in sport and active recreation in the past week		Sports New Zealand, Active New Zealand Survey
Auckland survey respondents most frequently stated recreational activity		Sports New Zealand, Active New Zealand Survey
MĀORI IDENTITY AND WELLBEING	Percentage of Auckland Māori that own their own home	Statistics New Zealand, Census of population and dwellings
	Annual household gross income for Māori in Tāmaki Makaurau and Aotearoa	Statistics New Zealand, Census of population and dwellings
	Percentage of Māori in Tāmaki Makaurau with 'Skill Level 5' by local board	Statistics New Zealand, Census of population and dwellings

OUTCOME	MEASURE	SOURCE
MĀORI IDENTITY AND WELLBEING (continued)	Employment by occupation (professionals and managers) for Māori in Tāmaki Makaurau and Aotearoa	Infometrics, Auckland economic profile
	Tertiary students completing a qualification for Māori in Tāmaki Makaurau	Ministry of Education, Education counts
	Percentage of Auckland Māori school leavers with NCEA Level 2 or above	Ministry of Education, Education counts
	Number of Auckland Māori apprenticeships	Ministry of Education, Education counts
	Percentage of Auckland Māori survey respondents that rate their health as good/very good	Auckland Council Quality of life Survey
	Percentage of Auckland Māori survey respondents who agree/strongly agree they feel a sense of community	Auckland Council Quality of life Survey
	Percentage of Auckland Māori survey respondents who feel safe/very safe in their city centre/local area	Auckland Council Quality of life Survey
	Percentage of Māori respondents who agree/strongly agree that public transport is safe	Auckland Council Quality of life Survey
	Number of Māori students in Tāmaki Makaurau enrolled in kura kaupapa Māori and kura teina	Ministry of Education, Education counts
	Number of tamariki in Tāmaki Makaurau enrolled in kohanga reo	Ministry of Education, Education counts
	Percentage of Year 11 and 12 Māori students in Tāmaki Makaurau engaging in Māori language learning, by immersion level	Ministry of Education, Education counts
	Percentage of Māori school leavers in Tāmaki Makaurau engaged in Te Reo Māori at NCEA Level 1, 2 and 3	Ministry of Education, Education counts
	Percentage of Auckland Māori who have visited an ancestral marae in the last 12 months	Statistics New Zealand Te Kupenga
	Percentage of Auckland Māori who rated Māori culture as important	Statistics New Zealand Te Kupenga
	Percentage of Auckland Māori attending a club or interest group	Statistics New Zealand Te Kupenga
	Percentage of Māori youth in education, employment or training - derived from NEET (not in education, employment or training) for Māori	Infometrics, Auckland economic profile
	Proportion of youth employees identified as Māori and representation in Youth Advisory Panel	Auckland Council
	Percentage of Auckland Māori 18-24 years of age that voted in the local body election	Local Government New Zealand
	Number of mana whenua and mataawaka marae that received support to renew or upgrade marae infrastructure	Auckland Council
	Auckland's Māori asset base relative to rest of New Zealand asset base	New Zealand Institute of Economic Research
	Number of Māori businesses which had been through an ATEED programme or benefited from ATEED intervention	Auckland Council
	Number of Māori New Zealand Trade Enterprise Focus, Build and Start clients	New Zealand Trade Enterprise
	Regional Business Partners Funding to Māori businesses in Auckland	New Zealand Trade Enterprise
	Number of Māori organisations in Auckland accessing Callaghan Innovation Research and Development grants	Callaghan Innovation
	Percentage of Māori tourism businesses by region	Statistics New Zealand, Tatauranga umanga Māori
	Number of Auckland Council non-statutory co-governance/co-management arrangements	Auckland Council

OUTCOME	MEASURES	SOURCE
MĀORI IDENTITY AND WELLBEING (continued)	Number of iwi that have signed a formal relationship agreement with the Governing Body (out of 19)	Auckland Council
	Number of iwi that have signed a formal relationship agreement with the Local Boards in Auckland (out of 21)	Auckland Council
	Proportion of Māori in management positions (Chief Executives, general managers and legislators) in Auckland	Statistics New Zealand, Census of population and dwellings
	Percentage of Auckland Māori that feel they have some/large influence on Council decision making process	Auckland Council Quality of life Survey
	Percentage of Auckland Māori that feel they have confidence in their local council's decision making	Auckland Council Quality of life Survey
	Self-rated te reo Māori proficiency of Auckland Māori (able to speak no more than a few words or phrases)	Statistics New Zealand Te Kupenga
HOMES AND PLACES	Auckland population projections by age group	Statistics New Zealand, Population projections
	Percentage of Auckland homes consented to within 1500m distance of the rapid transport network	Auckland Council, Building consents
	Number of dwellings consented by location (across Auckland) and type	Auckland Council, Building consents
	Number of new dwellings issued in Auckland with code of compliance certificates	Auckland Council, Building consents
	Number, type and value of Auckland residential forecasts	Ministry of Business, Innovation and Employment, National construction pipeline report
	Auckland survey respondents that agree/strongly agree that their housing suits their needs and the needs of others in their household	Auckland Council Quality of life Survey
	The 30 per cent gross income benchmark i.e. whether a household pays no more than 30 per cent of its gross income on housing costs	Statistics New Zealand, Census of population and dwellings
	Auckland survey respondents who disagree/strongly disagree that their housing costs are affordable (housing costs included things like rent or mortgage, rates, house insurance and house maintenance)	Auckland Council Quality of life Survey
	Number of Aucklanders without shelter and no other option to acquire safe and secure housing (includes sleeping rough or living in a car, living in temporary or emergency accommodation such as night shelters, refuges, as well as living in uninhabitable housing, such as dilapidated dwellings or garages)	Statistics New Zealand
	Median Multiple Measure i.e. ratio between median house price to annual household income	Demographia, Demographia survey
	Percentage potential first home buyers that would spend over 30 per cent of their incomes on housing	Ministry of Housing and Urban Development, Housing per cent buy
	Percentage of renters in Auckland whose rent is more than 30 per cent of their household income	Ministry of Housing and Urban Development, Housing per cent rent
	Number of empty dwellings in Auckland	Statistics New Zealand, Census of population and dwellings
	Number of social housing dwellings by provider	Statistics New Zealand, Census of population and dwellings

OUTCOME	MEASURE	SOURCE
HOMES AND PLACES (continued)	Total number of people on the Public Housing Register in Auckland	Ministry of Social Development Housing Register statistics
	Number of public houses in Auckland	Ministry of Social Development Housing Register statistics
	Number of transitional housing places in Auckland	Ministry of Social Development Housing Register statistics
	Government spend on emergency housing special needs grants in Auckland	Ministry of Social Development National Benefit Tables
	Number of people receiving the Accommodation Supplement in Auckland	Ministry of Social Development, National benefit tables
	Value of housing subsidies	Salvation Army, Beyond renting
	Number of privately owned dwellings and composition of those households in Auckland	Statistics New Zealand, Census of population and dwellings
	Number, ethnicity and Auckland local board areas of people living in crowded households (crowded households are classified according to the presence, number and type of family nuclei, and the presence of related and unrelated people)	Statistics New Zealand, Census of population and dwellings
	Auckland survey respondents who agree/strongly agree they feel a sense of pride in their local area	Auckland Council, Quality of life survey
	Auckland survey respondents that agree/strongly agree their city or local area is a great place to live	Auckland Council, Quality of life survey
	Labour productivity for the building and construction industry (annual percentage change)	Statistics New Zealand, Business demography
	Percentage of construction firms still trading (from 10 years ago)	Statistics New Zealand, Business demography
	Percentage of houses with some form of prefabrication incorporated	Moradibistouni & Gjerde, 2017 report
	Auckland employment in residential building construction sector	Statistics New Zealand, Business demography
	Percentage and number of households that are rented, and owner-occupied	Statistics New Zealand, Census of population and dwellings
	Percentage of Auckland households that rent	Statistics New Zealand, Census of population and dwellings
	Average rent increase in Auckland compared with average income increase (annual)	Salvation Army, Beyond renting
	Auckland survey respondents that state they have damp homes some/all of the time	Auckland Council, Quality of life survey
	Number of Auckland homes always having mould present (over A4 paper size)	Statistics New Zealand, Census of population and dwellings
	Rental dwellings in Auckland that are damp or have mould	Statistics New Zealand, Census of population and dwellings

OUTCOME	MEASURES	SOURCE
HOMES AND PLACES (continued)	Auckland residents that state their house or flat is colder than they would like	Statistics New Zealand, Wellbeing statistics
	Percentage of Auckland Māori that own their own home	Statistics New Zealand, Census of population and dwellings
	Percentage of those living without shelter or living in temporary accommodation that are Māori	Ira Mata Ira Tangata, Auckland's homeless count
	Percentage of Māori that live in crowded households	Statistics New Zealand, Census of population and dwellings
TRANSPORT AND ACCESS	Percentage of jobs within reasonable travel time from home (30 minutes by car or 45 minutes by public transport) of average Aucklander	Auckland Forecasting Centre
	Total and per capita delay (minutes) across the network based on the projected volume of traffic divided by its theoretical capacity (VC ratio)	Auckland Forecasting Centre
	Congestion levels on motorway and key arterials	Auckland Transport Alignment Project
	Percentage of trips made by public transport, walking and cycling during the AM peak	Auckland Forecasting Centre
	Fuel sales for diesel and petrol (percentage change over 12 months)	Auckland Transport Alignment Project
	Average weekly transport costs (transport costs contain expenditure on vehicle purchases, private transport supplies and services, and passenger transport services, spending on petrol, vehicle parts and servicing, and travel by rail, road, air and sea)	Statistics New Zealand, Household economic survey
	Auckland survey respondents that agree/strongly agree that public transport is easy to get to	Auckland Council, Quality of life survey
	Auckland survey respondents that agree/strongly agree that public transport is frequent	Auckland Council, Quality of life survey
	Auckland survey respondents that agree/strongly agree that public transport is reliable	Auckland Council, Quality of life survey
	Auckland Māori survey respondents that agree/strongly agree that public transport is affordable, frequent and reliable	Auckland Council, Quality of life survey
	Tonnes of harmful emissions from land transport emitted per year (apportioned harm from exposure to air pollutants from land transport)	Auckland Council, Auckland's greenhouse gas inventory
	Number of individual deaths recorded by NZ Police Traffic Crash Reports (TCRs) on all local roads, state highways and motorways within the Auckland Council boundary during a calendar year	New Zealand Transport Authority, Crash analysis system
	Number of serious injuries recorded by NZ Police Traffic Crash Reports (TCRs) on all local roads, state highways and motorways within the Auckland Council boundary during a calendar year	New Zealand Transport Authority, Crash analysis system
	Tonnes of harmful emissions from marine transport emitted per year (apportioned harm from exposure to air pollutants from marine transport)	Auckland Council, Auckland's greenhouse gas inventory
	Kilotonnes of CO2 equivalent (transport related)	Auckland Council, Auckland's greenhouse gas inventory
	Proportion of greenhouse gas emissions attributed to transport	Auckland Council, Auckland's greenhouse gas inventory

OUTCOME	MEASURES	SOURCE
TRANSPORT AND ACCESS (continued)	Auckland survey respondents that agree/strongly agree they always or frequently use public transport	Auckland Council, Quality of life survey
	Auckland survey respondents that agree/strongly agree they always or frequently use public transport (school leavers to those under 25 years of age)	Auckland Council, Quality of life survey
	List of investments in rapid transit, strategic roading, greenfield transport infrastructure, safety programmes, walking and cycling and bus and ferry improvements	Auckland Council
	Number and type of small personal transport devices (such as e-scooters, e-skateboards and monowheels)	Auckland Council
	Number of p-endorsements (required for carrying passengers in private vehicles)	New Zealand Transport Authority
	Number (and percentage increase) of Auckland public transport boardings	Auckland Transport Alignment Project
	Number (and percentage increase) of Auckland rail boardings	Auckland Transport
	Number (and percentage increase) of Auckland bus boardings	Auckland Transport
	Number (and percentage increase) of Auckland ferry boardings	Auckland Transport
	Kilometres of cycle way available and new cycleway being laid in Auckland	Auckland Transport Alignment Project
	Number of cycle movements past selected count sites in Auckland	Auckland Transport Alignment Project
	Auckland survey respondents that agree/strongly agree that public transport is easy to get to	Auckland Council, Quality of life survey
	Number of dwellings consented to within 1500m of the rapid transport network	Auckland Council, Building consents
	Number of dwellings enabled to be built in major greenfield growth areas, near rapid transport networks	Auckland Council, Building consents
	Number of individual deaths and serious injuries recorded by NZ Police Traffic Crash Reports (TCRs) on all local roads, state highways and motorways by local boards in Auckland	New Zealand Transport Authority, Crash analysis system
	Auckland and Auckland Māori survey respondents that agree/strongly agree that public transport is safe to use	Auckland Council, Quality of life survey
	Per capita transport emissions (for populations over 1 million)	Auckland Council, Auckland's greenhouse gas inventory
	Percentage of Auckland transport related waste from construction and demolition projects that is recycled	Auckland Transport Alignment Project
	Percentage of material used in Auckland road corridor maintenance contracts that is recycled	Auckland Transport Alignment Project
	ENVIRONMENT AND CULTURAL HERITAGE	Tracks in Auckland regional parks that meet a kauri safe standard
Percentage and type of land use capability (LUC) encroached on for various forms of development in Auckland		Landcare Research New Zealand, Land information systems
Percentage of native forest cover in Auckland		Auckland Council, State of environment report
Number of new plant species naturalizing in Auckland		Auckland Council, State of environment report
Control of weed and pest animals in Auckland's local and regional parks and priority ecosystem		Auckland Council, State of environment report
Percentage of Auckland survey respondents that are aware of, understand and have an appreciation for Auckland's cultural heritage		Auckland Council, People's panel

OUTCOME	MEASURES	SOURCE
ENVIRONMENT AND CULTURAL HERITAGE (continued)	Number of visitors to Auckland's cultural heritage attractions	Auckland Council, Auckland's heritage counts
	Improvement of water quality variables at 12 monitored sites in Auckland	Auckland Council, State of environment report
	E.coli levels in monitored streams in Auckland	Auckland Council, State of environment report
	Sediment accumulation and benthic invertebrates in estuaries in Auckland	Auckland Council, State of environment report
	Proportion of time beaches are safe for swimming in summer in Auckland	Auckland Council, State of environment report
	Sea level rise projections	Auckland Council, RIMU technical report TR2019/11
	Percentage of Auckland's buildings exposed to flood hazards (floor flooding in a 100-year flood event)	Auckland Council, RIMU technical report TR2019/11
	Hectares of land under group stewardship (including pest control and/or restoration) in Auckland	Auckland Council
	Number of conservation advocates and number of community groups funded for community led pest control and ecological restoration work, tools and resources	Auckland Council
	Percentage of Auckland schools engaged in sustainability education programmes	Auckland Council
	Number and value of regional environment and natural heritage grants in Auckland	Auckland Council
	Number and quality of grant applications from Auckland Council's waste minimisation and innovation fund	Auckland Council
	Number of hectares of native ecosystems in the Auckland urban area	Auckland Council
	Total stationary and transport energy as percentage of gross emissions	Auckland's greenhouse gas inventory
	Combined commercial and domestic waste to landfill in Auckland per person (annual)	Auckland Council
	Domestic waste to landfill per household per year in Auckland	Auckland Council
	Projected waste generation to landfill over next 20 years	Auckland Council
	Frequency and severity of extreme weather events	Auckland Council, RIMU technical report TR2019/019
	Auckland beach profile erosion	Auckland Council, RIMU technical report TR2019/019
	Sea surface water temperature in the Kaipara, Manukau, and Waitemata harbours	Auckland Council, RIMU technical report TR2019/019
	Number of Auckland historic heritage places being protected, including Māori cultural heritage	Auckland Council, Auckland's heritage counts
	Number of Auckland cultural or historic heritage places in flood sensitive or flood prone areas	Auckland Council, Auckland's heritage counts
	Number of protected Auckland heritage buildings requiring seismic strengthening within 35 years	Auckland Council, Auckland's heritage counts
	Number of protected Auckland heritage buildings in sea spray areas	Auckland Council, Auckland's heritage counts
	Water consumption (total) for Auckland	Watercare
	Proportion of greenhouse gas emissions attributed to transport	Auckland Council, Auckland's greenhouse gas inventory
	Kilotonnes of CO2 equivalent (transport related)	Auckland Council, Auckland's 's greenhouse gas inventory
	Percentage of Auckland dwellings consented to within 1500m of the rapid transit network	Auckland Council, Building consents

OUTCOME	MEASURES	SOURCE
OPPORTUNITY AND PROSPERITY	Auckland survey respondents' rating on how well income meets everyday needs (percentage that stated 'not enough money')	Auckland Council, Quality of life report
	Number and percentage of residents employed full-time or part-time	Statistics New Zealand, Household labour force survey
	Global Competitiveness Index 40 assessment of microeconomic and macroeconomic foundations of national competitiveness (defined as the set of institutions, policies, and factors that determine the level of productivity of a country)	World Economic Forum, Global competitiveness index
	Hectares of business zoned land under the Auckland Unitary Plan (i.e. zones that are classified as being in either the light Industry or Heavy Industry zones)	Auckland Council
	Contribution (\$m) of tourism to total Gross Domestic Product in Auckland	Infometrics, Auckland economic profile
	Percentage of working age residents not in employment (unemployed excludes people whose only job search method was to look at job advertisements in newspapers or online)	Statistics New Zealand, Household labour force survey
	Occupations in which Auckland has a significant shortage of skilled workers	New Zealand Immigration Services
	Average weekly wage of people over 15 years of age who work for wages or salaries or are self-employed	Statistics New Zealand, Household labour force survey
	Average weekly paid hours of part time plus full time employees (of businesses that employ more than two people)	Statistics New Zealand, Quarterly employment survey
	Number of employed (full and part-time combined) as a percentage of the working age population	Statistics New Zealand, Household labour force survey
	Highest level of education attained for the Auckland regional labour force aged 15 and over (includes NCEA Level 1, 2 and 3 school qualifications, Honours, Masters and Doctorate degrees and Highest Qualification unidentifiable, Other NZ Secondary School Qualification, and Qualification Not Stated)	Statistics New Zealand, Census of Population and Dwellings
	Number of people employed in Knowledge Intensive industries as a percentage of total employment in all industries (Knowledge Intensive is defined as industries where at least 25 per cent of the workforce must be qualified to degree level and at least 30 per cent of the workforce must be employed in professional, managerial, as well as scientific and technical occupations)	Infometrics, Auckland economic profile
	Net percentage of business respondents (in Auckland) that find it easier, harder or the same level of difficulty in finding skilled and unskilled labour than three months ago	New Zealand Institute of Economic Research, Quarterly Survey of Business Opinion
	Number of skilled/business migrants to Auckland approved for residency	Ministry of Business, Innovation and Employment
	Percentage of Auckland's total employed by skill level category 'highly skilled'	Infometrics, Auckland economic profile
	Percentage of Auckland's young people 20-24 years of age with a qualification registered on the New Zealand Qualifications Framework (NZQF) at Level 4 or above	Statistics New Zealand, Household labour force survey
	Number of people brought into work through Auckland's jobs and skills hubs	Auckland Council
	Percentage of Auckland survey respondents under 65 years of age to the World Internet Project New Zealand survey of internet usage who gave their household income information, by categories of internet user status and household income brackets	Auckland University of Technology, World internet project
	Percentage of Auckland residents that connect to the Internet with three or more device types	Auckland University of Technology, World internet project

OUTCOME	MEASURES	SOURCE
OPPORTUNITY AND PROSPERITY (continued)	Percentage of Auckland households that have connected to ultrafast broadband where it is available	Ministry of Business, Innovation and Employment
	Auckland's Gross Domestic Product per employed person (in constant 2019 prices)	Infometrics, Auckland economic profile
	Auckland's ranking in world cities in relation to ease of doing business and innovation	World Bank Group, Ease of doing business index
	Percentage of Auckland businesses that undertook research and development over the last 12 months	Auckland Council, Business survey
	Employment in creative industries (as a percentage of total employment) in Auckland	Infometrics, Auckland economic profile
	Average weekly wage of Auckland Māori (over 15 years of age who work for wages or salaries or are self-employed)	Statistics New Zealand, Household labour force survey
	Percentage of working age Māori residents not in employment	Statistics New Zealand, Household labour force survey
	Auckland Māori survey respondents rating on how well income meets everyday needs (percentage stating 'not enough money')	Auckland Council, Quality of life survey
	Value of goods exported (annual percentage growth) that was estimated to be produced in Auckland (assuming Auckland exports the same proportion as New Zealand for each industry)	Ministry of Business, Innovation and Employment
	Percentage growth in international visitor arrivals to Auckland	Infometrics, Auckland economic profile
	Tourism spend (percentage increase, total domestic spend, total international spend, total accommodation spend)	Infometrics, Auckland economic profile
	Number of people 15-24 years of age who are not in employment, education or training (NEET) as a percentage of the population of that age group in Auckland	Statistics New Zealand, Household labour force survey
	Percentage of Auckland population (15 years of age and over) with a bachelor's degree or level 7, or higher qualification	Statistics New Zealand, Census of population and dwellings
	Percentage of Auckland school leavers staying until at least their 17th birthday	Ministry of Education, Education counts
	Percentage of Auckland new entrants' that had prior participation in early childhood education	Ministry of Education, Education counts
	Number of Auckland tertiary students enrolled in industry training, including apprenticeships one year after leaving school	Ministry of Education, Education counts
	Levels of prosperity for skills, labour force and household prosperity by local boards in Auckland	Martin Jenkins, Prosperity Index

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Prepared for Auckland Council.



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Auckland Plan 2050 Three Yearly Progress Report, February 2020

ISBN 978-1-99-002218-0 (Print)

ISBN 978-1-99-002219-7 (PDF)

The Auckland Plan 2050 Three Yearly Progress Report was approved by the Auckland Council Planning Committee on 5 March 2020. This document provides an overview of progress towards the Auckland Plan 2050 outcomes as at February 2020. The information has been obtained from sources believed to be reliable and accurate at the date of preparation, but its accuracy, correctness and completeness cannot be guaranteed. At the time of writing, the impacts of COVID-19 were developing and unknown and are therefore not reflected in this report. Please note that the Auckland Plan 2050 is a digital plan and updates will be provided on the Auckland Plan website theaucklandplan.govt.nz

