AUCKLAND PLAN 2050

2023 Annual Monitoring Report

August 2023

Auckland Council

Te Kaunihera o Tāmaki Makaurau

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Please note that the Auckland Plan 2050 is a digital plan and updates will be provided on the Auckland Plan website theaucklandplan.govt.nz.

Auckland Plan, Strategy and Research Department.

Contents

Executive Summary

The Auckland Plan 2050 is a 30-year spatial plan for Auckland adopted in June 2018. The plan was updated in 2022. It provides broad direction to guide Auckland's growth and development while delivering on the six outcomes and the Development Strategy contained within the plan. The Development Strategy will be superseded by the Future Development Strategy once adopted.

Effective monitoring is fundamental to the successful implementation of the Auckland Plan 2050. It enables us to track progress and provides an ongoing evidence base to align our implementation and regulatory plans and funding programmes.

The Auckland Plan Annual Monitoring Report uses 33 measures for tracking progress against the outcomes in the Auckland Plan 2050. This is a high-level analysis of the trends. More detailed analysis is carried out as part of the Three Yearly Progress Report. The 2023 report was reported to the Planning Committee in March 2023 (and is available on the Auckland Plan website www.aucklandplan.govt.nz, in the measuring progress section).

This Annual Monitoring Report mostly uses data from 2022 or before, therefore the impacts of COVID-19 are captured in some instances. For other data on a range of areas, go to Auckland Council's Research and Evaluation Unit website at: https://knowledgeauckland.org.nz/.

The breadth of the Auckland Plan 2050 outcomes requires the annual monitoring report to use metrics and data sources which vary in terms of their availability and frequency. This means that there will not be updates for all measures.

Three of the 33 measures included in this report (new dwellings consented, new dwellings completed and zoned industrial land) are drawn from the Development Strategy monitoring framework, which is reported separately in October each year. The Development Strategy report provides a more comprehensive overview of growth, housing and land supply across the region.

This version of the report includes updated data from the Quality of Life survey 2022.

The challenges

New events, growing awareness of the urgency of existing issues, and geopolitical tensions have all contributed to greater uncertainty. The Auckland Plan 2050 identifies three interconnected challenges that must be addressed if we are to achieve the Auckland we want. These are:

Responding to population growth – Although the rate of population growth has slowed over the last couple of years due to border restrictions and a net internal migration decrease, Auckland must continue to plan for growth. More than 1.7 million people live in Auckland already. Over the next 30 years, this could increase by another 520,800 to reach 2.2 million people. More people put pressure on housing supply, housing affordability and infrastructure to accommodate growth.

Since 2014, there has been a continued increase in the number of new dwellings consented and issued with a code of compliance certificate. Apartments, townhouses, flats, units and other dwellings now comprise the majority of new dwellings consented (72 per cent). This has enabled more growth to occur within the existing urban area. Although population growth puts pressure on housing supply and infrastructure, households continue to spend around 22-23 per cent of their disposable income on housing.

Reducing environmental degradation - As Auckland grows, we will also need to spend more to mitigate the impacts of growth on the natural environment and the health of our waterways. Raising our ambitions in addressing climate change will provide major benefits including cleaner air and water.

Air quality has been improving for some sites across Auckland while greenhouse gas emissions continue to rise. The transport sector continues to be the largest contributor to greenhouse gas emissions. Increased native tree plantings and active management of threatened native plants and animals and native habitats

supports improvements in biodiversity. Stream water quality is highest (categorized as ‘good’) when the catchment land use is in native forest and open coast water quality remains in the ‘good’ category.

Sharing prosperity with all Aucklanders - we need to look after all Aucklanders and ensure that we provide assets and services fairly. We need to continually adapt our services to meet the changing needs of our communities.

Income, employment, health and education outcomes in Auckland have distinct patterns across different geographic areas. Secure and healthy housing is associated with better health and education outcomes not available to those living in short-term or unhealthy homes. We need to make sure we are not leaving anyone behind in our transition to a low carbon and resilient region.

We need to use our investment in assets and services to stimulate economic recovery and support our communities. While labour productivity and Aucklanders’ average wages have remained relatively unchanged and there is a downward trend overall in unemployment rates, unemployment levels for those aged 20-24 and Māori and Pacific Peoples have remained consistently higher than the overall level. Educational achievement of young people has been declining for some years.

These Auckland Plan challenges, and the six outcomes help to guide our short-term decisions so that they lead to the longer-term outcomes we want to achieve.

Below is a summary of findings based on the data and trends across the six outcomes:

 Belonging and Participation	This report provides updated data for one of the six measures for this outcome. The percentage of Aucklanders who rated their knowledge of Te Tiriti o Waitangi positively has declined slightly since 2018 (43%).
 Māori Identity and Wellbeing	One measure was updated this year. The proportion of Māori youth in education, employment or training is 78 per cent and remains below the baseline (81%). The proportion of Māori in jobs requiring higher qualifications (professionals and managers) has reached 43.5 per cent and exceeds the 2018 baseline (42.8%). The measure on Māori decision-making has been supplemented with new data on Māori voter turnout in local body elections. In the 2022 local body elections, 25 per cent of Māori voted.
 Homes and Places	Three of the five measures have been updated this year. The number of new dwellings consented in Auckland continues to reach record highs, and there is a clear shift to multi-unit dwellings. Housing costs as a percentage of household income have stayed largely the same. While there is no updated official data on homelessness since 2018, the need for housing support has increased, as evidenced by a much higher demand for public housing.
 Transport and Access	One measure and three sub-measures have been updated this year. Patronage numbers for public transport increased during 2022, however there was a decrease in cycling numbers. The number of serious injuries on Auckland's roads were higher than in 2021, but the number of fatalities were lower.
 Environment and Cultural Heritage	Updated data is provided for 13 sub-measures this year. Good progress is being made in protecting biodiversity through urban tree plantings and management of native habitats and species. Stream water quality continues to be highest ('good') in catchments with native forests. Open coast water quality continues to be 'good' (well protected), and lake water quality has improved for Lake Pupuke only. Air quality sub measures (fine particulate matter and NO_2 levels) are generally improved for the Penrose site and fluctuate above and below the baseline for all other sites. Reducing transport emissions is critical to achieving Auckland's climate goals.

 Opportunity and Prosperity	Six out of seven measures have been updated this year. Labour productivity has improved and remains above the national average. Average wages in Auckland increased across all ethnicities. The unemployment rate is the lowest it has been since 2008. Employment growth in advanced industries has recovered from a low in the previous year and outperforms employment growth in industries overall. Zoned industrial land had a net increase of 42 hectares between 2022 and 2023. The educational achievement of young people has declined between 2014 and 2021.

Summary of measures

The Auckland Plan Annual Monitoring Report uses 33 measures for tracking progress against the Auckland Plan 2050. Progress is reported as:

↑	Positive trend	The trend is tracking in the right direction (towards the outcome to be achieved).
↓	Negative trend	The trend is tracking in the wrong direction (away from the outcome to be achieved).
–	No significant change	Over the period measured, there has been little or no change.
•••	Insufficient data to determine a trend	There is not enough data to establish a trend.

The following tables provides a summary for each measure in terms of how they are tracking. Further detail on each measure is provided in the body of the report.

Belonging and Participation

AUCKLAND PLAN MEASURE		DATA (DATE)	TREND	DATA SOURCE
1	**Aucklanders' sense of community in their neighbourhood** Proportion of respondents to the Quality of Life Survey who strongly agree or agree they feel a sense of community in their local neighbourhood (%)	47% (2022)	–	Quality of Life Survey
2	**Aucklanders' sense of safety in their homes and neighbourhood** Proportion of respondents to the Quality of Life Survey who rate their feelings of personal safety as safe or very safe (%)	64% (2020)	–	Quality of Life Survey
3	**Aucklanders' quality of life** Proportion of respondents to the Quality of Life Survey who rate their overall quality of life positively (%)	82% (2022)	↓	Quality of Life Survey
4	**Relative deprivation across Auckland** Percentage of local board population with a Deprivation Index score of 8, 9 or 10	Not applicable – this measure enables comparison at the local level (2018)	•••	Stats NZ

AUCKLAND PLAN MEASURE		DATA (DATE)	TREND	DATA SOURCE
5	**Aucklanders' health** Proportion of respondents to the Quality of Life Survey who rated their physical and mental health positively (%)	70% (2022) *Physical Health* 65% (2022) *Mental Health*	– ↓	Quality of Life Survey
6	**Treaty of Waitangi awareness and understanding** Respondents to Council's resident survey who rate their knowledge of te Tiriti o Waitangi | the Treaty of Waitangi either very well or a fair amount (%)	43% (2023)	–	Auckland Council Resident Survey

Māori Identity and Wellbeing

AUCKLAND PLAN MEASURE		DATA (DATE)	TREND	DATA SOURCE
1	**Whānau wellbeing** Respondents of Māori ethnicity and/or descent who rate their whānau as doing well (%)	73.2% (2018)	•••	Stats NZ
2	**Māori in employment, education and training** Proportion of Māori youth in education, employment or training (%)	78% (2022)	–	Household Labour Force Survey
3	**Māori decision making** a) Number of co-governance/co-management arrangements	9 co-governed/ co-managed arrangements in place (2023)	–	Auckland Council
	b) Māori turnout - Local election: Auckland	25% (2022)	–	Auckland Council
4	**Te reo Māori across Tāmaki Makaurau** Respondents of Māori ethnicity and/or descent who rate their te reo proficiency as being able to speak te reo fairly well, well or very well	17.5% (2018)	•••	Stats NZ

Homes and Places

AUCKLAND PLAN MEASURE		DATA (DATE)	TREND	DATA SOURCE
1	**New dwellings consented** Number of dwellings consented by location and type (also a Development Strategy measure)	19,085 (2023)	↑	Stats NZ Building Consent Data
2	**Net new dwellings consented and completed** Number of dwellings issued with Code of Compliance Certificate (also a Development Strategy measure)	15,263 (2023)	↑	Auckland Council Code of Compliance Certificate data

AUCKLAND PLAN MEASURE		DATA (DATE)	TREND	DATA SOURCE
3	**Housing costs as a percentage of household income** Ratio of housing costs to disposable household income (%)	22.3% (2023)	–	Household Economic Survey
4	**Homelessness** Number of people living without shelter and in temporary accommodation	18,157 (data from 2018, analysis published in 2020)	•••	Stats NZ & Emergency Housing Provider Data
5	**Resident satisfaction with built environment at a neighbourhood level** Respondents to the Quality of Life Survey who agree they feel a sense of pride in their local area (%)	56% (2022)	↓	Quality of Life Survey

Transport and Access

AUCKLAND PLAN MEASURE		DATA	TREND	DATA SOURCE
1	**Access to jobs**			
	Proportion of jobs accessible to the average Aucklander in the morning peak within 30 minutes by car and 45 minutes by public transport (%)	33.9% of jobs are accessible within 30 minutes by car 9.8% of jobs are accessible within 45 minutes by public transport (2016 baseline)	•••	Auckland Forecasting Centre – Auckland Transport
2	**Delay from congestion**			
	a) Per capita annual delay from congestion (minutes)	921 minutes per capita (2016 baseline)	•••	Auckland Forecasting Centre
	b) Congestion in the arterial network in the AM peak period (%)	Annual congestion rate of 21% (2022)	–	Auckland Transport
3	**Use of public transport, walking and cycling**			
	a) Proportion of trips made by public transport, walking and cycling in the AM peak (%)	7.2% of trips made by public transport and 15.6% of trips made by active transport (walking and cycling) (2016 baseline)	•••	Auckland Forecasting Centre
	b) Annual number of public transport boardings (millions)	57.3 million (2022)	↓	Auckland Transport
	c) Number of cycle movements past selected count sites	2.88 million (2022)	↓	Auckland Transport

AUCKLAND PLAN MEASURE		DATA	TREND	DATA SOURCE
4	**Household transport costs**			
	Average household transport costs ($/wk)	$233.50 per week (2019)	–	Household Economic Survey
5	**Deaths and injuries from transport network**			
	Number of serious and fatal injuries	601 serious injuries (2022) 53 fatalities (2022)	–	Auckland Transport

Environment and Cultural Heritage

AUCKLAND PLAN MEASURE		DATA (DATE)		TREND	DATA SOURCE
1	**People's treasuring and stewardship of the natural environment and cultural heritage**				
	a) Aucklanders who value biodiversity	3.79 (2022)		–	Auckland Council
	b) Aucklanders engaged in environmental / conservation activity	Participation in (2022):		–	Auckland Council
		biosecurity risk-reducing behaviours	4.0	–	
		conservation activities at home	3.22	↑	
		conservation activities in the community	1.5		
	c) Number of initiatives with Māori, which protect and improve the environment, improve water quality and reduce pollution	To be developed		•••	
	d) Domestic kerbside (tonnes per annum)	188,238 (2023)		↓	Auckland Council
2	**Sustained management of priority native habitats**				
	a) Proportion of rural mainland Auckland under sustained management for possums	28% (2023)		↑	Auckland Council
	b) Proportion of priority native habitats on regional parks under sustained management for pest plants	50% (2023)		↑	Auckland Council

AUCKLAND PLAN MEASURE		DATA (DATE)		TREND	DATA SOURCE
	c) Number of native plants planted	761,451 (2023)		↑	Auckland Council
3	**Active management of threatened native plants and animals**				
	a) Number of plants and animals regionally vulnerable to extinction under active management	94 (2023)		↑	Auckland Council
	b) Number of species-led projects being delivered on Hauraki Gulf islands for the purpose of maintaining or achieving eradication of pest plants and pest animals	9 (2023)		–	Auckland Council
4	**Marine and freshwater quality**				
	a) Stream water quality (Water Quality Index – scale 1-100)	Native	89.7 (2021)	–	Auckland Council
		Exotic	69.8 (2021)		
		Rural	62.5 (2021)		
		Urban	52.7 (2021)		
	b) Lake water quality (Trophic Level Index – scale of 1-5+)	Pupuke	3.9 (2021)	–	Auckland Council
		Rototoa	3.3 (2021)		
		Tomarata	4.2 (2021)		
		Wainamu	4.1 (2019)		
	c) Coastal water quality (Coastal Water Quality Index – scale 1-100)	Open coast	82.7 (2022)	–	Auckland Council
		Estuary	63.1 (2022)		
		Tidal Creek	49.9 (2022)		
	d) Proportion of time Safeswim reference beaches are suitable for contact recreation	86.2% (2023)		↑	Auckland Council
5	**Air quality and greenhouse gas emissions**				
	a) Concentration of air pollutants (NO_2 µg/m³)	Glen Eden	6.9 (2022)	–	Auckland Council
		Henderson	9.3 (2022)		
		Patumahoe	4.6 (2022)		
		Penrose	14.1 (2022)		
		Queen Street	18.5 (2022)		
		Takapuna	13.4 (2022)		
	b) Concentration of fine particulate matter ($PM_{2.5}$ µg/m³)	Patumahoe	5.1 (2022)	–	Auckland Council
		Penrose	5.0 (2022)		
		Queen Street	8.1 (2022)		
		Takapuna	6.3 (2022)		

AUCKLAND PLAN MEASURE		DATA (DATE)		TREND	DATA SOURCE
	c) Greenhouse gas emissions (kilotonne CO_2e)	Gross 12,713 (2019) Net 11,516 (2019)		↓	Auckland's Greenhouse Gas Inventory
6	*Statutory protection of environment and cultural heritage*				
	a) Total area (ha) of scheduled Significant Ecological Areas	Terrestrial	79,123 (2023)	–	Auckland Council
		Marine	100,732 (2023)		
	b) Number of scheduled sites of significance to Mana Whenua	109 (2023)		↑	Auckland Council

Opportunity and Prosperity

AUCKLAND PLAN MEASURE		DATA (DATE)	TREND	DATA SOURCE
1	**Labour productivity** Real GDP per filled job ($)	$140,804 (2023)	↑	Auckland Economic Profile
2	**Aucklanders' average wages** Average weekly wages ($)	$1,337 (2023)	↑	Household Labour Force Survey
3	**Employment in advanced industries** Number of people employed in knowledge intensive industries	4.3% growth (versus 3.2% growth in total employment) (2022)	↑	Auckland Economic Profile
4	**Zoned industrial land** Zoned industrial land (ha) (also a Development Strategy measure)	6,362 hectares (2023)	–	Auckland Unitary Plan (Spatial Database Engine)
5	**Level of unemployment** Unemployment level (%)	3.4% (Mar 2023)	↑	Household Labour Force Survey
6	**Internet usage based on income** Proportion of respondents under 65 years of age using the internet by household income (%)	99% users 1% non-users (2021)	↑	World Internet Project New Zealand (WIPNZ)
7	**Educational achievement of young people** Percentage of those aged 20-24 with a Level 4 qualification or above (%)	34.6% (2022)	↓	Household Labour Force Survey

Future work and next steps

The measurement framework for the annual monitoring report will continue to change over time as the availability and quality of data improves. Any future changes (or proposed changes) to the data sets are noted below.

Belonging and Participation outcome

Safety is reported across a range of settings. The figure reported in the summary is for 'walking alone in their neighbourhood after dark'. This question was not included in the Quality of Life Survey 2022 although it did ask about sense of safety in the city centre. The question will be included in the Quality of Life Survey 2024.

Māori Identity and Wellbeing outcome

There has been no movement on Māori decision-making (Measure 3 Number of co-governance/co-management arrangements) since 2018, though there is one in abeyance. This has been supplemented with the level of Māori voter turnout in the general and local election, using the most recent elections as a baseline. However, election data occurs on a three-yearly cycle and may not be appropriate for 'annual' scorecard reporting.

A review of measure one (Whānau wellbeing) and measure four (te reo Māori across Tāmaki Makaurau) is needed. Both measures are dependent on Census data which occurs every five years or a subsequent Te Kupenga survey which has a 5-yearly frequency. These are not suitable data sources to support an 'annual' scorecard.

Homes and Places outcome

A greater focus on climate change may require additional measures in this area, for example, measures that capture compactness / population density near transit corridors and urban green space. Such measures will be further investigated and may be considered for inclusion in the annual scorecard from 2024.

Environment and Cultural Heritage outcome

New measures for this outcome were adopted by the Planning Committee in April 2021.

A supporting framework may be needed for Measure 1c (Number of initiatives with Māori which protect and improve the environment, improve water quality and reduce pollution) to facilitate data gathering.

Increased monitoring with a wider number of sites for air quality and water quality measures will occur over the coming years in response to new or updated national direction, in particular the National Environmental Standards for Freshwater, the National Policy Statement for Freshwater Management, and the National Environmental Standards for Air Quality. This means that use of the Water Quality Index is phased out in favour of new measures of integrated ecosystem health developed as part of the National Policy Statement for Freshwater Management.

Opportunity and Prosperity outcome

The current measure on internet use as related to household income is sourced from the World Internet Project Survey undertaken by the Auckland University of Technology. The results of the survey indicate that only two per cent of those on lower incomes are non-users of the internet. The measure of internet usage by income appears to be improving and becoming less of an issue as internet use is near saturation (99% for those aged 65 years and under). It is timely to explore other indicators of digital equity, such as digital literacy and/or access to devices. Alternative measures will be explored and may be proposed for the annual scorecard from 2023.

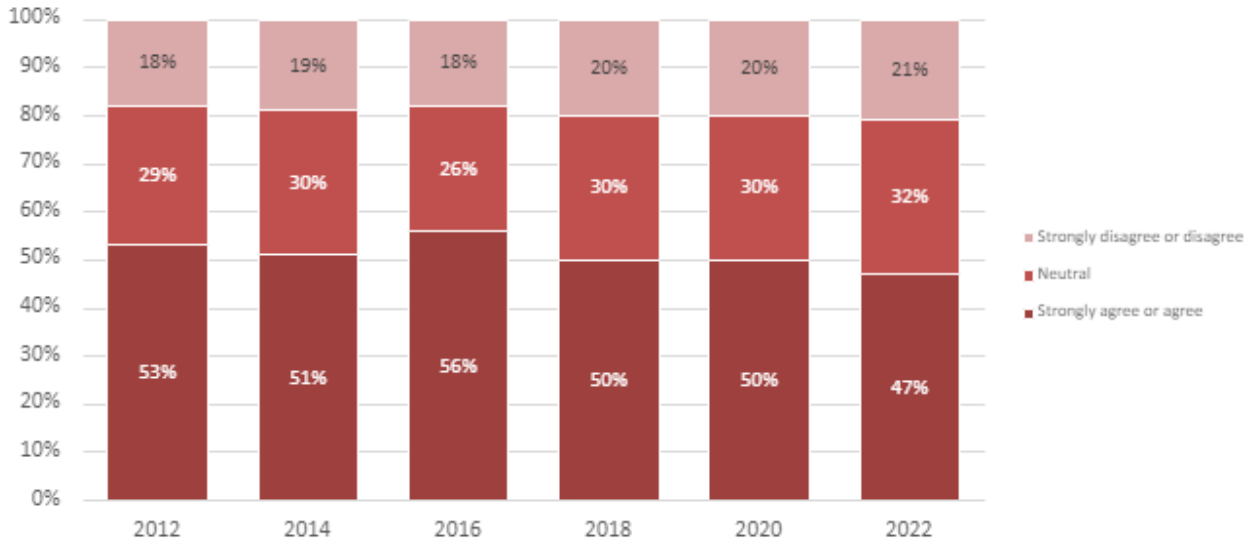
Outcome

Belonging and Participation

Measure 1

Aucklanders' sense of community in their neighbourhood

Respondents to the Quality of Life survey who rated their sense of community in their local neighbourhood



Data

Proportion of respondents to the Quality of Life Survey who report feeling a sense of community in their local neighbourhood.

Source

Auckland Council, Quality of Life Survey 2012, 2014, 2016, 2018, 2020 and 2022.

Frequency

Every 2 years.

Availability

The reports are available on Knowledge Auckland (www.knowledgeauckland.org.nz).

Note

From 2012, the Quality of Life survey method changed from a Computer-Assisted Telephone Interviewing (CATI) survey to an online self-complete survey. The 2018 survey used a sequential mixed-method methodology, enabling respondents to complete the survey either online or via a hard copy of the questionnaire. In 2020, respondents aged under the age of 35 years were only able to complete the survey online, unless they proactively requested a hard copy questionnaire to be sent to them. Respondents aged 35 years and over were able to complete the survey online or via hard copy as in previous years. In 2022, those aged 50 years and over were automatically sent a hard copy to complete if they had not completed the survey three weeks after a follow-up reminder. This was a methodology change from the 2020 survey.

Relevance

A sense of community is an important component of the liveability of a city, as it enables the establishment of social networks and builds social capital.

Baseline (2018)

In 2018, 50 per cent of Auckland respondents agreed that they felt a sense of community with others in their neighbourhood.

Analysis

Between 2012 and 2022, there was a decrease from 53 per cent to 47 per cent of respondents feeling a sense of community with others in their neighbourhood. Sense of community peaked at 56 per cent in 2016.

There is no new data for this measure this year.

Trend

- From 2012 to 2022, there has been no significant change.

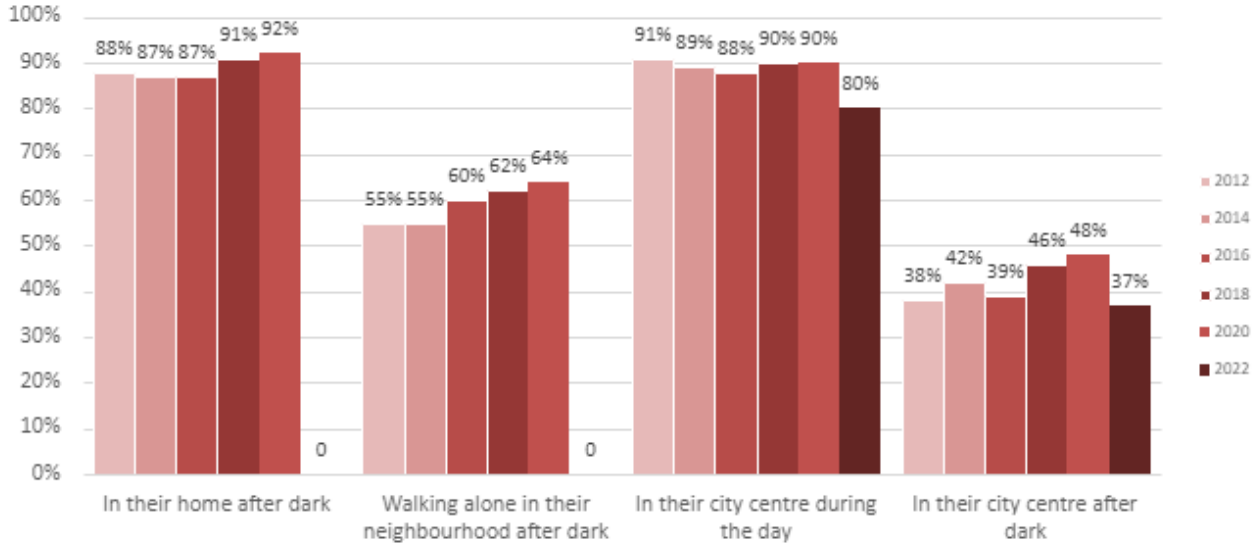
Outcome

Belonging and Participation

Measure 2

Aucklanders' sense of safety in their homes and neighbourhood

Respondents to the Quality of Life Survey who rated their sense of safety in their neighbourhood and city centre (%)



Data

Proportion of respondents to the Quality of Life Survey who rate their feelings of personal safety as very safe or fairly safe.

Source

Auckland Council, Quality of Life Survey 2012, 2014, 2016, 2018, 2020 and 2022.

Frequency

Every 2 years.

Availability

The reports are available on Knowledge Auckland (www.knowledgeauckland.org.nz).

Note

The Quality of Life Survey asks respondents whether they feel very unsafe, a bit unsafe, fairly safe or very safe in different situations, including walking alone in their neighbourhood after dark. From 2012, the Quality of Life survey method changed from a Computer-Assisted Telephone Interviewing (CATI) survey to an online self-complete survey. The 2018 survey used a sequential mixed-method methodology, enabling respondents to complete the survey either online or via a hard copy of the questionnaire. In 2020, respondents aged under the age of 35 years were only able to complete the survey online, unless they proactively requested a hard copy questionnaire to be sent to them. Respondents aged 35 years and over were able to complete the survey online or via hard copy as in previous years. In 2022, those aged 50 years and over were automatically sent a hard copy to complete if they had not completed the survey three weeks after a follow-up reminder. This was a methodology change from the 2020 survey.

Relevance

Perceptions of safety impact on the health and wellbeing of the individual, family and the wider community. If people feel unsafe, they are less likely to talk to their neighbours, use public transport, go out in the evening, use public amenities and generally participate in their communities.

Baseline (2018)

Ninety-one per cent of Auckland respondents felt safe in their home after dark. Sixty-two per cent of Auckland respondents felt safe walking alone in their neighbourhood after dark. Ninety per cent of Auckland respondents felt safe in their city centre during the day. Forty-six per cent of Auckland respondents felt safe in their city centre after dark.

Analysis

Between 2012 and 2022, there was a decline in respondents' feelings of safety across two of the four categories measured. Aucklanders' sense of safety in their home and walking alone in their neighbourhood after dark were not included in the Quality of Life Survey 2022. While a high proportion of Auckland respondents reported feeling 'very safe' or 'fairly safe' (80 per cent) in the city centre during the day, this proportion dropped to 37 per cent when considering their sense of safety in the city centre after dark.

There is no new data for this measure this year.

Trend

- From 2012 to 2020, positive trends for Aucklanders' sense of safety in their neighbourhood. From 2020 to 2022, negative trends for Aucklanders' sense of safety in the city centre during the day and after dark.

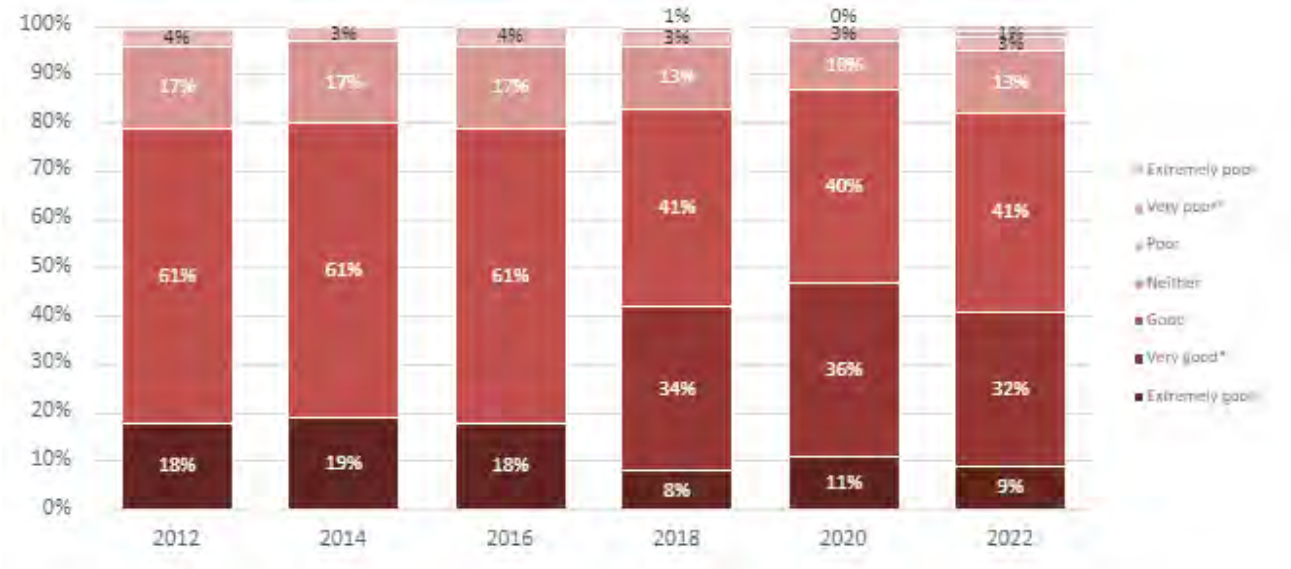
Outcome

Belonging and Participation

Measure 3

Aucklanders' rating of their quality of life

Respondents to the Quality of Life Survey who rate their overall quality of life positively (%)



Data

Proportion of respondents to the Quality of Life Survey who rated their overall quality of life positively.

Source

Auckland Council, Quality of Life Survey 2012, 2014, 2016, 2018, 2020 and 2022.

Frequency

Every 2 years.

Availability

The reports are available on Knowledge Auckland (www.knowledgeauckland.org.nz).

Note

Respondents were asked to rate their overall quality of life and to also indicate the extent to which they felt their quality of life had changed from 12 months prior. Note that the 2012 Quality of Life survey method changed from a Computer-Assisted Telephone Interviewing (CATI) survey to an online self-complete survey. The 2018 survey used a sequential mixed-method methodology, enabling respondents to complete the survey either online or via a hard copy of the questionnaire. In 2020, respondents aged under the age of 35 years were only able to complete the survey online, unless they proactively requested a hard copy

questionnaire to be sent to them. Respondents aged 35 years and over were able to complete the survey online or via hard copy as in previous years. In 2022, those aged 50 years and over were automatically sent a hard copy to complete if they had not completed the survey three weeks after a follow-up reminder. This was a methodology change from the 2020 survey.

Relevance

Aucklanders' perception of their quality of life is central to their health and wellbeing. Satisfaction with overall quality of life is a measure of subjective wellbeing. A number of factors contribute to satisfaction with quality of life, which are further explored in the Quality of Life survey.

Baseline (2018)

Forty-two per cent of Auckland respondents rated their quality of life as extremely or very good. Forty-one per cent of Auckland respondents rated their quality of life as good. Thirteen per cent of Auckland respondents rated their quality of life as neither good nor poor. Four per cent of Auckland respondents rated their quality life as poor or very poor. No Auckland respondents rated their quality of life as extremely poor.

Analysis

Due to the change to a 7-point scale for the 2018 survey, it is difficult to draw a direct comparison to results prior to 2018. Between 2018 and 2020, there was an increase in Aucklanders who rate their quality of life as good, very good or extremely good from 83 per cent to 87 per cent. This declined to 82 per cent in 2022.

In 2022, Māori and Pacific People were less positive about their quality of life than Aucklanders as a whole, with 76% and 66% rating their overall quality of life as 'good', respectively.

There is no new data for this measure this year.

Trend

↓ From 2020 to 2022, a negative trend.

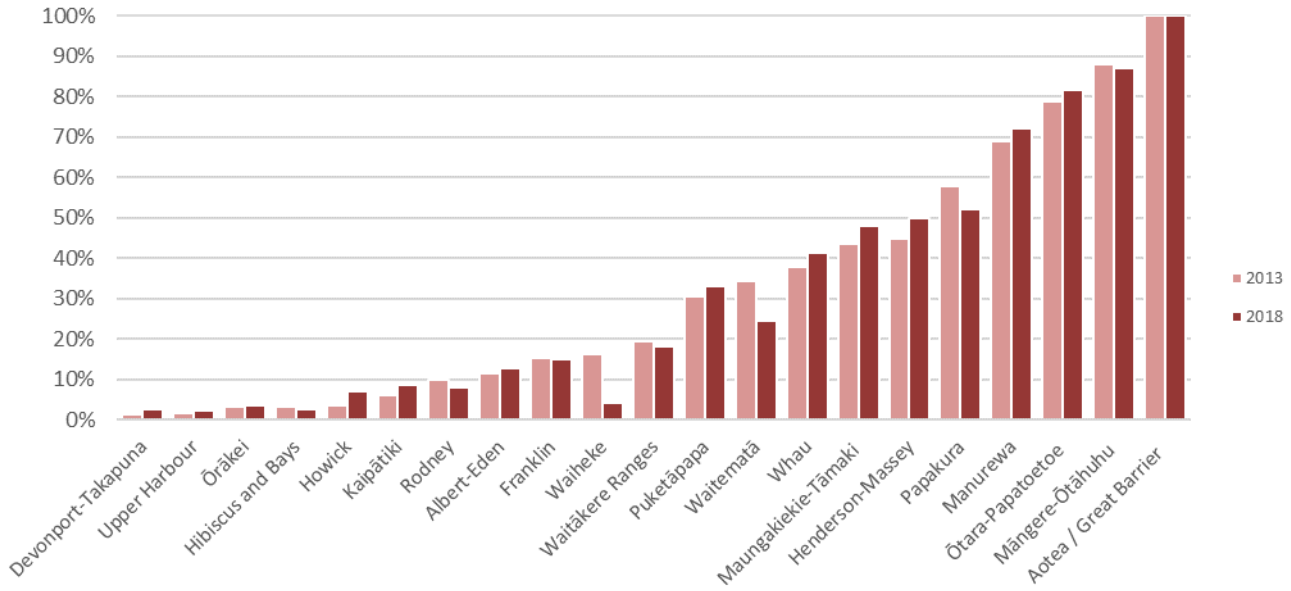
Outcome

Belonging and Participation

Measure 4

Relative deprivation across Auckland

Percentage of local board population with a Deprivation Index of 8,9 or 10



Data

Socio-economic Deprivation Index (NZDep).

Source

Department of Public Health, University of Otago, Wellington.

Frequency

The deprivation index is produced after each census, generally every 5 years.

Availability

Deprivation index data can be downloaded from the “New Zealand Indices of Deprivation” section of the University of Otago website, where more technical details about the index can also be found. (https://www.otago.ac.nz/wellington/departments/publichealth/research/hirp/otago020194.html)

Note

The deprivation index assigns a value to Census Area Units (CAUs) across New Zealand as a way to indicate relative socio-economic deprivation. The index is not a measure of absolute deprivation (the lower the number, the lower the relative deprivation). The index is calculated via a number of census variables from the following themes: access to communications, income, employment, qualifications, home ownership, single-parent family status, living space and access to private transport.

Relevance

The deprivation index allows investigation of spatial patterns of relative socio-economic deprivation, which can be used in planning both council and community projects.

Baseline (2018)

Not applicable at the regional level, this measure is only meaningful at the local level.

Analysis

In three local board areas (Waiheke, Waitematā and Papakura local board areas), the percentage of residents living in areas with a high deprivation index value declined significantly indicating that there is now less socio-economic deprivation in these areas. In other local board areas, the percentage of residents living in areas with a high deprivation index value rose slightly or stayed the same.

There is no new data for this measure this year.

Trend

••• This measure shows meaningful change in deprivation at the local level, but at the regional level, deprivation levels average out (because it is a relative measure).

Outcome

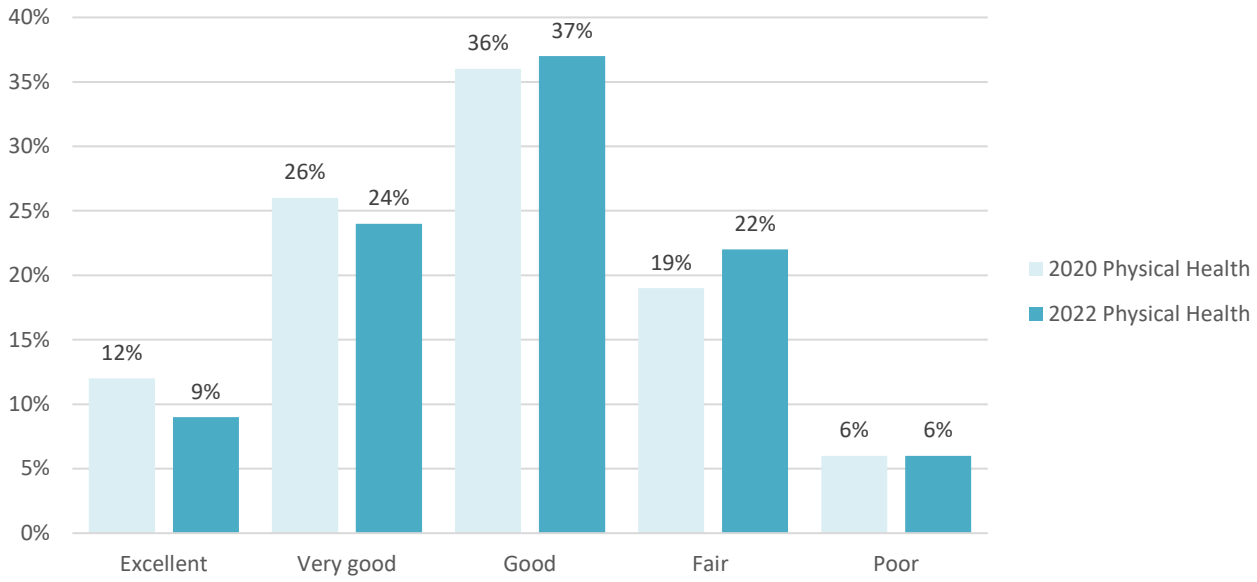
Belonging and Participation

Measure 5

Aucklanders' health

Measure 5a. Aucklanders' physical health

Respondents to the Quality of Life Survey who rate their physical health (%)



Data

Proportion of respondents to the Quality of Life Survey who rated their physical health positively.

Source

Auckland Council, Quality of Life Survey 2020 and 2022.

Frequency

Every 2 years.

Availability

The reports are available on Knowledge Auckland (www.knowledgeauckland.org.nz).

Note

Respondents were previously asked to rate their general overall health. In 2020, respondents aged under the age of 35 years were only able to complete the survey online, unless they proactively requested a hard copy questionnaire to be sent to them. Respondents aged 35 years and over were able to complete the survey online or via hard copy as in previous years. In 2022, those aged 50 years and over were automatically sent a hard copy to complete if they had not completed the survey three weeks after a follow-up reminder. This was a methodology change from the 2020 survey.

This question was changed in 2020 to ask respondents to rate their 'physical health' and 'mental health' separately.

Relevance

Good physical health is critical to wellbeing as it enables people to participate in society and the economy. Without good physical health, people are less able to enjoy their lives to the fullest extent, and their options may be limited. Self-rated physical health is a widely used indicator of health status and has been shown to have a strong relationship with objective measures of health status.

Baseline (2020)

Seventy-four per cent of Auckland respondents rated their physical health as good, very good or excellent. Nineteen per cent of Auckland respondents rated their physical health as fair. Six per cent of Auckland respondents rated their physical health as poor.

Analysis

The proportion of respondents who rated their physical health positively (excellent, very good and good) declined from 74 per cent in 2020 to 70 per cent in 2022.

Pacific People and Māori were less likely to rate their physical health as good, very good or excellent, compared with Aucklanders in general (62% and 53% respectively).

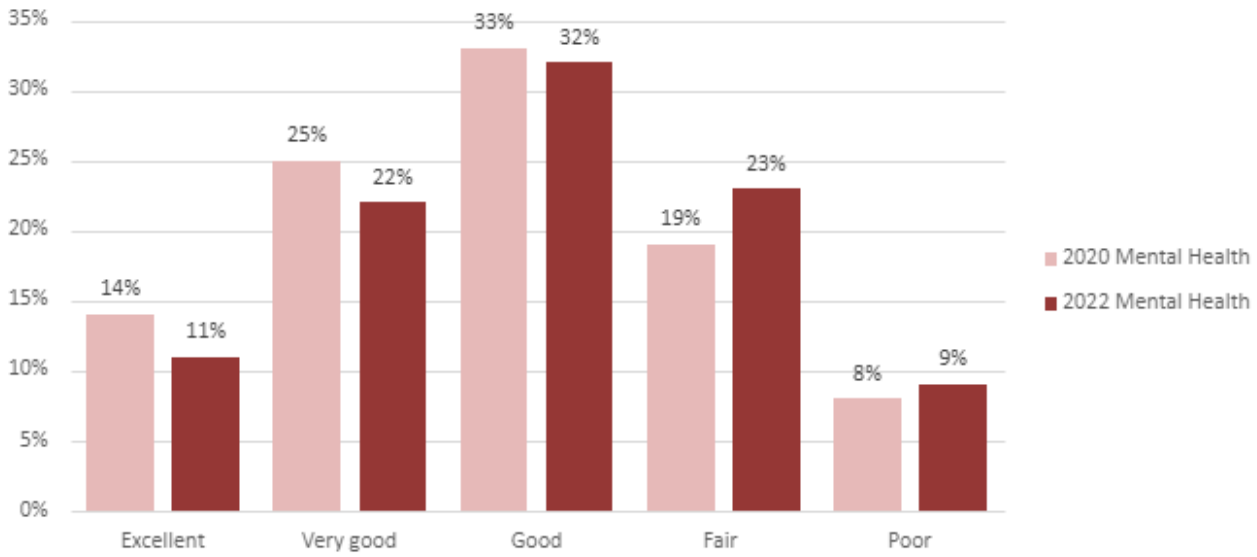
There is no new data for this measure this year.

Trend

- From 2020 to 2022, no significant change.

Measure 5b. Aucklanders' mental health

Respondents to the Quality of Life Survey who rate their mental health (%)



Data

Proportion of respondents to the Quality of Life Survey who rated their mental health positively.

Source

Auckland Council, Quality of Life Survey 2020 and 2022.

Frequency

Every 2 years.

Availability

The reports are available on Knowledge Auckland (www.knowledgeauckland.org.nz).

Note

In 2020, respondents aged under the age of 35 years were only able to complete the survey online, unless they proactively requested a hard copy questionnaire to be sent to them. Respondents aged 35 years and over were able to complete the survey online or via hard copy as in previous years. In 2022, those aged 50 years and over were automatically sent a hard copy to complete if they had not completed the survey three weeks after a follow-up reminder. This was a methodology change from the 2020 survey.

Relevance

Good mental health is critical to wellbeing as it enables people to participate in society and the economy. Without good mental health, people are less able to enjoy their lives to the fullest extent, and their options may be limited. Self-rated mental health is a widely used indicator of health status and has been shown to have a strong relationship with objective measures of health status.

Baseline (2020)

Seventy-two per cent of Auckland respondents rated their mental health as good, very good or excellent. Nineteen per cent of Auckland respondents rated their mental health as fair. Six per cent of Auckland respondents rated their health as poor.

Analysis

The proportion of respondents who rated their mental health positively (excellent, very good and good) declined from 72 per cent in 2020 to 65 per cent in 2022.

Pacific people were less likely to rate their mental health as ‘good’ (50%).

There is no new data for this measure this year.

Trend

↓ From 2020 to 2022, a negative trend.

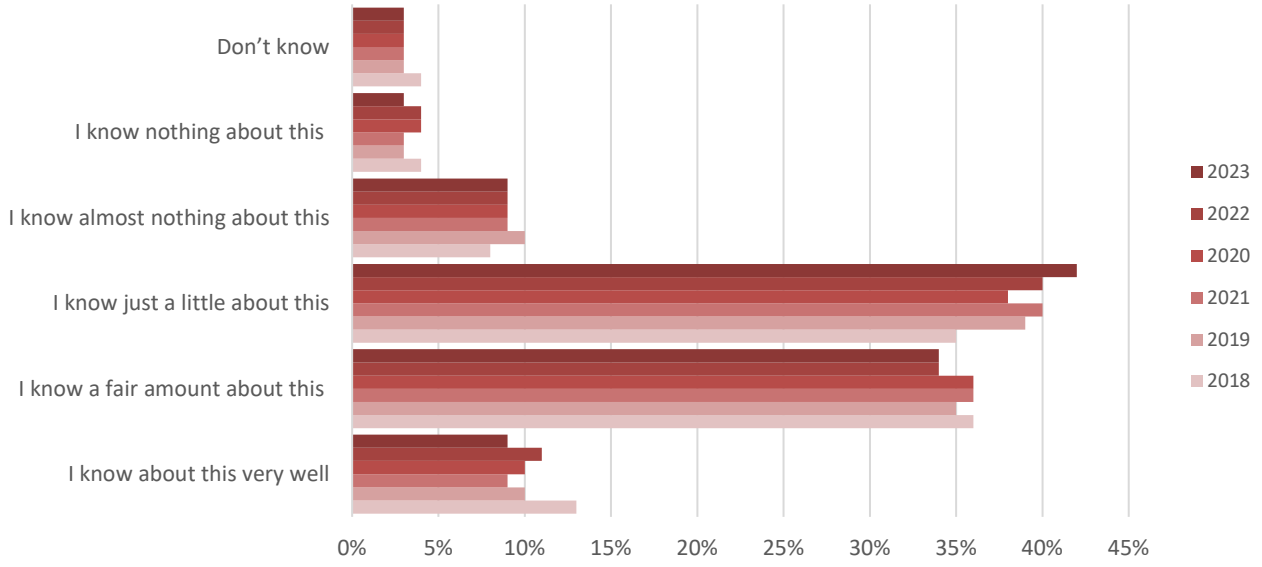
Outcome

Belonging and Participation

Measure 6

Treaty of Waitangi awareness and understanding

Respondents to the Council's Resident Survey who rate their knowledge of te Tiriti o Waitangi - the Treaty of Waitangi



Data

Respondents to council's resident survey who rate their knowledge of Te Tiriti o Waitangi - the Treaty of Waitangi.

Source

Auckland Council – Citizen Engagement and Insights.

Frequency

Annual.

Availability

On request from Auckland Council.

Note

The survey primarily measures respondents' use of, and satisfaction with, a range of council services. It is conducted using a mix of online, phone and face-to-face interviews among Auckland residents aged 15 years and over. In 2023, 4,177 respondents took part in the survey.

Relevance

Te Tiriti o Waitangi - the Treaty of Waitangi is important as a 'living document', central to New Zealand's present and future, as well as its past. It provides the basis for all people to belong, while recognising Māori as tangata whenua. Valuing and better understanding the Treaty contributes to our shared identity and sense of belonging.

Baseline (2018)

In 2018, respondents to Council's resident survey rated their knowledge of Te Tiriti o Waitangi - the Treaty of Waitangi accordingly:

- 13 per cent considered they knew it very well
- 36 per cent considered they had a fair amount of knowledge
- 35 per cent considered they knew just a little
- 8 percent considered they knew almost nothing
- 4 per cent considered they knew nothing about the Treaty of Waitangi
- 4 per cent said they didn't know their knowledge level.

Analysis

Between 2018 and 2023, there has been no significant change in how Auckland residents rate their knowledge of Te Tiriti o Waitangi - the Treaty of Waitangi. In 2023, there was a small decrease in the number of residents who consider that they know the Treaty very well or have a fair amount of knowledge (from 45% to 43%). Similarly, there was a small increase in the number of residents who consider they know just a little or almost nothing about the Treaty in 2023 (51%).

Trend

- From 2018 to 2023, there has been no significant change.

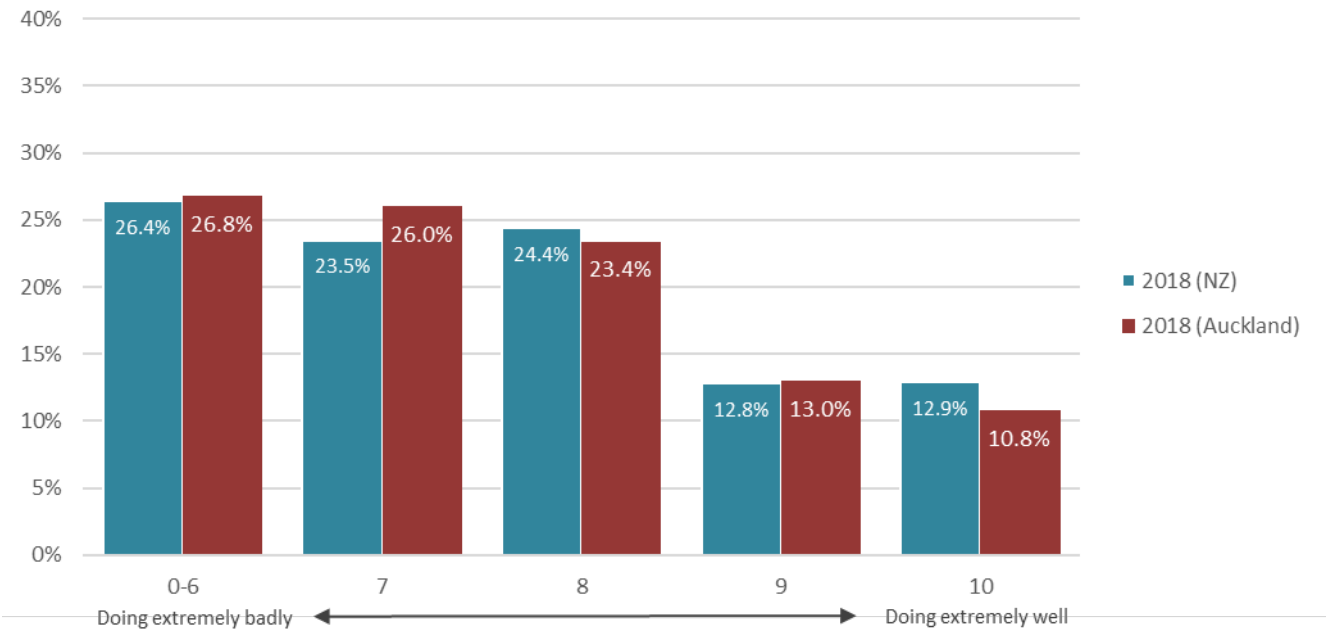
Outcome

Māori Identity and Wellbeing

Measure 1

Whānau wellbeing

Percentage of whānau that are doing well (%)



Data

Respondents who rate their whānau as doing well (7, 8, 9 and 10).

Source

Te Kupenga, Stats NZ.

Frequency

5 yearly.

Availability

Available from the Stats NZ website.

Relevance

Whānau relationships - "Whānau will flourish when they are cohesive, practise whānaungatanga, and are able to foster positive intergenerational transfers. Whānau cohesion includes: the quality of relationships within households and within the wider whānau; the use of on-line communication systems; opportunities for whānau living elsewhere to participate in whānau life; whānau leadership; whānau events and

participation in those events; involvement in whānau 'traditions'; whānau wānanga." - Te Puawaitanga o ngā whānau.

Whānau connectedness – "Whānau will flourish when their connections beyond the whānau lead to empowerment. Whānau connectedness includes: whānau utilisation of societal institutions (e.g. schools, health care) and facilities (e.g. sport grounds, gymnasium), whānau participation in sport and/or recreation; whānau engagement in community affairs; whānau exercise of citizenship rights; whānau utilisation of banking and other financial institutions; whānau contributions to community committees, boards, voluntary efforts". - Te Puawaitanga o ngā whānau.

Baseline (2018)

In 2018, 73.2 per cent of Auckland's Māori rated their whānau as doing well (rated 7, 8, 9 and 10).

Analysis

There is no significant difference (only 0.4 per cent lower) between Auckland's Māori and the general Māori population who rated their whānau as doing well (rated 7, 8, 9 and 10). The measurement method also changed from four categories (extremely well, well, neither well nor badly or badly/extremely bad) to a 10-point scale so it is difficult to draw direct comparison of the results and observe any trends.

There is no new data for this measure this year.

Trend

... Insufficient data to determine a trend until the next Te Kupenga survey.

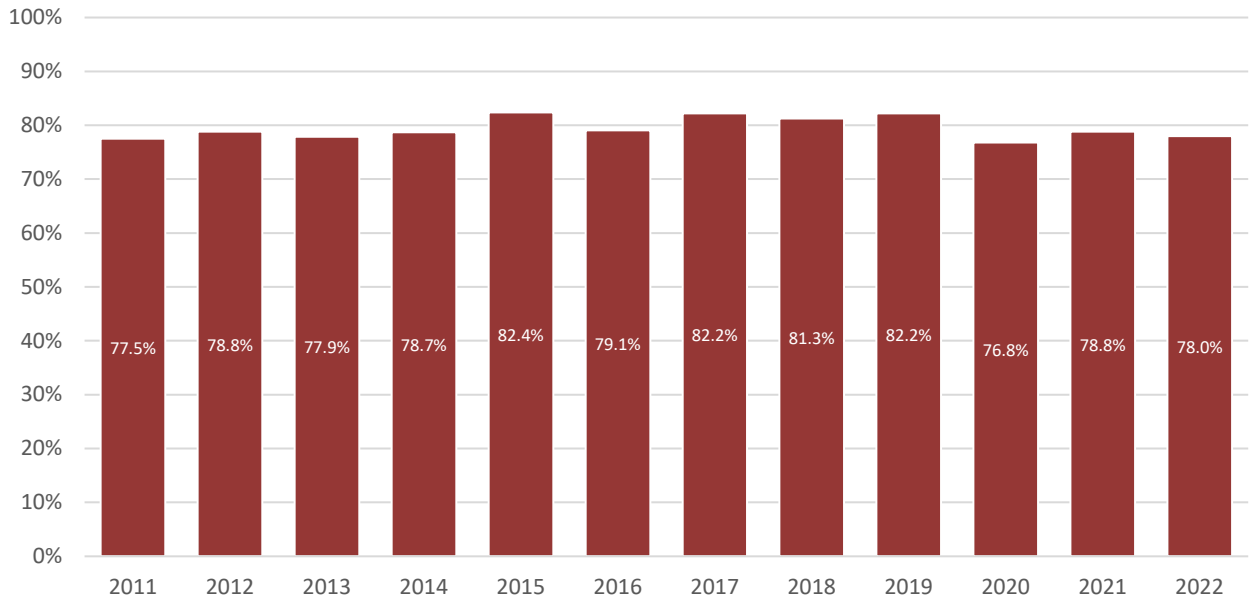
Outcome

Māori Identity and Wellbeing

Measure 2

Māori in employment, education and training

Proportion of Māori youth in education, employment or training (%)



Data

Derived from youth (aged 15-24) NEET rates (not in employment education or training) by ethnicity and age.

Source

Stats New Zealand, Household Labour Force Survey (HLFS); Auckland Council, Research and Evaluation Unit (RIMU) calculations.

Frequency

Quarterly and moving annual average (to avoid seasonality).

Availability

High-level data available from Stats NZ website (http://archive.stats.govt.nz/infoshare/?url=/infoshare/ - Work income and spending). Detailed Auckland breakdowns from Auckland Council, Research and Evaluation Unit (RIMU) custom dataset.

Note

Education and training data is only available for youth (ages 15-24). Employment here is number of individuals in paid employment (including self-employed and working proprietors and part-timers). People

not working or studying include those who are not available (e.g. full-time parents and other caregivers), as well as unemployed and other jobless people (not just the workforce). All data is subject to sampling errors, which increases for smaller sub-samples. Quarterly data is seasonal, so annual averages are recommended.

Relevance

Employment generates wealth for society, and income and job experience for the individual; education and training enable youth in particular to improve their prospects. In the labour market, young people are often the first to lose their jobs and the last to gain employment. Youth who are in employment, education or training are less at risk of long-term unemployment, have better health outcomes and are less likely to be socially or economically disadvantaged in the future.

Baseline (2018)

In 2018, 81 per cent of Māori youth aged 15 – 24 were in employment, education or training.

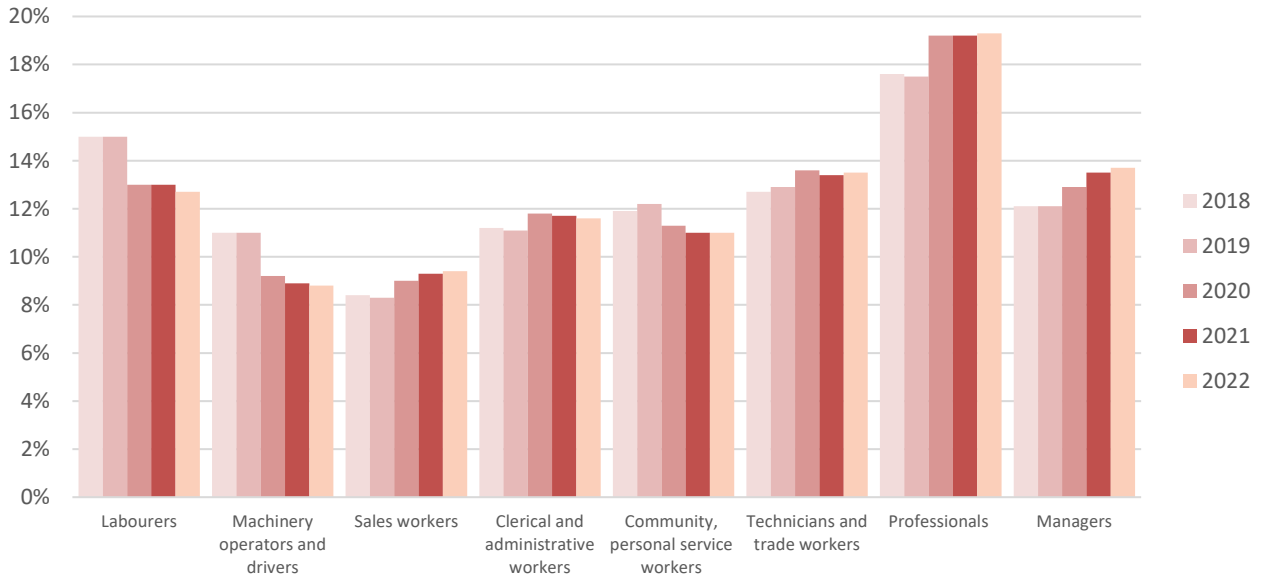
Analysis

There was a significant drop (5.4 per cent) between 2019 and 2020 in the proportion of Māori youth aged 15 – 24 in employment, education or training. This drop is associated with the COVID-19 pandemic. Since 2020 the proportion has remained between 77 and 79% to be slightly below the baseline (81%)

Trend

- No trend in Māori youth in employment, education and training (since 2018).

Type of employment for Māori (%)



Data

Employment (filled jobs) of Māori and all-ethnicities by occupation (ANZSCO I digit), modelled by Infometrics from Stats NZ data (census and quarterly HLFS).

Source

Infometrics, Auckland regional economic profile.

Frequency

Annual.

Availability

High-level data available from Stats NZ website (http://archive.stats.govt.nz/infoshare/?url=/infoshare/ - Work income and spending). Detailed Auckland breakdowns from Auckland Council, Research and Evaluation Unit custom dataset.

Note

Employment here is number of filled jobs (including self-employed and working proprietors and part-timers). Infometrics model Māori occupation data using their Regional Industry-Occupational matrix.

Relevance

Modern economies tend to shift employment out of lower skilled occupations such as labourers and machinery operators, and into higher skilled ones such as managers and professionals. Higher skilled occupations generally tend to be more productive and rewarding, and to offer better opportunities. Skills require education and training.

Baseline (2018)

Employment by occupation for Māori in 2018 relative to the total population:

- Labourers – 15% (Total population – 8.7 per cent)
- Machinery operators and drivers – 11% (Total population – 5.2 per cent)
- Sales workers – 8.4% (Total population – 10 per cent)
- Clerical and administrative workers – 11.2% (Total population 11.9 per cent)
- Community, personal service workers – 11.9% (Total population - 8.9 per cent)
- Technicians and Trade workers – 12.7% (Total population – 12.5 per cent)
- Professionals - 17.6% (Total population – 25.3 per cent)
- Managers – 12.1% (Total population – 17.5 per cent).

Analysis

Māori employed in the higher skilled jobs (professional and managers combined) have increased from 29.7 in 2018 to 33% in 2022 (up by 3.3%). For Tāmaki Makaurau Auckland 43.5 % of Māori are in jobs requiring higher skills.

Those in jobs requiring lower skills (labourers, machinery operators and drivers combined) have decreased from 26 per cent to 21.5% (down by 4.1%) from 2018 to 2022. For Tāmaki Makaurau Auckland 13.6 % of Māori are in these lower skilled roles.

Trend

↑ Positive trend for Māori employed as professionals and managers (higher skilled jobs).

↓ Declining trend for Māori employed as labourers and machinery operators and drivers (lower skilled jobs).

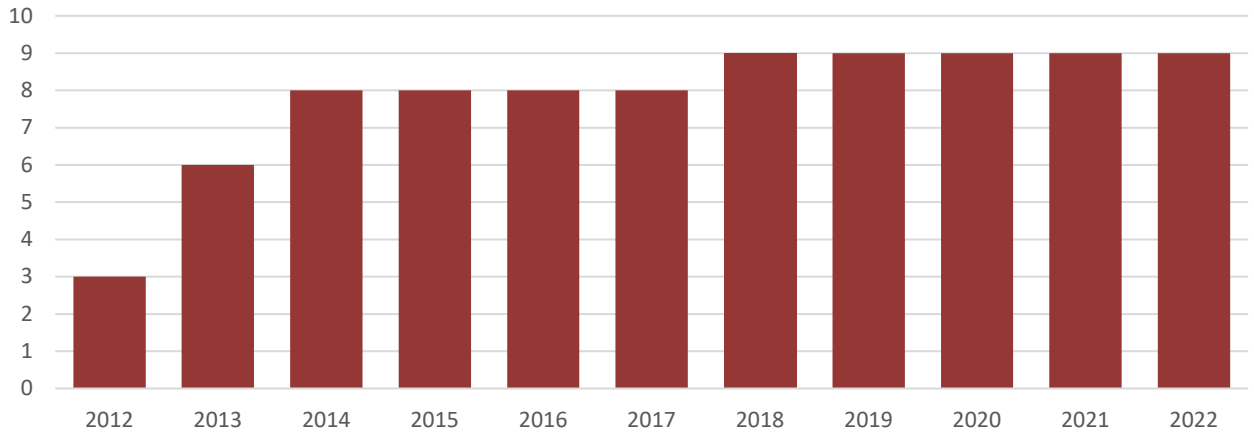
Outcome

Māori Identity and Wellbeing

Measure 3

Māori decision making

Measure 3a. Number of co-governance/co-management arrangements



Data

Number of co-governance / co-management arrangements.

Source

Auckland Council, Ngā Mātārae.

Frequency

Annual.

Availability

On request from Auckland Council, Ngā Mātārae.

Note

Data collection notes:

- all years exclude Rangihoa and Tawaiparera Committee, which is not currently in operation
- all years exclude new governance structure over the Ōnehunga Portage, which is not yet fully operational
- all years include two co-management agreements – Pūkaki and Wai-o-maru
- 2018 list reclassifies Pukekiwiriki Pā Joint Management Committee as co-governance rather than co-management.

An alternative measure will be considered for the next annual monitoring report as the number of co-governance / co-management agreements remains the same since 2014 and is not effective in measuring

annual progress.

Relevance

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

Baseline (2018)

There are nine co-governance arrangements (with one in abeyance), some of which were initiated by Treaty of Waitangi Settlement legislation.

Analysis

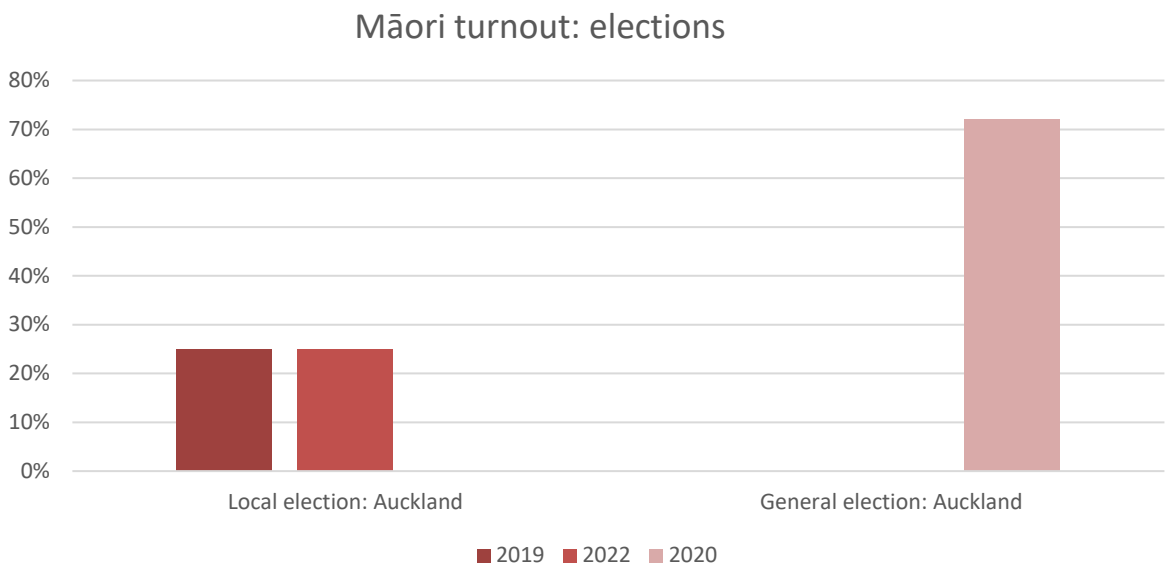
As of December 2022, the following co-governance / co-management arrangements were in place:

- Tūpuna Maunga Authority (statutory)
- Wai-o-maru
- Te Motu a Hiaroa (Puketutu Island) Governance Trust
- Mutukaroa (Hamlins Hill) Management Trust
- Ngāti Whātua Ōrākei Reserves Board (statutory)
- Pukekiwiriki Pā Joint Management Committee
- Te Poari o Kaipātiki ki Kaipara (statutory)
- Rangihoa and Tawaiparera Management Committee (in abeyance)
- Te Pūkaki Tapu o Poutukeka Historic Reserve and associated Māori lands co-management Committee (Pūkaki).

Trend

- From 2014 to 2022, there has been no significant change.

Measure 3b. Māori voter turnout in the local body elections



Data

Auckland Local Body Election voter turnout 2022

Source

https://www.knowledgeauckland.org.nz/media/2556/2022-auckland-local-election-voter-turnout-who-did-and-did-not-vote-january-2023.pdf

https://www.knowledgeauckland.org.nz/media/2543/2019-auckland-local-election-voter-turnout-who-did-and-did-not-vote-march-2020.pdf

Frequency

3-yearly

Availability

Knowledge Auckland

Note

New measure in 2022/23

Relevance

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

Baseline (2022)

2019 baseline: 25%

Analysis

Auckland Council creates a report after every election on voter statistics. The baseline has been set for the year 2019. The same proportion of Māori have voted in the 2019 and 2022 local body elections (25%).

Trend

- From 2019 to 2022, there has been no significant change.

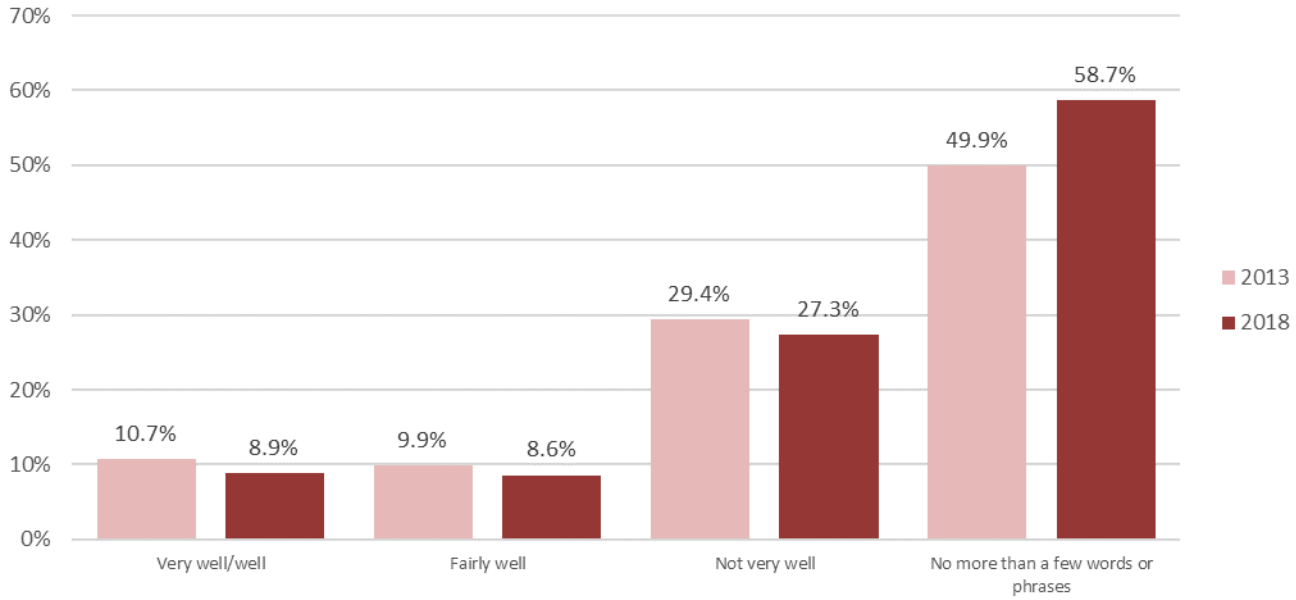
Outcome

Māori Identity and Wellbeing

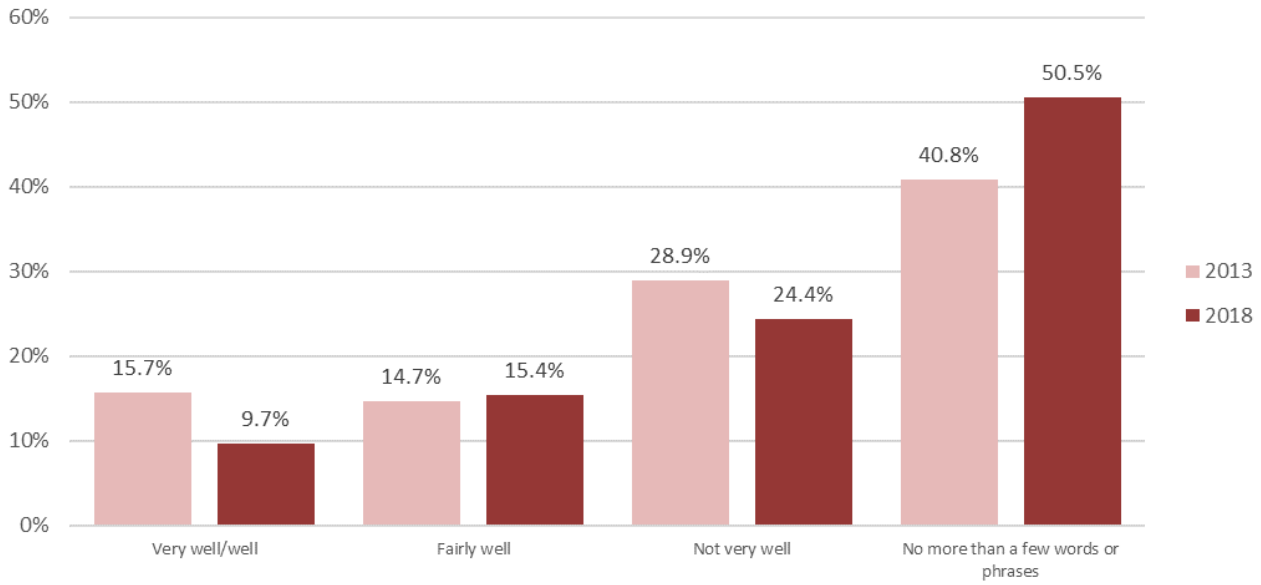
Measure 4

Te reo Māori across Tāmaki Makaurau

Te reo Māori proficiency (self-rated): able to speak Te reo Māori (%)



Te reo Māori proficiency (self-rated): able to understand spoken Te reo Māori (%)



Data

Self-rated te reo Māori proficiency.

Source

Te Kupenga, Stats NZ.

Frequency

5 yearly.

Availability

Available from the Stats NZ website.

Relevance

Language is intrinsic to expressing and sustaining culture as a means of communicating values, beliefs and customs. As the indigenous culture of New Zealand, Māori culture is unique to New Zealand and forms a fundamental part of the national identity. Māori language is central to Māori culture and an important aspect of cultural participation and identity.

Baseline (2018)

Self-rated Te reo Māori proficiency (able to speak and able to understand spoken Te reo Māori) for New Zealand Māori in 2018:

- able to speak Te reo Māori very well/well (8.9 per cent)
- able to speak Te reo Māori fairly well (8.9 per cent)
- able to understand spoken Te reo Māori very well/well (9.7 per cent)
- able to understand spoken Te reo Māori fairly well (15.4 per cent).

Analysis

Steady decline across ability to speak or understand Te reo Māori among those of Māori ethnicity and/or descent.

There is no new data for this measure this year.

Trend

… Insufficient data to determine a trend until the next Te Kupenga survey. It is unknown if this survey will be repeated again after the 2023 Census.

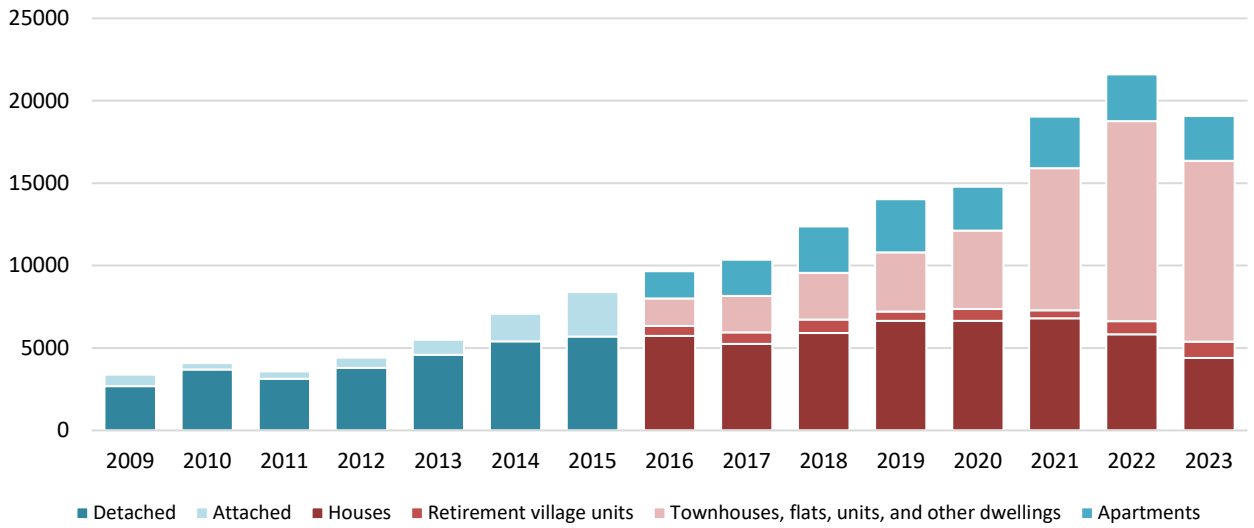
Outcome

Homes and Places

Measure 1

New dwellings consented by location and type (also a Development Strategy measure)

Number of new dwellings consented by type



Data

Numbers of new residential dwellings consented (per annum) by location and type.

Source

Stats New Zealand, building consent data.

Frequency

Annual (financial year, also available monthly).

Availability

Building consent data for Auckland is freely available on Stats New Zealand's Infoshare website. Detailed data at subregional level is available on request from the Research and Evaluation Unit (RIMU) at Auckland Council.

Note

Stats NZ building consent data is produced both for the number of consents issued and the number of dwellings consented – this analysis is for dwellings consented. Data is for financial years (1 July to 30 June).

A single building consent may allow for the building of more than one dwelling.

In 2015, Stats NZ revised the classification of data resulting in four categories: 1) Houses, 2) Apartments, 3) Townhouses, flats, units and other dwellings, 4) Retirement village units.

Relevance

The housing preferences of Aucklanders are diverse. A broad range of housing types are required, in a variety of locations. These characteristics are also important measures of a quality compact urban form.

This measure is also used to track progress towards the aims of the Auckland Plan 2050 Development Strategy.

Baseline (2018)

For the 2018 (financial) year:

- Houses – 5,917 new dwelling consents
- Townhouses, flats, units and other dwellings – 2,823
- Apartments – 2,811
- Retirement village units – 817
- Total – 12,368.

Analysis

There has been a significant increase in the number of dwellings consented over the past decade, and a clear shift in housing typologies over time, very much in line with the quality compact approach to growth set out in the Development Strategy. In the year to June 2023, apartments, townhouses, flats, units and other dwellings (not including retirement village units) made up approximately 72 per cent of new dwellings consented. In 2013 (calendar year), the figure was approximately 25 per cent.

From an annual perspective, there has been 19,085 dwellings consented in Auckland in the 12 months to June 2023. This represents a decrease of 12 per cent on the 21,609 dwellings consented in the 12 months to June 2022.

Demand for housing remains strong. Looking ahead, we will be watching to see how factors such as rising building costs and rising interest rates will flow through to dwelling consents.

The change in the types of dwellings consented is enabling most growth (83% in 2021/2022[1]) to occur within the existing urban area, particularly in and around centres, evidencing that Auckland is progressively becoming more compact.

Trend

↑ From 2009 to 2023, a positive trend.

[1] The equivalent figure is not yet available for the 2022/2023 year. This will be included in the Development Strategy Monitoring Report to be published in December 2023.

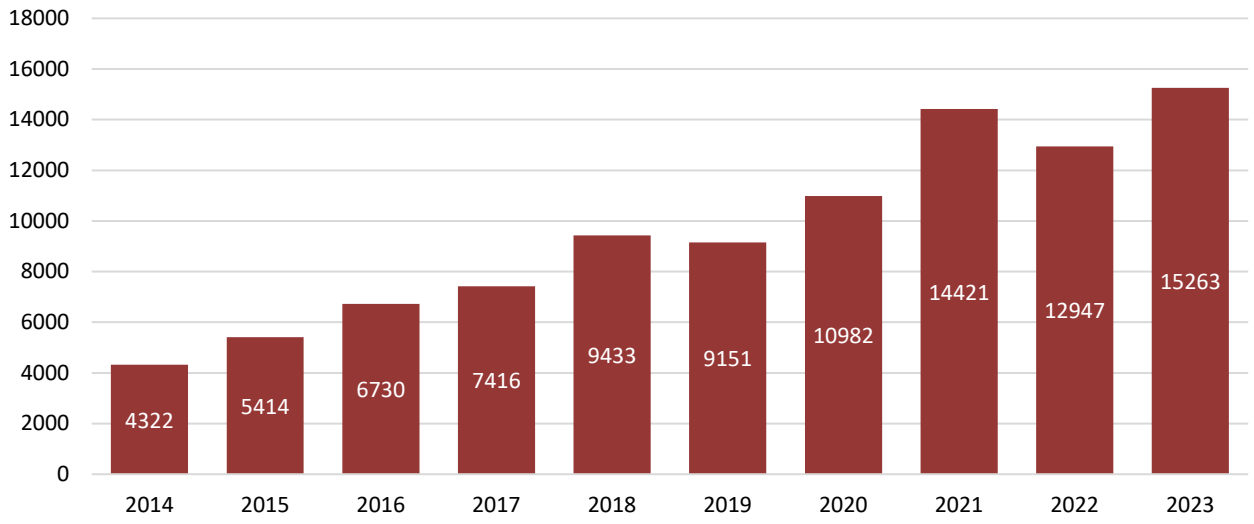
Outcome

Homes and Places

Measure 2

New dwellings consented and completed (also a Development Strategy measure)

Number of new dwellings issued with a code of compliance certificate



Data

Numbers of new residential dwellings that have a code of compliance certificate issued per annum.

Source

Auckland Council, code of compliance certificate data.

Frequency

Annual (financial year, also available monthly).

Availability

Numbers of code of compliance certificates and the number of dwellings with code of compliance certificates are coded as part of Auckland Council's building consenting processes. Detailed data at sub-regional level is available on request from the Research and Evaluation Unit (RIMU) at Auckland Council.

Note

'Dwellings with code of compliance certificates issued' is a metric that was developed by Auckland Council's Building Control department in response to monitoring requirements for the Auckland Housing Accord. 'Dwellings with code of compliance certificates issued' data is only available from October 2013 onwards, and spatial matching of this data is only 93 per cent.

This measure is also reported in the Auckland Plan Development Strategy monitoring report.

Relevance

Code of compliance certificates provide a measure for when a dwelling is able to be occupied rather than a building consent that indicates an intention to build. There are no strict requirements to obtain a code of compliance certificate, however they are a useful indicator of actual completions.

Baseline (2018)

In 2018 (financial year), there were 9,433 residential dwellings that had a code of compliance certificate issued.

Analysis

Between 2014 and 2021, the annual number of new dwellings issued with a code of compliance certificate has steadily increased. The number of new dwellings issued with a code of compliance certificate in the 12 months to June 2023 was 15,263 – an 18 per cent increase from the number in the 12 months to June 2022.

Trend

↑ From 2014 to 2023, a positive trend.

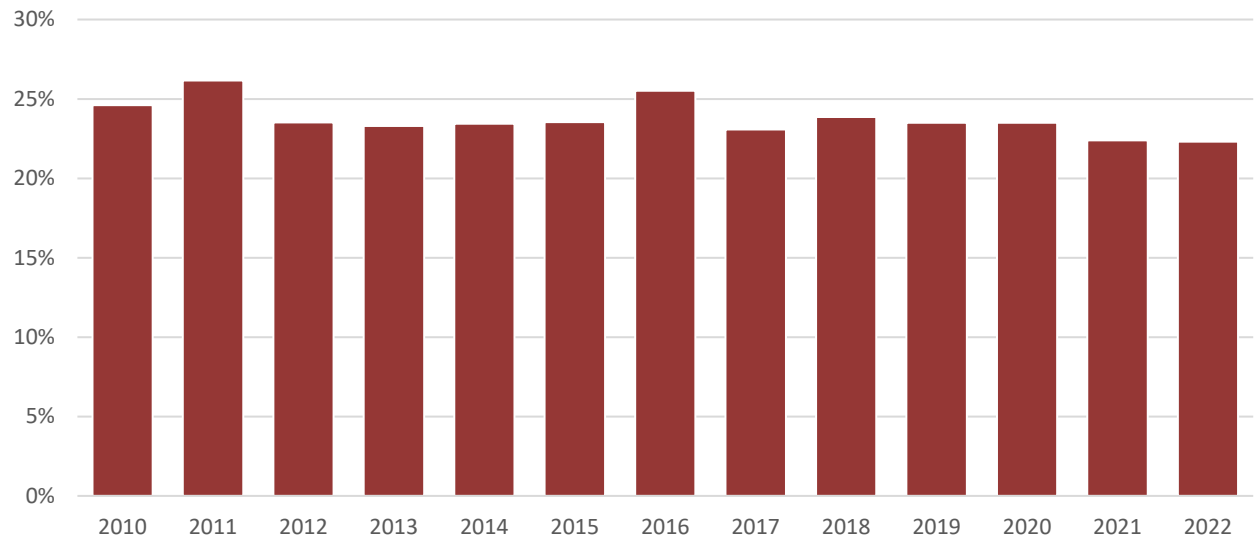
Outcome

Homes and Places

Measure 3

Housing costs as a percentage of household income

Housing costs to disposable household income (%)



Data

Auckland average household annual expenditure on housing costs and average annual household disposable income.

Source

Stats New Zealand, HES Household Economic Survey and Household Economic Survey (Income).

Frequency

Annual.

Availability

Published on the Stats New Zealand website.

Note

This measure was updated in 2019, from average annual gross household income to average annual disposable household income. This is in line with Stats NZ, who note that "releasing disposable income as our key income measure will offer a better representation of the economic resources available to meet household needs." The data for previous years have been revised accordingly.

All dollars are nominal (not adjusted for inflation) and include survey error margins of up to 10 per cent.

Values are averages (not medians) of households in the Auckland region. Household income includes wages and salary, self-employment, investments and government benefits, and superannuation. Housing costs include rent and mortgages, property rates and building-related insurance.

Data for 2020 was only collected over a 9-month period due to COVID-19, making the sample size smaller than the previous year. However, Stats NZ is satisfied that the data is fit for purpose.

Relevance

Although this ratio is a common indicator of housing cost stress, the household income component depends on many things, including household size and number of income earners. Housing affordability can also be affected by the interplay of a wide range of factors including taxation and fiscal policy, planning and regulatory requirements and costs, industry practice and productivity, migration and demographic changes. These factors affect housing costs for a very broad cross-section of society. It should also be remembered that people who already owned (or inherited) property prior to the rise in housing prices, were largely unaffected or even benefited from those price rises.

Baseline (2018)

In 2018, the ratio of housing costs to household disposable income was 23.9 per cent.

Analysis

The cost of housing continues to be an issue for Auckland households. In 2022 households spent 22 per cent of their disposable income on housing costs. This has not changed significantly since 2010.

The average figure reported above hides significant variation across households. Lower income households and renters spend, on average, a higher proportion of their incomes on housing costs (refer to 2022 Auckland Plan Annual Monitoring report).

The Auckland median house prices have been declining over the past year (the median price for June 2023 was 12.5% lower (-$142,500) than June 2022). It is likely that the housing cost burden will continue to be at the same high levels in 2023. That is due to rising rents and higher interest rates for people re-fixing existing mortgages or taking on new mortgages and unlikely to be offset by increases in income.

Trend

- From 2010 to 2022, no significant change.

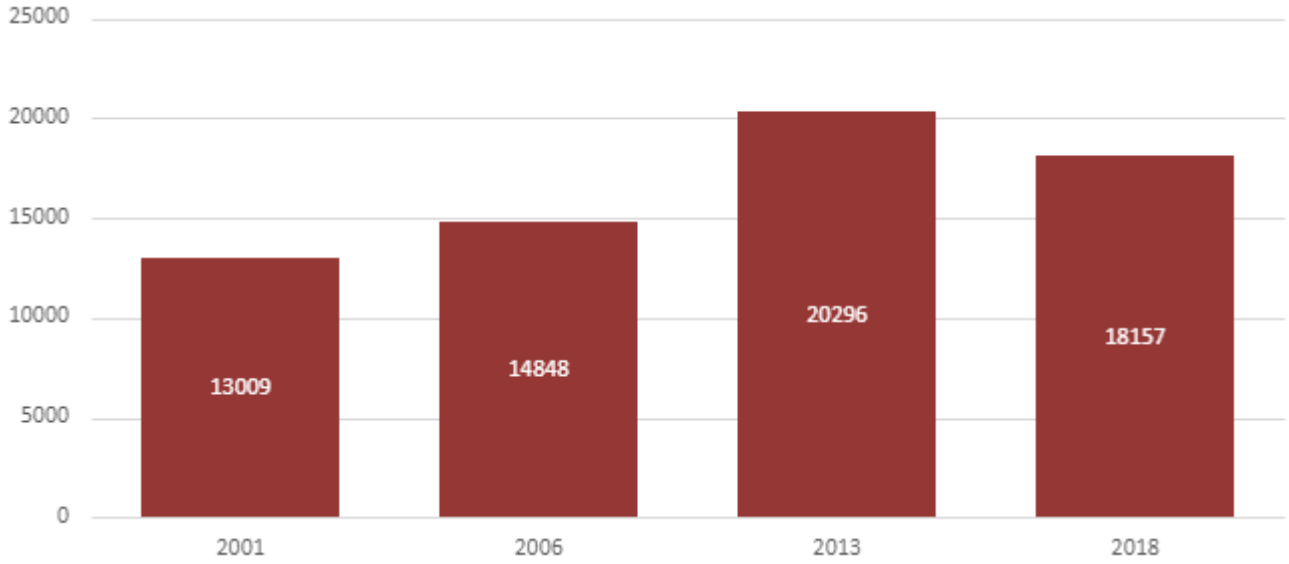
Outcome

Homes and Places

Measure 4

Homelessness

Numbers of people living without shelter and in temporary accommodation



Data

Stats NZ; Ministry of Housing and Urban Development (HUD) transitional housing dataset; and operational data sourced directly from providers of emergency and transitional housing.

Source

Severe housing deprivation in Aotearoa/New Zealand, 2018 report by Dr Kate Amore, Helen Viggers, Distinguished Professor Philippa Howden Chapman (2021), He Kāinga Oranga / Housing and Health Research Programme, Department of Public Health, University of Otago, Wellington.

Frequency

Every five years.

Availability

The latest report is available on the Ministry of Housing and Urban Development website (Severe-Housing-Deprivation-2018-Estimate-Report.pdf (hud.govt.nz))

Note

Severe housing deprivation refers to people living in severely inadequate housing due to a lack of access to minimally adequate housing. This means not being able to access an acceptable dwelling to rent, let alone buy.

The data includes three main categories:

- without shelter – rough sleeping, vehicles, improvised or makeshift shelter
- sharing temporarily – couch surfing in private residence
- temporary accommodation – emergency housing, refuges, campgrounds, boarding houses, hotels, motels, marae.

Scope changes, 2018 census operational difficulties, and quality limitations inherent in surveying people experiencing homelessness mean data comparisons over time are not recommended.

Relevance

Severe housing deprivation is an important social issue, which requires an integrated approach at both the local and national level to reduce poverty and increase opportunity as well as to develop effective interventions to meet the needs of homeless people.

Baseline (2018)

In 2018, 18,157 Aucklanders were estimated to be homeless.

Analysis

There is no new data for this measure this year. The latest official figure based on the 2018 Census estimated that 18,157 Aucklanders were homeless. However, this figure is now outdated and does not reflect the impact of COVID-19 or of more recent events (e.g. extreme weather events of 2023) or policies.

The need for public housing support is strong with 8,073 people on the public housing register in June 2023, although this number has reduced from the previous year, which saw the highest number of people on the housing register in a decade (8,864 in April 2022) in the aftermath of the COVID-19 pandemic.[2, 3]

Trend

... Insufficient data to determine a trend.

[2] Ministry of Housing and Urban Development Housing Dashboard. Available: Housing register - Te Tūāpapa Kura Kāinga - Ministry of Housing and Urban Development (hud.govt.nz)
[3] Ministry of Social Development, Social Housing Register. Available: Social Housing Register - Archive - Ministry of Social Development (msd.govt.nz)

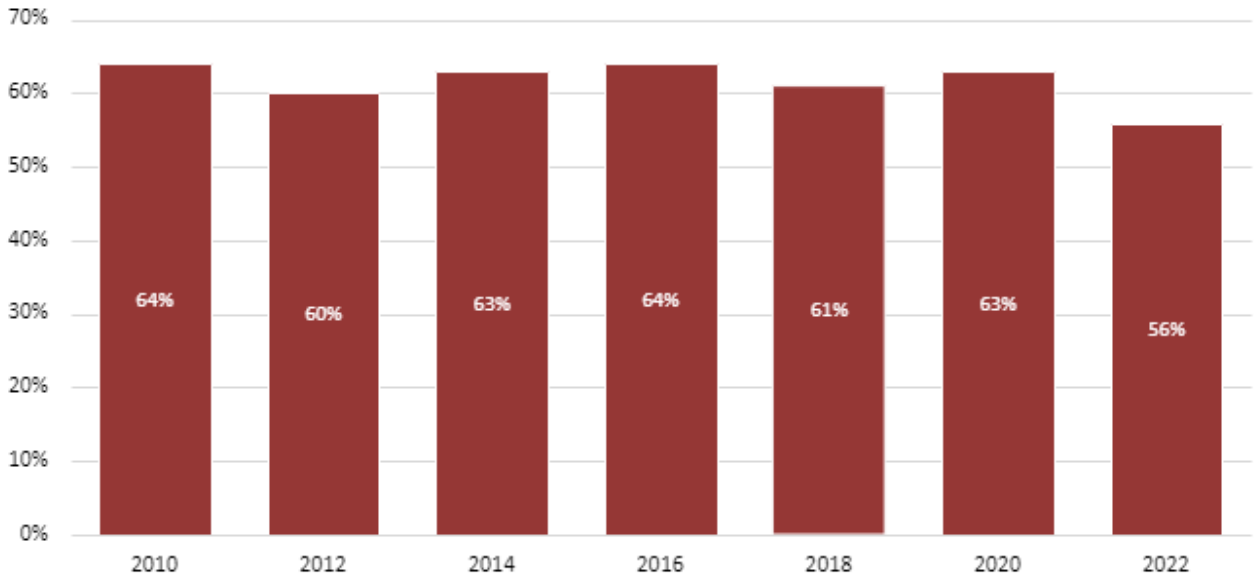
Outcome

Homes and Places

Measure 5

Resident satisfaction with their built environment at a neighbourhood level

Respondents to the Quality of Life Survey who agreed they feel a sense of pride in their local area (%)



Data

Proportion of respondents to the Quality of Life Survey who feel a sense of pride in the way that their local area or neighbourhood looks and feels.

Source

Auckland Council, Quality of Life Survey 2010, 2012, 2014, 2018, 2020 and 2022.

Frequency

Every 2 years.

Availability

The reports are available on Knowledge Auckland (www.knowledgeauckland.org.nz).

Note

From 2012, the Quality of Life survey method changed from a Computer-Assisted Telephone Interviewing (CATI) survey to an online self-complete survey. A variation of the method used from 2012-2018 was adopted for the survey in 2020. In 2020, respondents aged under the age of 35 years were only able to complete the survey online, unless they proactively requested a hard copy questionnaire to be sent to them. Respondents aged 35 years and over were able @to complete the survey online or via hard copy as in previous years. In 2022, those aged 50 years and over were automatically sent a hard copy to complete if they had not completed the survey three weeks after a follow-up reminder. This was a methodology change from the 2020 survey.

Relevance

How residents feel about their local area or neighbourhood can be considered a reflection in part of how satisfied they are with the built environment. This measure will help to determine whether Auckland is creating a strong sense of place that resonates with its residents.

Baseline (2018)

In 2018, 61 per cent of Auckland respondents agreed or strongly agreed that they felt a sense of pride in the way their city or local area feels.

Analysis

In 2022, 56 per cent of respondents reported that they felt a sense of pride in the built environment. This was the first year that this percentage fell below 60 per cent, as between 2010 and 2020 the percentage was relatively steady between 60 per cent and 64 per cent. While it is a notable drop from 2020 to 2022, the timeframe is too short to determine if this is an ongoing trend.

There is no new data for this measure this year.

Trend

↓ From 2010 to 2020, no significant change, but a notable drop from 2020 to 2022. The timeframe is too short to determine if this is an ongoing trend.

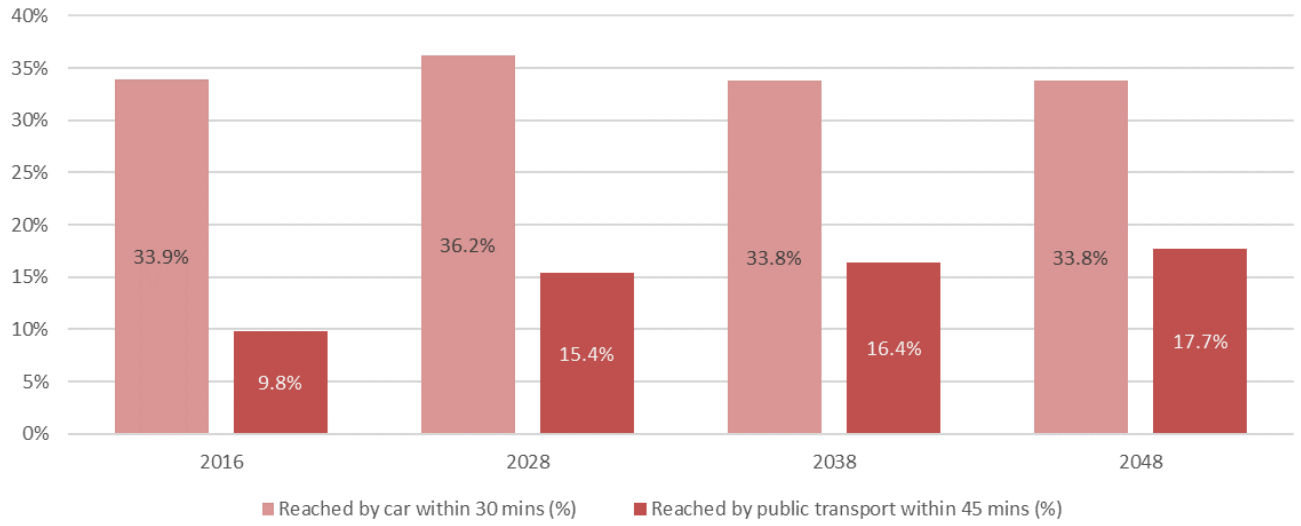
Outcome

Transport and Access

Measure 1

Access to jobs

Proportion of jobs reached by car or public transport – 2016 baseline (%)



Data

Forecasted (modelled) number of jobs accessible to the average Aucklander in the morning peak within 30 minutes by car and 45 minutes by public transport.

Source

Auckland Regional Transport (ART) model outputs, Auckland Forecasting Centre.

Frequency

Variable.

Availability

Data can be sourced from the Auckland Forecasting Centre.

Note

The Auckland Regional Transport model uses a combination of real data and various assumptions to predict the level and rate of change across different areas and components of the transport network. Modelled data are valuable for forecasting. The use of modelling enables targeted interventions to be made and understood within the context of the broader network now and into the future. The model output was prepared for the 2016 Auckland Transport Alignment Project (ATAP). Further refinement to the model outputs was carried out through the revised ATAP in 2018. There will be a review of whether to include modelled data in further monitoring reports.

Relevance

For Auckland to fully capitalise on the benefits of the region's growth, it is essential that people from all parts of Auckland have good access to the employment, education, and other opportunities. Our continued prosperity is dependent on the convenient, affordable, safe and sustainable movement of people, goods and services within Auckland, along with connections with the rest of New Zealand and the world. Improving access to employment and education is particularly critical to boosting Auckland's economic productivity and overall prosperity (Ministry of Transport, 2014). To be productive, businesses need a wide choice of potential employees. Similarly, workers need a wide choice of potential jobs within a reasonable commute time to best match their skills and to reduce their vulnerability to long-term unemployment in the event of job loss.

Baseline (2016)

On average, Aucklanders can access 33.9 per cent of the region's jobs within 30 minutes by car in the morning peak. 9.8 per cent of jobs are accessible to the average Aucklander in the morning peak within 45 minutes by public transport.

Analysis

Job accessibility varies significantly by mode and distance. The number of jobs accessible by public transport within a reasonable timeframe is expected to increase over the next 30 years. In 2016, 9.8 per cent of jobs were considered accessible to Aucklanders within a 45-minute trip on public transport. This figure is expected to increase to 17.7 per cent by 2048. Access by car is also expected to increase between 2016 and 2028, from 33.9 to 36.2 per cent before decreasing and remaining at 33.8 per cent for 2036 and 2048.

As part of the process of any modelling, the outputs are validated every few years with new data and information. This means there will be some differences between the 2020 Annual Report and this current reporting period.

There is no new data for this measure this year.

Trend

••• These are modelled and forecasted data – no trend is available.

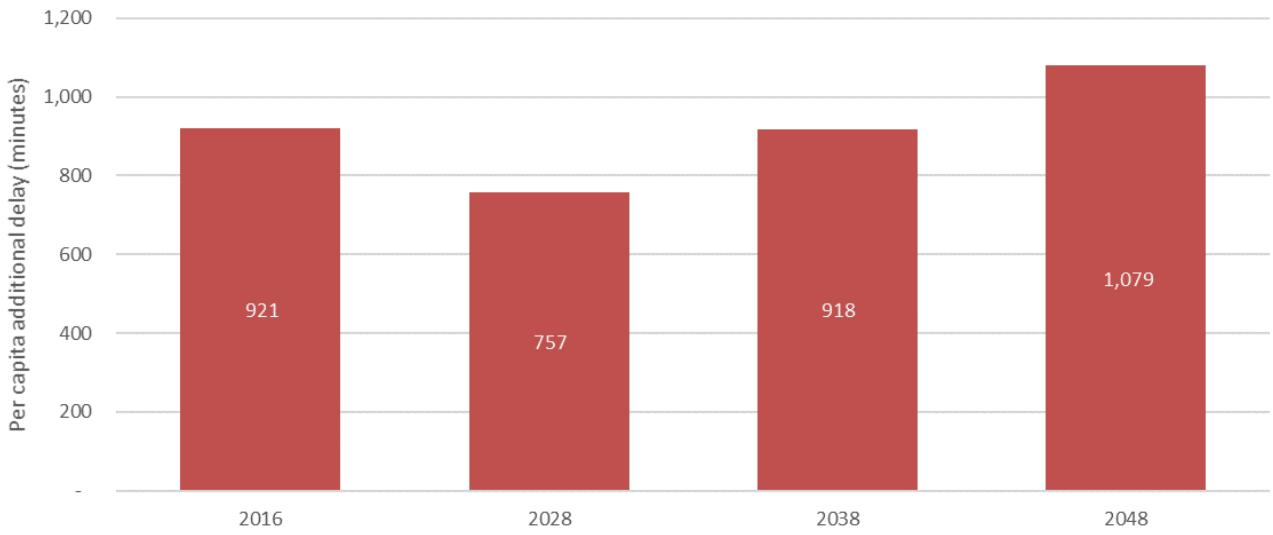
Outcome

Transport and Access

Measure 2

Delay from congestion

Measure 2a. Per capita annual delay from congestion – 2016 baseline (hours/capita)



Data

Per capita annual delay from congestion (minutes) (modelled data).

Source

Auckland Regional Transport model outputs, Auckland Forecasting Centre.

Frequency

Variable.

Availability

Data can be sourced from the Auckland Forecasting Centre.

Note

The Auckland Regional Transport model uses a combination of real data and various assumptions to predict the level of congestion across different areas and components of the transport network. The use of modelling enables targeted interventions to be made and understood within the context of the broader network now and into the future. The model output was prepared for the 2016 Auckland Transport Alignment Project (ATAP). Further refinement to the model outputs was carried out through the revised ATAP in 2018.

Relevance

Traffic delays constrain economic productivity so moving people and goods efficiently through Auckland is a key transport objective. This measure shows the total and per capita delay across the network based on the projected volume of traffic divided by its theoretical capacity (VC ratio).

Congestion is defined by combining the two worst levels of service measures for measuring network performance:

- significant delay and low average speed (Level of service E)
- high delay and extremely low speeds (Level of service F).

Baseline (2016)

921 minutes per capita annual from congestion.

Analysis

Delay from congestion, measured as per capita additional delay, is expected to decrease to 757 minutes in 2028 before increasing to 918 minutes in 2038 and 1,079 minutes by 2048.

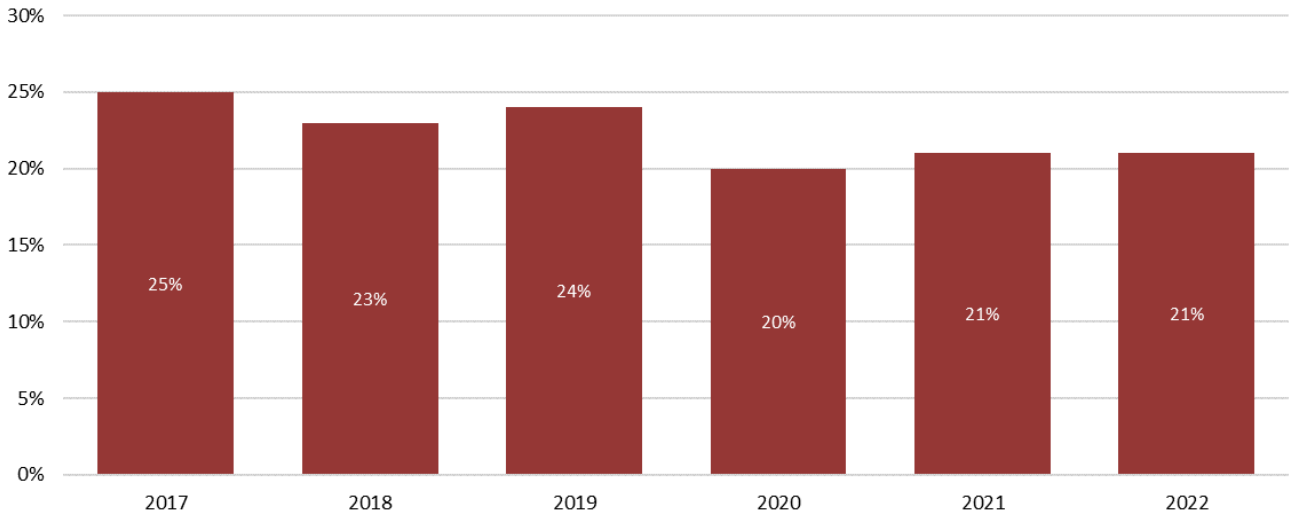
As part of the process of any modelling, the outputs are validated every few years with new data and information. This means there will be some differences between the 2020 Annual Report and this current reporting period.

There is no new data for this measure this year.

Trend

••• These are modelled and forecasted data – no trend is available.

Measure 2b. Congestion in the arterial network in the AM peak (%)



Data

The proportion of the arterial network that has a median travel speed of less than 50 per cent of the posted speed during the AM peak hour (7:30 – 8:30am). This is an annual average.

Source

Auckland Transport data.

Frequency

Annual.

Availability

Annual data is available from Auckland Transport or monthly and quarterly indicator reports are available on the Auckland Transport website (https://at.govt.nz/about-us/our-role-organisation/meetings-minutes/).

Note

Congestion is defined as average travel speeds of less than 50 per cent of the posted speed and the AM peak hour is 7.30–8.30. Regional arterial roads link districts or urban areas within the region connect regionally significant facilities and play a critical role in the movement of people and goods within the region. They include Motorways / Strategic Routes / Primary Arterials and Secondary Arterials. A map of the arterial network is available in Auckland Transport monthly indicator reports.

Relevance

The impact of growing congestion is increased travel times and unreliability. Traffic delays constrain economic productivity, moving people and goods efficiently through Auckland is a key transport objective. Congestion also makes Auckland a less attractive place to live and affects the quality of life for many Aucklanders, reducing the time available to spend on leisure activities and with friends and family.

Baseline (2018)

In 2018, there was an annual congestion rate of 23 per cent in the AM peak period.

Analysis

In the 12 months to December 2022, on average 21 per cent of the arterial network was considered congested in the AM peak which was the same as the previous year. Lower congestion in 2020 was due to several COVID-19 related lockdowns and lower travel demand on the arterial network. With the release of COVID related restrictions, travel demand has started to rise again to pre-COIVD levels.

Trend

- There was an increase in congestion between 2018 and 2019, followed by a decrease in 2020. There was no significant change between 2020 and 2022.

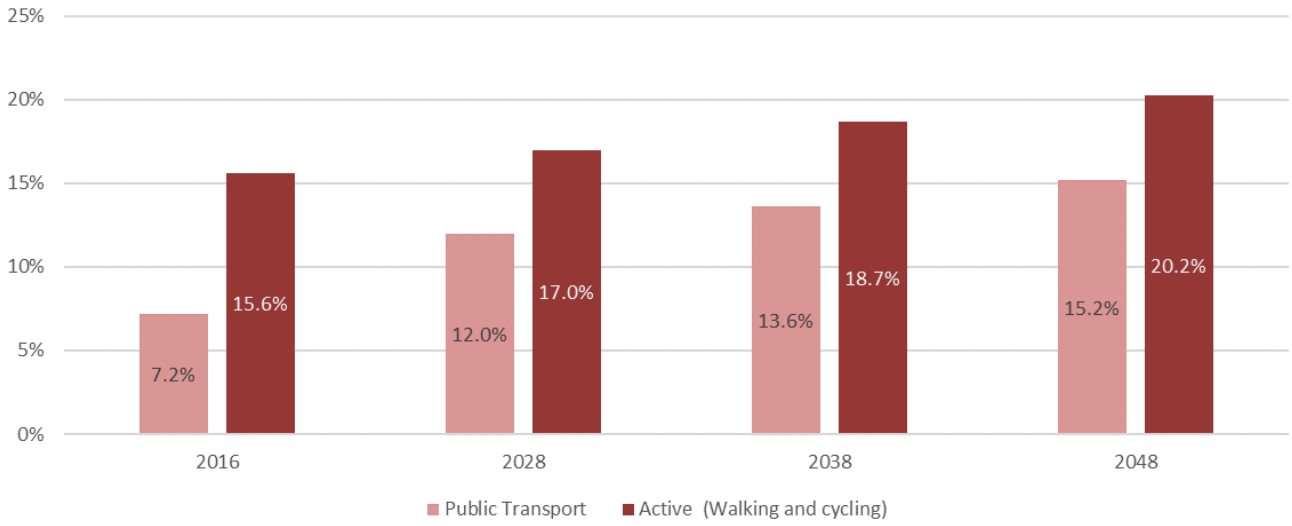
Outcome

Transport and Access

Measure 3

Use of public transport, walking and cycling

Measure 3a. Proportion of trips made by public transport, walking and cycling during the AM peak – 2016 baseline (%)



Data

Proportion of trips made by public transport, walking and cycling during the AM peak.

Source

Auckland Regional Transport (ART) model outputs, Auckland Forecasting Centre.

Frequency

Variable.

Availability

Data can be sourced from the Auckland Forecasting Centre.

Note

The Auckland Regional Transport model uses a combination of real data and various assumptions to predict the level and rate of change across different areas and components of the transport network. The use of modelling enables targeted interventions to be made and understood within the context of the broader network now and into the future. The model output was prepared for the 2016 Auckland Transport Alignment project (ATAP). Further refinement to the model outputs was carried out through the revised ATAP in 2018.

Relevance

For Auckland to benefit from the region's growth, it is essential for people from all parts of Auckland to have good access to the employment, education and other opportunities that growth creates. People need access to a range of modes to ensure they can move easily throughout the region. Access to a range of transport modes, including walking, cycling and public transport, is essential to the development of an efficient, sustainable and equitable transport system.

Baseline (2016)

7.2 per cent of trips made by public transport during AM peak. 15.6 per cent of trips made by active transport (walking and cycling during AM peak).

Analysis

The proportion of trips taken in Auckland by public transport and active modes is expected to increase between 2016 to 2048. In 2016, it was calculated that just over 20 per cent of trips taken in Auckland were by public transport or active modes. In 2048, it is expected that just over 35 per cent of trips taken in Auckland will be by public transport or active modes.

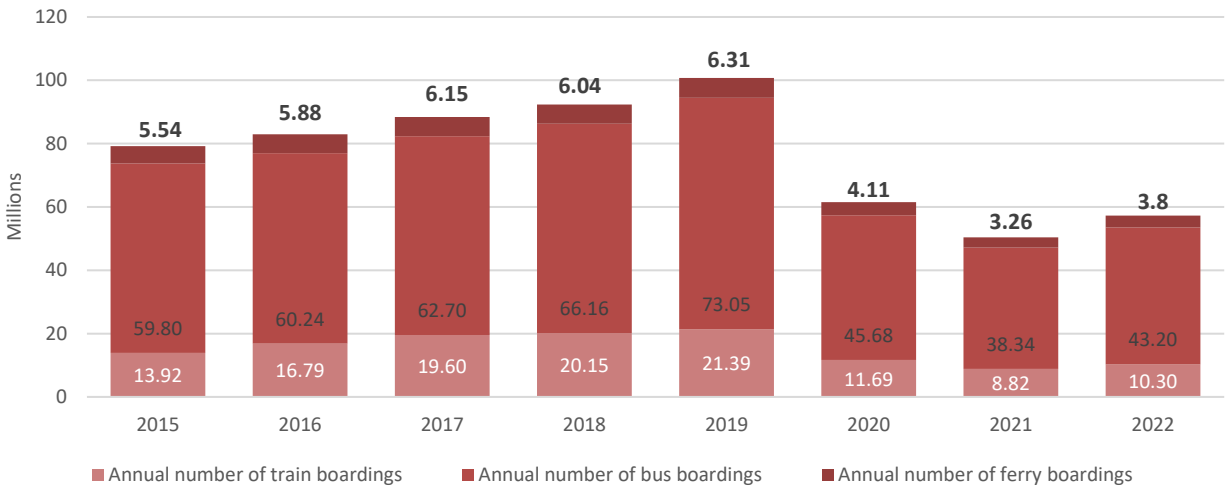
As part of the process of any modelling the outputs are validated every few years with new data and information. This means there will be some differences between the 2020 Annual Report and this current reporting period.

There is no new data for this measure this year.

Trend

••• These are modeled and forecasted data – no trend is available.

Measure 3b. Annual number of public transport boardings (millions)



Data

Annual number of public transport boardings (millions).

Source

Auckland Transport data.

Frequency

Annual (for year ending in June).

Availability

Auckland Transport public transport figures are available on their website (https://at.govt.nz/about-us/reports-publications/at-metro-patronage-report).

Note

Public transport boardings include buses, trains and ferries.

Relevance

For Auckland to benefit from the region's growth, it is essential for people from all parts of Auckland to have good access to the employment, education and other opportunities that growth creates. People need access to a range of modes to ensure they can move easily throughout the region. Public transport is an important part of that mix, reducing congestion and contributing toward our climate change commitments.

Baseline (2018)

In 2018, there were 92.36 million annual public transport boardings.

Analysis

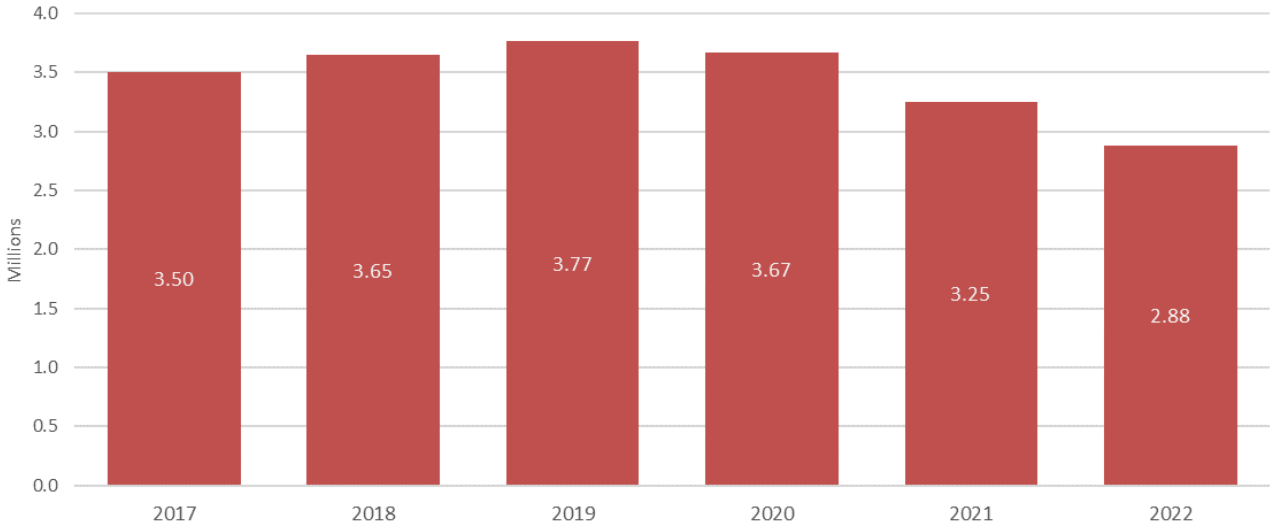
On average patronage increased during 2022 with month-on-month data showing usage going up significantly in November and December and into 2023.

After reaching 100.75 million boardings in 2019, patronage numbers declined significantly reaching 61.5 million in 2020. They have since been increasing. The decline in usage was due to COVID-19 related lockdowns, reliability issues caused by staff shortages and significant disruptions to rail lines due to critical renewals on the rail network. While the impacts of Covid and staff shortages on the public transport system continued to abate towards the end of 2022 and into 2023, the disruption caused by rail network renewal work will remain a challenge for several more years.

Trend

↓ From 2015 to 2019, a positive trend. However, there was a significant decrease in boardings during 2020 and 2021 due to COVID-related disruptions. There has been an increase in patronage numbers between 2021 and 2022 but this has not recovered to pre-COVID levels.

Measure 3c. Number of cycle movements past selected count sites (millions)



Data

Annual number of cycle movements past selected count sites.

Source

Auckland Transport monitoring data.

Frequency

Annual (calendar year). Monthly and daily data are also available.

Availability

- See the Auckland Transport website for cycling data, monitoring, and research (https://at.govt.nz/cycling-walking/research-monitoring/). The 'active modes quarterly snapshots' include a map of the monitoring sites. Data for specific months and sites can be downloaded from

the ‘monthly cycle monitoring’ section.
- Data is also available through Auckland Transport’s Monthly Transport Indicators

Note

The number of cycle movements in Auckland is collected at sites across the region using permanent, automated cycle-monitoring equipment. There are currently 26 sites with counters across the region, which report the number of cycle movements all day, every day. The data here starts from 2017, when the number of monitoring sites was increased (from 14 sites).

Cycling counts are an indicator of overall cycling numbers, however data collection is at selective points around the region and can miss local variation. It is also possible for cyclists to go past multiple sites on a single journey.

Relevance

For Auckland to benefit from the region’s growth, it is essential for people from all parts of Auckland to have good access to the employment, education and other opportunities that growth creates. People need access to a range of modes to ensure they can move easily throughout the region. Walking and cycling are an important part of that mix, particularly for short and medium distance trips, reducing congestion, contributing toward our climate change commitments, and providing health benefits.

Baseline (2018)

In 2018, the number of cycle movements past selected count sites was 3.65 million.

Analysis

The number of cycle movements past 26 selected count sites decreased during 2022.

Numbers had been increasing, from 3.5 million in 2017 to 3.77 million in 2019. However due to COVID-19, counts went down to 3.67 million in 2020 and further still to 3.25 million for year ending December 2021. Numbers continued to decline for 2022.

Trend

↓ From 2018 to 2019, a positive trend. However, there was a significant decrease in cycle movements during 2020 and 2021 due to COVID-related disruptions. Numbers continued to decrease in 2022.

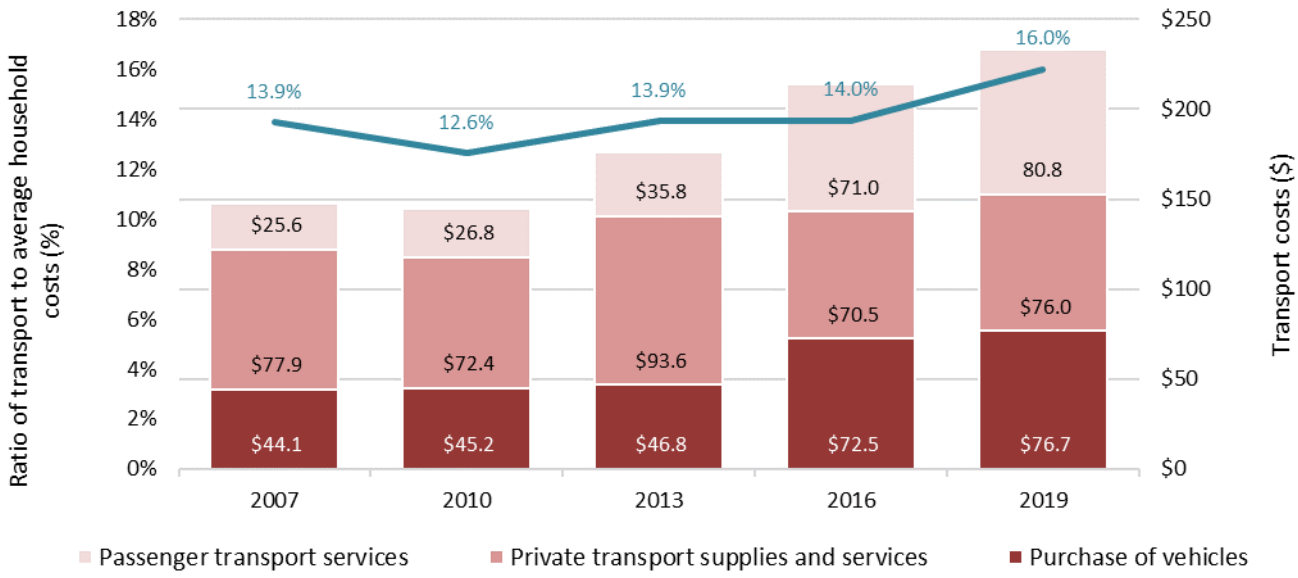
Outcome

Transport and Access

Measure 4

Household transport costs

Average weekly household transport costs ($)



Data

Average weekly transport costs.

Source

Stats New Zealand, HES Household Economic Survey and HES (Income).

Frequency

3 yearly survey.

Availability

Stats NZ website. Household transport expenditure will not be available until 2022.

Note

All dollars are nominal (not adjusted for inflation) and include survey error margins of up to 10 per cent. Values are averages (not medians) of households in the Auckland region.

Relevance

Reducing household transport costs can help to improve equity across the region. It can also drive change in mode choice. Transport costs contain expenditure on vehicle purchases, private transport supplies and services, and passenger transport services. It includes spending on petrol, vehicle parts and servicing, and travel by rail, road, air and sea.

Baseline (2016)

As of 2016, the average cost per week as a percentage of average household costs were:

- purchase of vehicles - $72.50 per week
- private transport supplies and services - $70.50 per week
- passenger transport services - $71.00 per week
- percentage of transport costs to average household costs (%) - 14.0 per cent.

Analysis

Between 2016 and 2019, the ratio of transport costs as a percentage of household costs increased from 14.0 per cent to 16.0 per cent. However, in the longer term, transport costs have remained relatively constant at between 13.9 to 16.0 per cent of household costs.

Between 2007 and 2019, passenger transport costs as a proportion of average household costs increased the most from $25.60 to $80.80 per week. Purchase of vehicle costs showed the second highest increase from $44.10 to $76.70, whilst private transport supplies and services decreased slightly from $77.90 to $76.00.

There is no new data for this measure. Due to the disruption of COVID-19 restrictions to interviewing, StatsNZ decided to halt the ‘full expenditure’ component of the Household Economic Survey for the year ended June 2022. This content will be collected in the Household Economic Survey for the year ended June 2023. Household expenditure statistics: Year ended 30 June 2023 will be released in early 2024.

Trend

- From 2007 to 2019, no significant change.

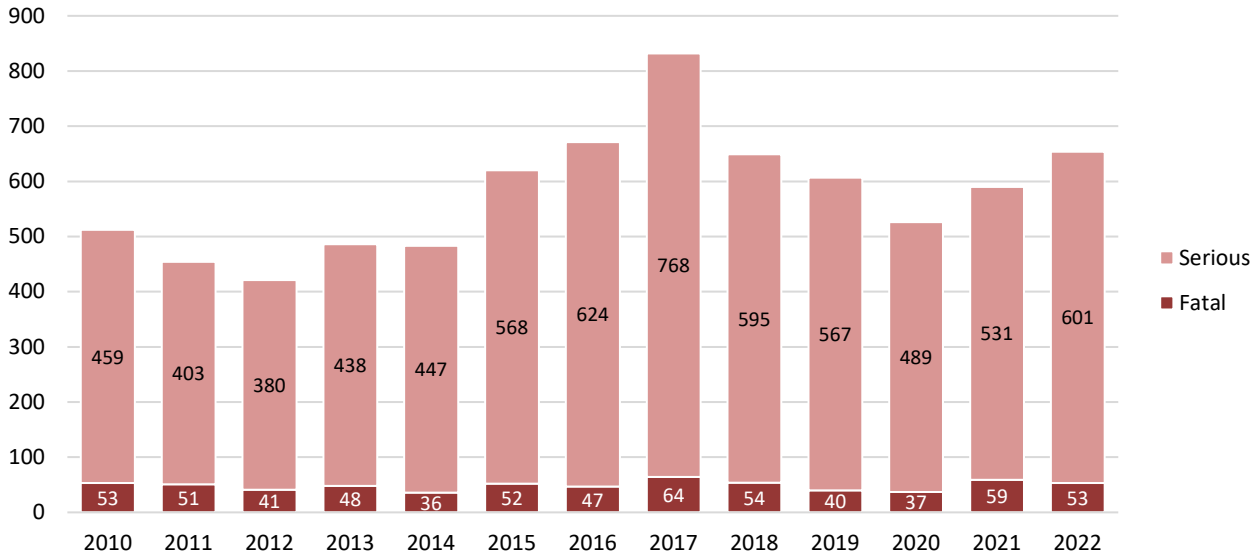
Outcome

Transport and Access

Measure 5

Deaths and serious injuries from the transport network

Number of serious and fatal injuries



Data

Serious and fatal traffic deaths and injuries in the Auckland Region.

Source

Auckland Transport Safety Performance Dashboard – Board Reports.

Frequency

Monthly and annual updates.

Availability

Auckland Transport.

Note

Road crash 'fatal and serious injuries' (FSI) is an annual measure of the number of individual deaths and 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. Reporting delays may cause numbers to change slightly between reporting cycles.

Relevance

This is a key indicator for understanding annual changes in the scale and severity of road trauma across Auckland. The measure reflects the recent international and national shift to a Safe Road System increasingly free of death and serious injury. This approach acknowledges that while minor injury or non-injury crashes may still occur, road system designers have a responsibility to create and operate a transport system where people are protected from death or serious injury. Auckland became a Vision Zero city in 2019, following the adoption of Vision Zero for Tāmaki Makaurau, with a goal of no deaths or serious injuries in our transport system by 2050.

Baseline (2018)

In the year to December 2018, there were:

- 595 serious injuries
- 54 fatalities.

Analysis

There has been a significant increase in deaths and serious injuries since 2020. In the 12 months to the end of December 2022 there were 53 deaths and 601 serious injuries on Tāmaki Makaurau roads compared to 59 and 531 respectively for the same period in 2021. The number of people who lost their lives (53) was a small decrease from the 59 fatalities in 2021.

Thirty fatalities have been motor-vehicle occupants (24 drivers, 6 passengers) and 23 have been vulnerable road users (VRUs) (9 motorcycle riders, 9 people on foot and 5 people on bikes). Although motor-vehicle occupant fatalities made up just over half of Auckland road fatalities in 2022 at 57 per cent, vulnerable road user fatalities increased by 35 percent (from 17 vulnerable road user fatalities in 2021 to 30 in 2022).

The increase in deaths and serious injuries can be partially attributed to an increase in high-risk behaviours with an increase in speed related and fatigue related behaviours. Increases were also seen in run off, head-on and rear-end type crashes. Vulnerable road user deaths and serious injuries increased with the largest increase for motorcyclists at 16 percent compared to people on bikes at 3 percent and people on foot at 1 percent.

Trend

– From 2018 to 2020, decreasing numbers in both deaths and serious injuries. However, there was a significant increase in serious injuries in 2021 and a small decline in fatalities.

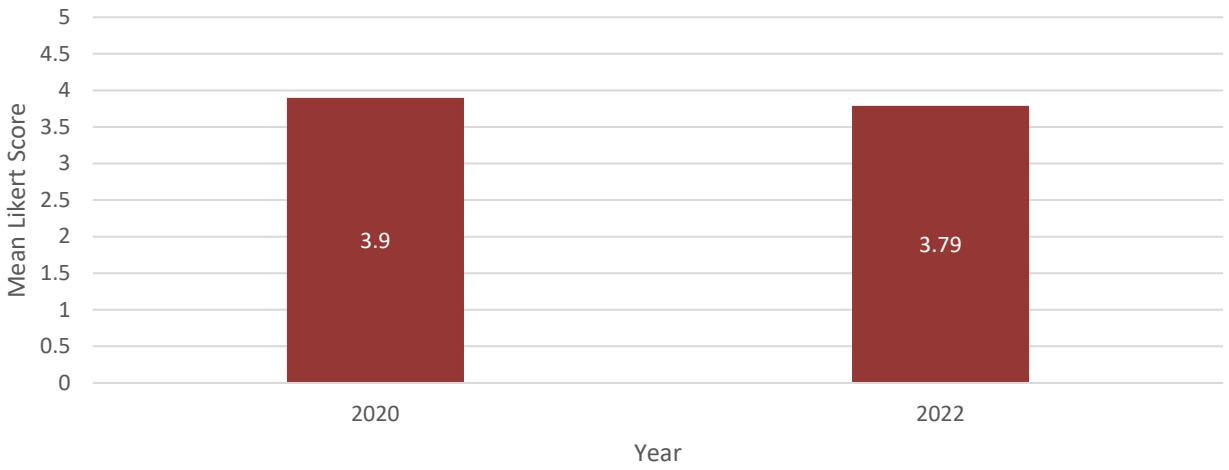
Outcome

Environment and Cultural Heritage

Measure 1

People's treasuring and stewardship of the natural environment and cultural heritage

Measure 1a. Aucklanders who value biodiversity



Data

Mean Likert score from survey respondents who expressed a “pro-ecological” world view utilising the New Ecological Paradigm Scale. The score can range from 1 to 5: never=1, rarely=2, sometimes=3, often=4, all the time=5. Therefore a score of 3.9 would mean, on average, Aucklanders value biodiversity ‘often’.

Source

Auckland Council, Environmental Services.

Frequency

Every 2 years.

Availability

The Auckland Council Natural Environment Portfolio Social Outcome Monitor 2020 report is available on Knowledge Auckland (www.knowledgeauckland.org.nz).

Note

This measure utilises the revised New Ecological Paradigm (NEP) scale. This is a globally recognised method to indicate endorsement of a pro-ecological worldview. It consists of 15 statements, some that align to a “pro-ecological” world view and some of a contrary world view. A mean score for each question of those whose reaction to each statement indicates a “pro-ecological” world view is calculated and then averaged

across all 15 questions.

Relevance

People's world view informs their choices and behaviour. People with a "pro-ecological" world view are more likely to be stewards of the natural environment and make sustainable choices.

Baseline (2020)

The 2020 result is the baseline for this measure: 3.9

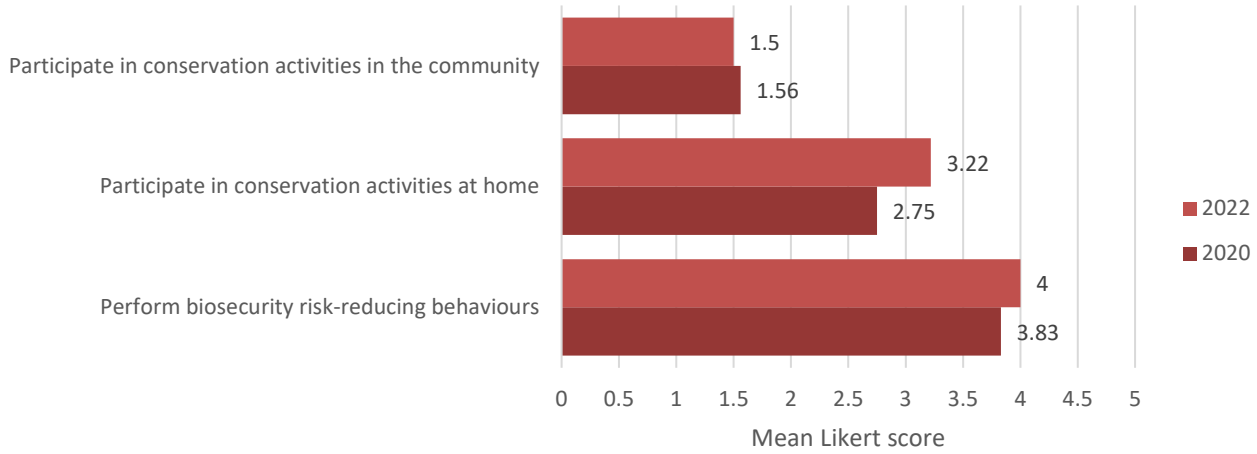
Analysis

In 2022 the mean score is 3.79. This is not a meaningful reduction in how Aucklanders value biodiversity

Trend

- From 2020 to 2022, no significant change.

Measure 1b. Aucklanders who perform environmental/conservation activities



Data

Proportion of survey respondents who regularly perform a range of environmental / conservation activities.

Source

Auckland Council, Environment Services.

Frequency

Every 2 years.

Availability

The Auckland Council Natural Environment Portfolio Social Outcome Monitor 2020 report is available on Knowledge Auckland (www.knowledgeauckland.org.nz).

Note

These scores are mean Likert scores that range from 1 to 5. They are participants who engage in a number of specified environmental or conservation activities regularly.

Regularly is defined as ‘once or twice every 2-3 months’ and ‘once a month or more’ or ‘often/usually’ and ‘all of the time / every time’ depending on what was most appropriate to the activity.

Relevance

Performance of these activities demonstrates stewardship of the natural environment. People who participate in conservation activities are more likely to start performing these activities outside the home.

Baseline (2020)

The baseline figures are Biosecurity behaviour (3.83), conservation at home (2.75) and conservation activities in the community (1.56).

Analysis

The level of community conservation efforts remained consistent between 2020 and 2022, despite the challenges posed by COVID-19.

Conservation activities at the individual household level increased significantly during the same period, as more people engaged in planting native species.

The majority of biosecurity practices continued to be followed, with the adherence to these behaviours remaining consistently high since 2020.

Overall, when looking at the bigger picture, the pro-environmental actions taken by the people of Auckland has been stable, with increased conservation efforts at home.

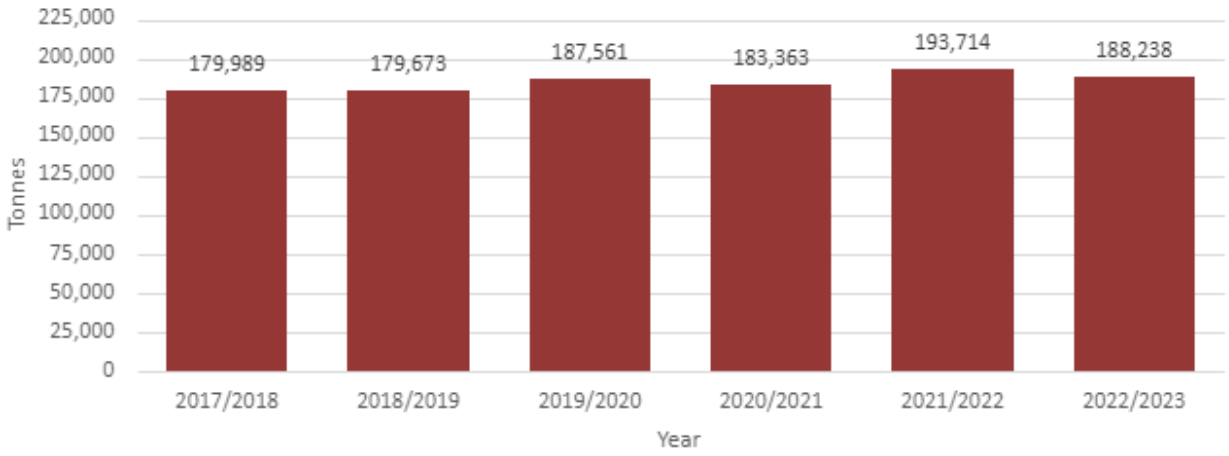
Trend

- From 2020 to 2022, no significant change.

Measure 1c. Number of initiatives with Māori which protect and improve the environment, improve water quality, and reduce pollution

This was a new measure for the 2021 financial year. Further work may be needed on a supporting framework to facilitate reporting in future monitoring reports.

Measure 1d. Domestic waste tonnage collected through Auckland Council's kerbside refuse service



Data

The weight of waste generated by households per capita. Refuse collected by private waste collectors is excluded.

Source

Contractor tonnages reporting, Auckland Council.

Frequency

Data is reported monthly from collection contract areas across the region.

Availability

Current and historical data is available from Waste Solutions, Auckland Council. Annual data is published every six years in Auckland Council's Waste Assessment and Waste Management and Minimisation Plan.

Note

Domestic waste from households, which are serviced by a private provider is not included in this data. The proportion of total households that this includes can change year on year to a small degree. Work is underway to develop robust estimates of these private tonnages so that a per capita measure can be calculated. A per capita waste generation measure is useful as a comparator with other council areas and gives insights into individual behaviours.

Relevance

Domestic kerbside refuse production is a good indicator of people's behaviour. It can be used to monitor the progress and impact of waste minimisation interventions such as frequency of collections, greater access to diversion opportunities for organics and recyclables, and the impact of service costs and container volume on household behaviour.

Baseline (2017/18)

The current baseline is set against the 2017/2018 financial year data, which was 179,989 tonnes per annum.

Analysis

Domestic waste volumes have fluctuated up and down since 2017/18 with the larger year on year increase occurring between 2020/21 and 2021/22. Since 2020/21 the volumes of waste have exceeded the baseline.

The full rollout of a kerbside food scraps service across the region began in 2021/2022 and could be partly responsible for the reduction of kerbside waste seen between 2021/2022 and 2022/2023. Another factor to support reduced waste volumes is the gradual introduction of product stewardship schemes, which will encourage product producers to increase the recyclability of items such as packaging.

Trend

↓ A negative trend from 2019/2020 to 2022/2023.

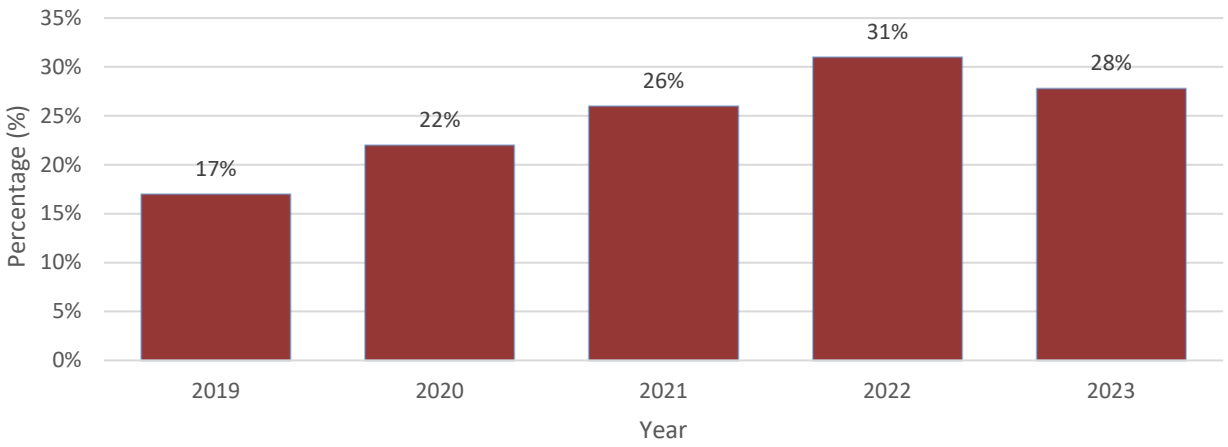
Outcome

Environment and Cultural Heritage

Measure 2

Sustained management of priority native habitats

Measure 2a. Proportion of rural mainland Auckland under sustained management for possums



Data

Rural areas in mainland Auckland controlled within the last 3 years and achieving a confirmed <3% Residual Trap Catch (RTC) and areas controlled within the current year and achieving a confirmed <6% RTC.

Source

Regional Possum Control Project - Mainland Programme. Environmental Services, Auckland Council.

Frequency

Annually.

Availability

Annual Report, Auckland Council.

Note

Rural is defined as the areas of Auckland Region outside the current Rural-Urban Boundary in the Auckland Unitary Plan.

Sustained management means that possums have been reduced to, and are being maintained at, levels where their impact on the natural environment and agricultural sector are considered to be minor. Pre and post control monitoring are carried out using the Residual Trap Catch (RTC) method to confirm whether target possum densities have been achieved. Possums are considered to be under sustained management where a RTC of <3% has been achieved within the last 3 years, or <6% is maintained per year.

Relevance

Possums have a significant impact on natural ecosystems, both as predators of birds and insects and browsers of native plants. Possums can also spread tuberculosis to cattle. Achieving sustained management of possums leads to a reduction in possum pressure and leads to improved ecological integrity and ecosystem resilience to other stressors such as climate change.

Baseline (2019)

17 per cent of rural mainland Auckland was under sustained management for possums in 2019.

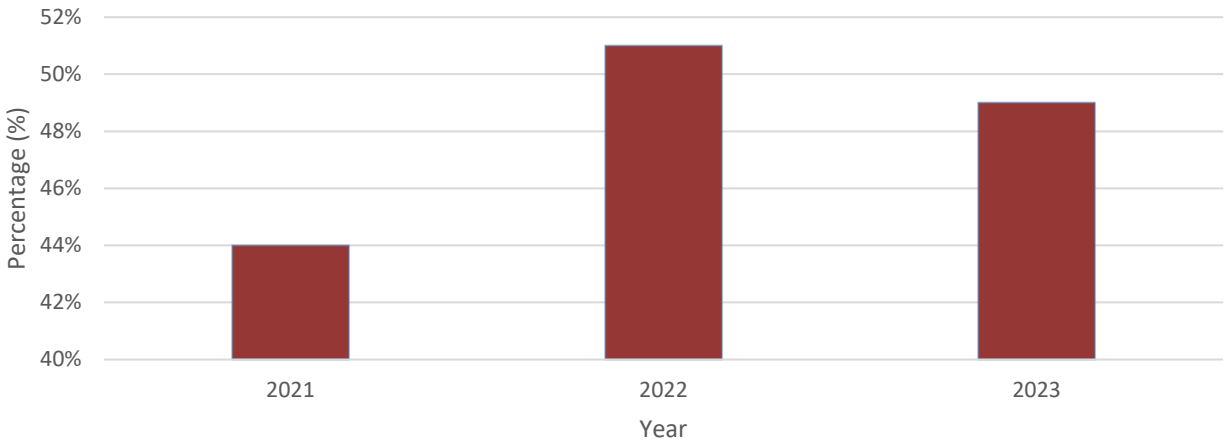
Analysis

Sustained possum management in rural mainland Auckland has dropped to 28% in 2023 due to possum numbers being higher than expected across half of the Awhitu Peninsula.

Trend

↑ A positive trend from 2019 to 2023.

Measure 2b. Proportion of priority native habitats on regional parks under sustained management for pest plants



Data

The percentage of Biodiversity Focus Areas (BFAs) on regional parks, which receive control for pest plants, as well as areas understood to be weed free and maintained as such through control of pest plants in the buffer areas.

Source

Parks Integrated Site Management Project – Mainland Programme, Environmental Services, Auckland Council.

Frequency

Annually.

Availability

Annual Report, Auckland Council.

Note

Biodiversity Focus Areas (BFAs) are a set of defined areas of indigenous ecosystems across Auckland that if appropriately managed would maintain the greatest number and most diverse range of Auckland's indigenous ecosystems.

Only includes control where it is understood the pest plants will be reduced, over time, to levels where their impact on native ecosystems will be minor.

Results include both areas where targeted weed control is being carried out, as well as the majority of Hunua Ranges Regional Park, which is understood to be largely free of pest plants and being maintained as such through control of pest plants around the edges and buffer areas of the park.

Relevance

BFAs are representative of the diversity of Auckland's indigenous ecosystems. Controlling pest plants in these areas reduces pressures, leading to improved ecological integrity of managed sites and ecosystem resilience to other stressors such as climate change.

Baseline (2021)

44 per cent of Biodiversity Focus Areas (BFAs) on regional parks receive monitoring and control for pest plants in 2021. This was measured for the first time in the 2021 financial year and the result is the baseline for this measure.

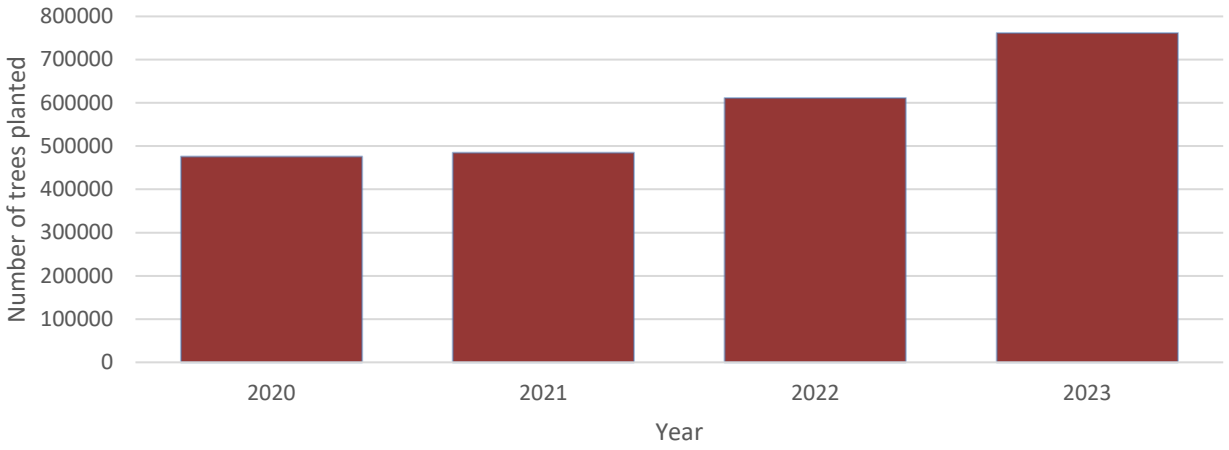
Analysis

In the 2023 financial year, 50% of Biodiversity Focus Areas (BFAs) on regional parks are receiving monitoring and control for pest plants. This is a slight reduction from the previous year due to a wet summer season and damage from Cyclone Gabrielle preventing access to some sites along the West Coast.

Trend

↑ A positive trend from 2021 to 2023.

Measure 2c. Number of native plants planted



Data

The number of native plants planted by Auckland Council, its contractors, or through community activities it funded or facilitated.

Source

Auckland Council.

Frequency

Annually.

Availability

Annual Report, Auckland Council.

Note

Native plants are defined as plants whose natural range includes the Auckland region.

The total includes plantings funded by Auckland Council and delivered by numerous teams and programmes, as well as community groups including Regional Parks revegetation, Local Parks community planting, Trees for Survival, Mayor's Million Trees, Healthy Waters waterway protection and private landowner and community-led restoration projects.

A significant number of native plants are also planted throughout the region with funding from other sources external to Auckland Council for the purposes of restoring, enhancing and connecting native habitats. These plantings are not included in this measure.

Relevance

Native plantings offer a number of vital ecosystem services such as increased food and habitat available for native species, water and air quality improvement, and the sequestration of carbon.

Plantings can also provide buffering of, and connectivity between, high value native habitats in both urban and rural environments. They can also improve the resilience of native habitats and local communities to the impacts of climate change.

Baseline (2020)

This was measured for the first time in 2020 and the result is the baseline for this measure. 475,539 native plants planted by Auckland Council, its contractors, or through community activities it funded or facilitated.

Analysis

A positive upward trajectory on the total number of native trees planted has occurred since 2020. The highest number of trees planted per planting season occurred in 2023 (761,451 trees). This activity is increasing the biodiversity throughout Tāmaki Makaurau Auckland.

Trend

↑ A positive trend from 2020 to 2023.

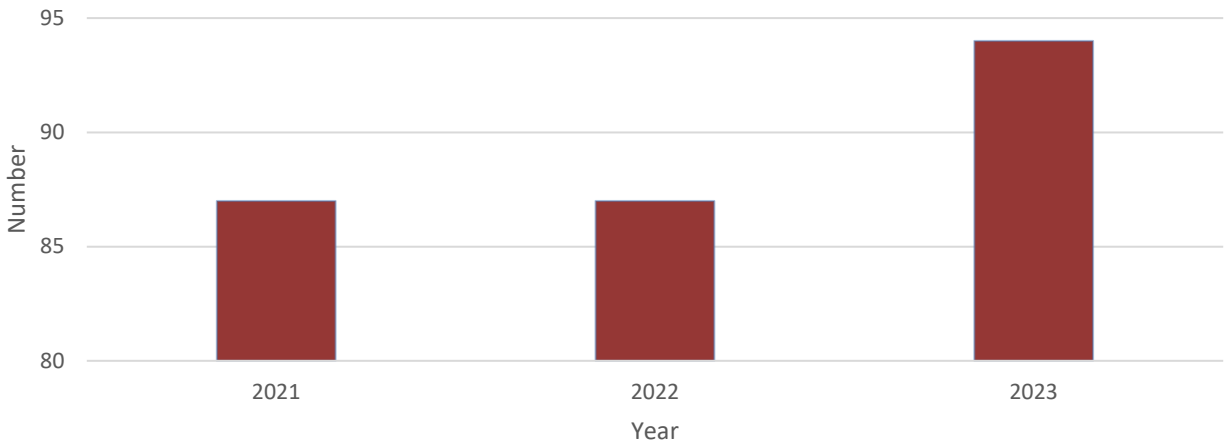
Outcome

Environment and Cultural Heritage

Measure 3

Active management of threatened native plants and animals

Measure 3a. Number of plant and animal species regionally vulnerable to extinction under active management



Data

Number of plant and animal species regionally vulnerable to extinction under active management.

Source

Threatened Species Project – Biodiversity Focus area Programme, Environmental Services, Auckland Council.

Frequency

Annually.

Availability

Annual Report, Auckland Council.

Note

"Vulnerable to extinction" is considered equivalent to species that would be expected to be listed as threatened or at risk through a regional threat assessment. The total number of species considered “vulnerable to extinction” is subject to change over time with changes in pressures, as well as management. It is for this reason we report the ‘number’ of species rather than a proportion or percentage as has previously been reported.

"Active management" is defined as reducing or controlling pressures impacting on a species to the extent it is understood that a reduction in those pressures will improve the likelihood of the species surviving at that site in the long-term. Management may be delivered entirely, or in part by the council, or through

community stewardship.

Invertebrates, fungi, lichen, non-vascular plants, and marine species are not covered by this measure.

Regional threat assessments for species (in planning phase) will determine the relative risk of extinction of each species, along with their current population trends. This will help to determine the number of species that have regional populations that are stable or improving. These will be conducted every 3-6 years. National threat assessments for all species are conducted by DOC every 3 years.

Relevance

There are many plants, birds, freshwater fish, lizards, frogs and bats considered “vulnerable to extinction” in the region through a review of national and regional data and expert knowledge. Management of key pressures will improve the population trend of these species and improve their resilience to other pressures, such as climate change.

Baseline (2021)

87 plant and animal species were under active management in 2021. This was measured for the first time in 2021 and the result is the baseline for this measure.

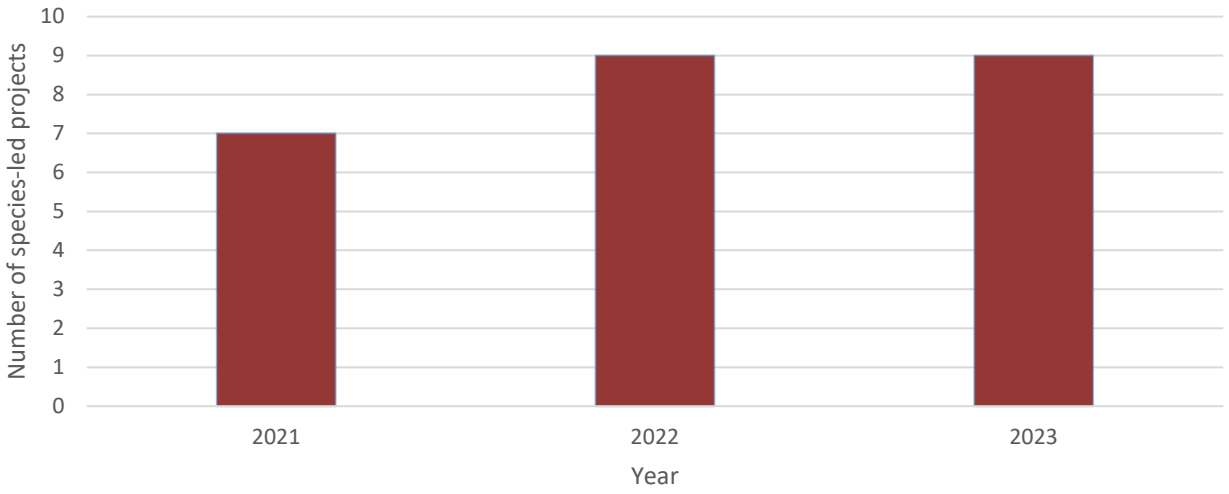
Analysis

In 2023 we increased the number of vulnerable species under active management to 94. Of this number, 79 species are afforded protection on predator free offshore islands and the Hunua Project provides protection for at least 10 indigenous species.

Trend

↑ A positive trend from 2021 to 2023.

Measure 3b. Species-led projects being delivered on Hauraki Gulf islands for the purpose of maintaining or achieving eradication of pest plants and pest animals



Data

Number of species-led projects being delivered on Hauraki Gulf islands for the purpose of maintaining or achieving eradication of pest plants and pest animals.

Source

Islands Programme, Environmental Services, Auckland Council.

Frequency

Annually.

Availability

Annual Report, Auckland Council.

Note

"Species-led projects" means projects that target single or multiple species. This includes both site level pest control projects and projects that manage pest pathways to prevent species re-invading those islands from which they have been eradicated. The majority of site level control projects target a single pest on a single island, but there will be some exceptions to these where multiple species can be controlled with the same tools and methods, or where islands are sufficiently close that control can be delivered on more than one island (e.g. the Aotea / Great Barrier Island group).

"Pest plants and pest animals" are defined as any pest listed in the Auckland Regional Pest Management Plan (including invertebrates) for which eradication on an island is deemed feasible.

Relevance

Eradicating pests contributes to the protection and enhancement of the nationally significant life-supporting capacity of the Hauraki Gulf's environment, as well as the maintenance and enhancement of its natural resources that provide for recreation and enjoyment.

Baseline (2021)

This was measured for the first time in 2021 and the result is the baseline for this measure. Seven species-led projects are being delivered on Hauraki Gulf islands for the purpose of maintaining or achieving eradication of pest plants and pest animals.

Analysis

There has been no significant change in the number of species-led projects being delivered on Hauraki Gulf islands for the purpose of maintaining or achieving eradication of pest plants and pest animals since 2021. The total number of projects remains at nine. A tenth project had been planned in 2022/2023 to eradicate the pest plant Rhamnus from Waiheke Island but was abandoned for feasibility reasons. However, Rhamnus continues to be controlled at high value sites.

Trend

- From 2021 to 2023, no significant change.

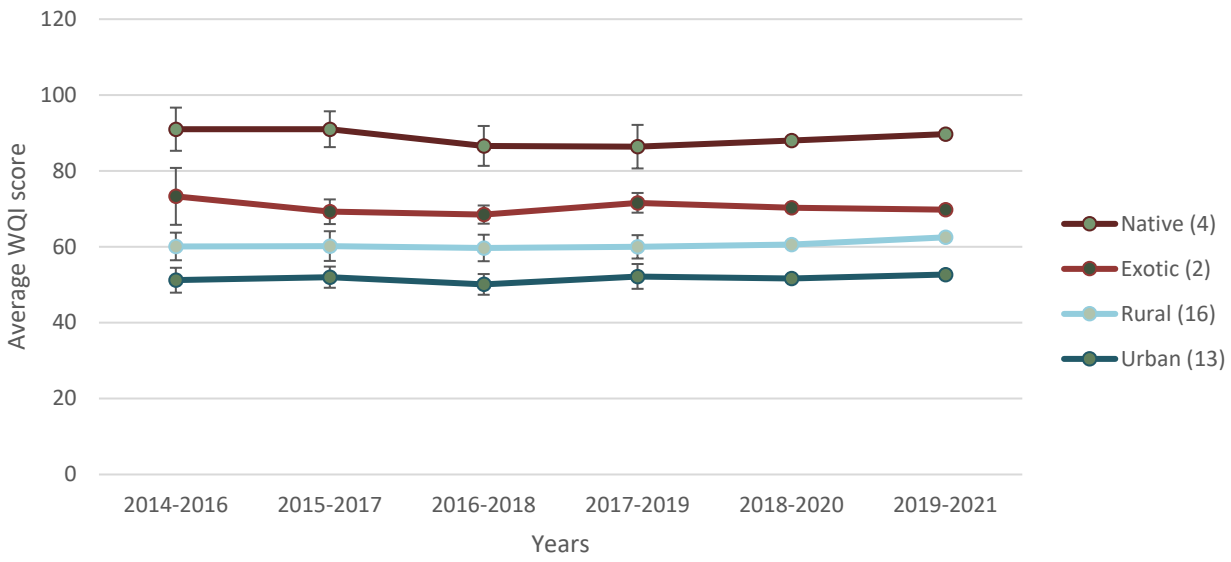
Outcome

Environment and Cultural Heritage

Measure 4

Marine and freshwater quality

Measure 4a. Stream water quality



Data

Stream Water Quality Index (WQI).

Source

River Water Quality Monitoring Programme, Research and Monitoring Unit, Auckland Council.

Frequency

Water quality is measured monthly and reported annually. WQI is calculated for a three-year period.

Availability

Knowledge Auckland.

Notes

The methodology used to calculate the WQI has changed since this measure was reported on in the 2019 Auckland Plan 2050 Monitoring Report. All data reported here have been recalculated using this new methodology.

The Water Quality Index compares rolling results across three years of monitoring to regional guidelines based on ten years of water quality data from reference streams with minimal human impacts in the

Auckland region. The number of sites used in each three years of monitoring changes per reporting period. For example, the number of urban sites used since 2014 was 11 but has changed to 13 sites in the 2019-2021 reporting, and the number of native sites changed from 6 sites to 4 sites in the 2019-2021 reporting period.

Monitoring sites are grouped as 'urban' where upstream urban land cover is >15% and as 'rural' where upstream land cover is >25%.

The index may be phased out in the future as new measures of integrated ecosystem health are established under the National Policy Statement for Freshwater Management 2020.

The index is based on seven key water quality variables including temperature, dissolved oxygen, pH, measures of different nutrients, and turbidity or water clarity. Scores range from 0 to 100 based on how often water quality exceeds these guidelines, by how much, and how many different guidelines are exceeded.

QUALITY	WQI RANGE	DESCRIPTION
Excellent	95-100	Water quality is very close to regional natural levels and is within all guidelines all the time
Good	80-94	Water quality is protected, and conditions rarely depart from guideline levels
Fair	65-79	Water quality is occasionally impaired
Marginal	45-64	Water quality is frequently impaired, and conditions often depart from guideline levels
Poor	0-44	Water quality is almost always impaired, and conditions are usually above guideline levels

Relevance

Stream water quality is largely influenced by catchment land use. In general, streams with higher proportions of urban land cover in the upstream catchment have poorer water quality. Streams within rural catchments generally have marginal to fair water quality but specific sites such as in the southern Pukekohe area have poor water quality due to high nutrient levels.

Streams with a predominantly native forest catchment generally have little to no human impact and good to excellent water quality. However, one stream categorized as 'native' has 12% urban land cover upstream and water quality is marginal at this site.

Baseline (2018)

The current baseline is set against the average WQI score for 2018 (2016-2018 scores) across the land cover groups as per the analysis below:

- Native forest – Good
- Exotic Forest – Fair
- Rural – Marginal
- Urban – Marginal.

Analysis

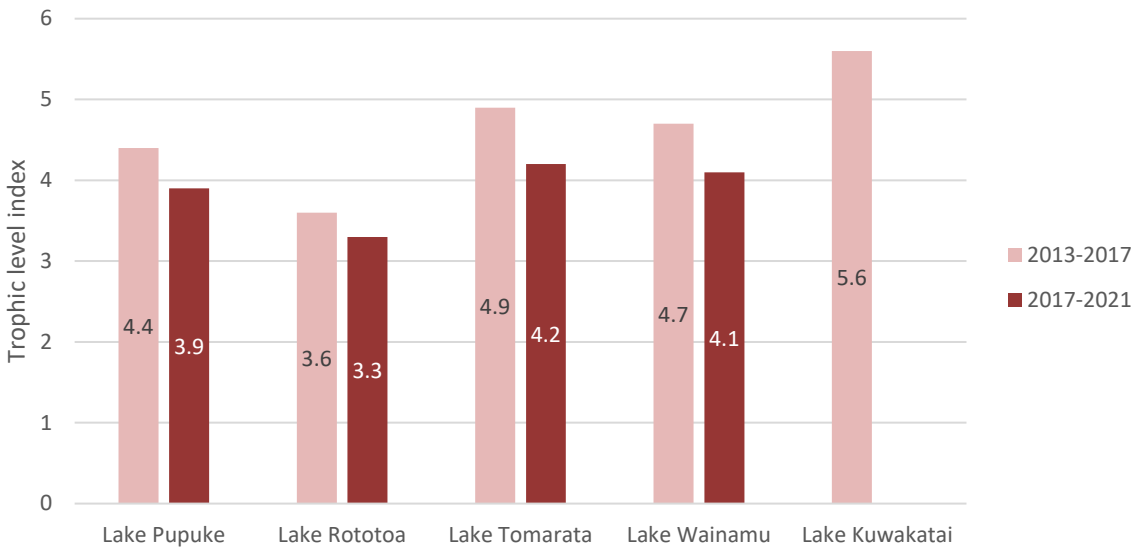
Stream water quality where native land cover predominates has stayed in the 'good' water quality category since 2016. Exotic land cover areas remain in the 'fair' water quality category with the latest reporting period (2019-2021) WQI value being similar to that in 2016.

Stream water quality where rural land cover/use dominates remains in the marginal water quality category. The 2019-2021 reporting period has the highest WQI value since records began. Urban stream water quality remains in the marginal water quality category and also has the highest WQI value since records began.

Trend

- From 2016 to 2021, no changes in the water quality categories for all land cover groups (native, exotic, rural and urban).

Measure 4b. Lake water quality



Data

Trophic Level Index (TLI).

Source

Lake Water Quality Monitoring Programme, Research and Monitoring Unit, Auckland Council.

Frequency

Measurements are taken quarterly and/or six weekly. The medium TLI for a five-year period is calculated every two years.

Availability

Knowledge Auckland.

Notes

Monitoring of Lake Kuwakatai was stopped in 2017 but resumed in 2020 (therefore, no data for 2017-2021 period).

Auckland Council's lake water quality programme expanded in January 2020 to monitor a total of 16 lakes across the region and sampling frequency increased to monthly monitoring. Interim reporting on these additional lakes will be available in 2023.

The TLI is used to place lakes into nutrient-enrichment categories known as trophic states, based on concentrations of nutrients (nitrogen and phosphorus), algae and water clarity.

TROPHIC STATE	TLI RANGE AND CATEGORY	DESCRIPTION
Microtrophic	< 2; very good	Lakes are very clean and often have snow or glacial sources
Oligotrophic	2–3; good	Lakes are clear and blue, with low concentrations of nutrients and algae
Mesotrophic	3–4; average	Lakes have moderate concentrations of nutrients and algae
Eutrophic	4–5; poor	Lakes are murky, with high concentrations of nutrients and algae
Supertrophic or hypertrophic	> 5; very poor	Lakes have extremely high concentrations of phosphorus and nitrogen, and are overly fertile; they are rarely suitable for recreation and lack habitats for desirable aquatic species

Relevance

When nitrogen and phosphorus accumulate in lakes (referred to as 'nutrient enrichment') above certain concentrations, they can stimulate the growth of algae and cyanobacteria. Lakes with very high concentrations of nutrients and algae are rarely suitable for recreation and provide poor habitats for aquatic species, particularly through reduction in dissolved oxygen concentrations.

Several key pressures can be drivers of change in water quality in lakes include catchment land cover type, pest fish, invasive plant species, internal nutrient loading, and climate change.

Baseline (2013-2017)

- Pupuke - Eutrophic
- Rototoa - Mesotrophic
- Tomarata - Eutrophic
- Wainamu - Eutrophic
- Kuwakatai - Supertrophic

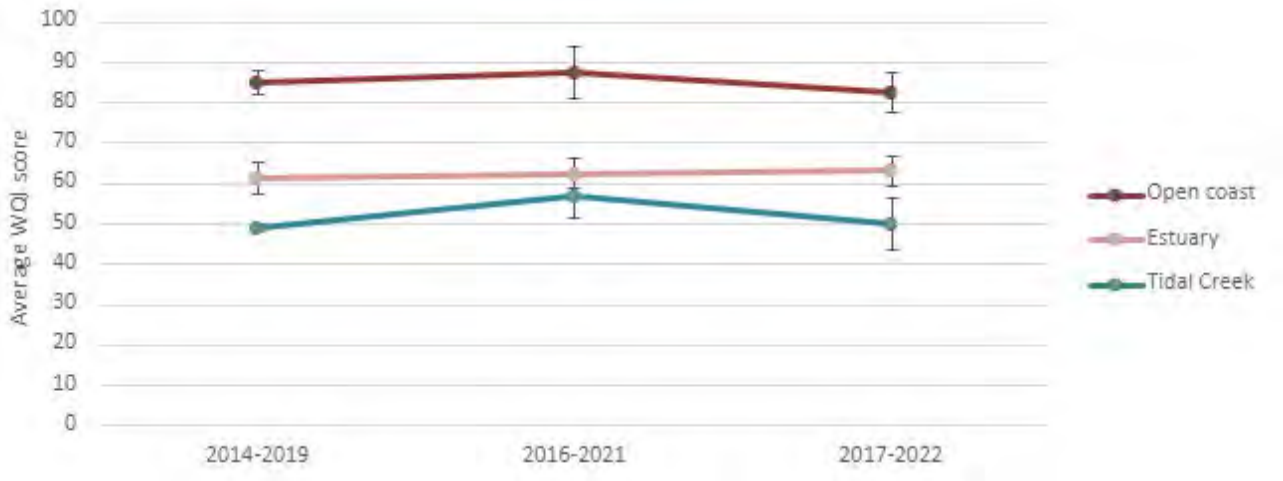
Analysis

Lake Pupuke has had a change in trophic level to mesotrophic signaling an improvement in water quality from poor to average. The other three lakes have had no change in their trophic level with Tomarata and Wainamu remaining in the poor trophic category. There is no new data for Lake Kuwakatai.

Trend

- From 2017 to 2021, no significant change.

Measure 4c. Coastal water quality



Data

Coastal Water Quality Index (WQI).

Source

Coastal Water Quality Monitoring Programme, Research and Monitoring Unit, Auckland Council.

Frequency

Water quality is measured monthly and reported annually. The Water Quality Index is calculated for a five-year period.

Availability

Knowledge Auckland.

Notes

The water quality index compares results across five years of monitoring to regional guidelines based on ten years of water quality data from reference sites in harbour mouths and open coastal environments in Auckland that are less impacted by human influences. The shift to five yearly calculations (and use of the hydrological year being July to June) in 2022 is to align with the National Policy Statement-Freshwater reporting requirements.

The monitoring network aims to be regionally representative covering our three main harbours and large estuaries, and open coastal sites located along the east coast within the Hauraki Gulf. The majority of monitoring sites are within the main body of a harbour or large estuary. Upper tidal creeks are monitored within the Waitemata Harbour.

The index is based on six key water quality variables including dissolved oxygen, chlorophyll α (algae), measures of different nutrients, and turbidity or water clarity. Scores range from 0 to 100 based on how often water quality exceeds these guidelines, by how much, and how many different guidelines are exceeded. There are four monitoring sites for the open coast, 27 for estuaries and four for tidal creeks.

QUALITY	WQI RANGE	DESCRIPTION
Excellent	95-100	Water quality is very close to regional natural levels and is within all guidelines all the time
Good	80-94	Water quality is protected, and conditions rarely depart from guideline levels
Fair	65-79	Water quality is occasionally impaired
Marginal	45-64	Water quality is frequently impaired, and conditions often depart from guideline levels
Poor	0-44	Water quality is almost always impaired, and conditions are usually above guideline levels

Relevance

Water quality in our estuarine and coastal environments is influenced by the runoff of freshwater and generally improves as this runoff is diluted and flushed further out into our harbours and to the coast.

High levels of nutrients can stimulate the growth of phytoplankton, and macroalgae and affect dissolved oxygen concentrations. High turbidity or poor water clarity can impact phytoplankton and macroalgae by limiting light levels in the water column, and sediments can also settle out to the seabed increasing muddiness. These interactions are complex and the ecological health of communities of animals living in the seabed provides a more integrated picture of the health of the coastal environment.

Baseline (2018)

The current baseline is set against the average WQI score for 2018 (2016-2021 scores) across the water body types as per the analysis below:

- Open Coast – Good
- Estuary – Marginal
- Tidal Creek – Marginal.

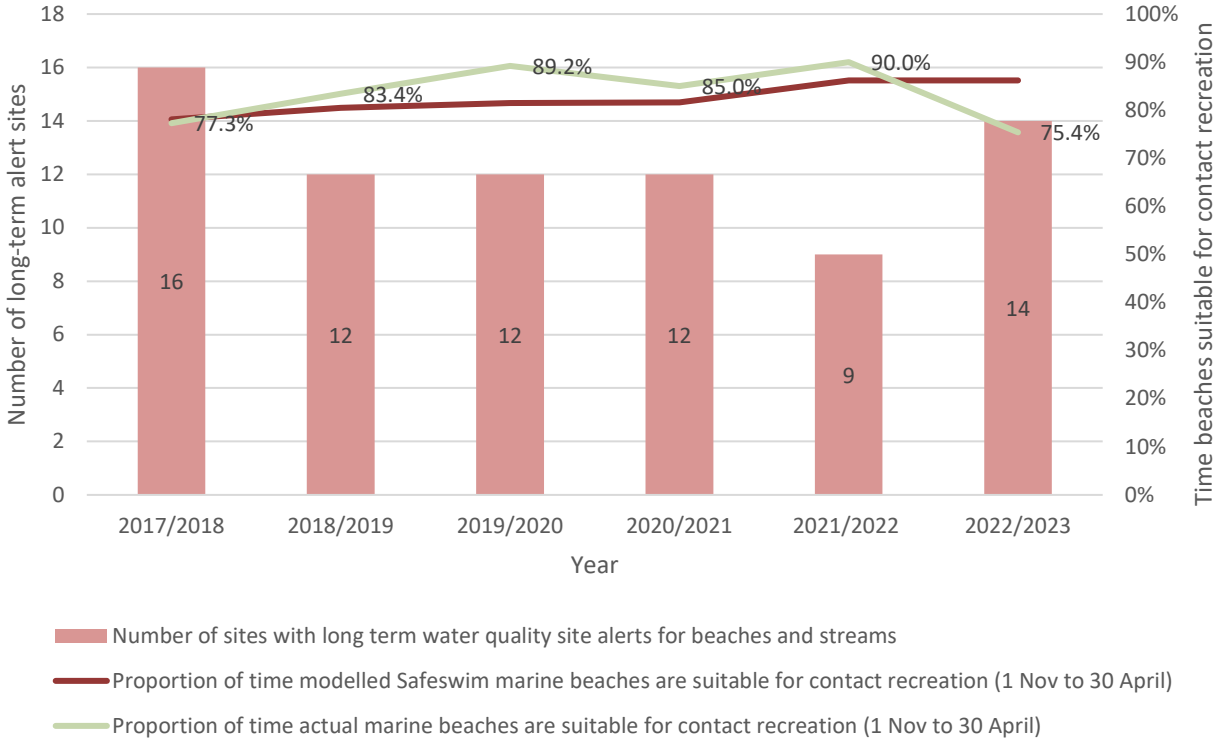
Analysis

Open coast water quality continues to be classified as ‘good’. Estuary water quality appears stable over time to remain in the marginal water quality category since records began (2014). Tidal creek water quality continues to be marginal.

Trend

- From 2019 to 2022, no significant change.

Measure 4d. Beach swimming safety



Data

Number of sites with long-term water quality alerts for beaches and streams, proportion of time modelled Safeswim reference beaches are suitable for contact recreation during the summer swimming season (1 November to 30 April), and proportion of time actual marine beaches are suitable for contact recreation during summer swimming season.

Source

Auckland Council, Safeswim Programme.

Frequency

Annual.

Availability

Auckland Council Annual Report. More detailed information is reported via annual memo to the Auckland Council's Planning, Environment and Parks Committee.

Notes The Safeswim standardised modelled data uses 84 marine beaches that have been in the Safeswim programme since 1st November 2017.

Suitability for contact recreation requires compliance with thresholds or guidelines that are set by the Ministry for the Environment and Ministry of Health and published in national microbiological water quality guidelines.

Actual statistics report what actually happened during the reporting period and includes model predictions, automatic overflows and manual water quality alerts for all beaches in the programme. The total number of

beaches changes over time and are as follows:

- 2017-18: 84 beaches
- 2018/19: 99 beaches
- 2019/20: 100 beaches
- 2020/21: 105 beaches
- 2021/22 114 beaches
- 2022/23: 115 beaches

Long-term water quality alerts are put in place at sites with evidence of consistently poor water quality. The water quality alerts relate to the concentration of faecal indicator bacteria in the water which indicate the levels of human pathogens in the water. The total number of sites in the programme changes from year to year and are as follows:

- 2017-18: 95 sites
- 2018/19: 112 sites
- 2019/20: 112 sites
- 2020/21: 119 sites
- 2021/22 128 sites
- 2022/23: 132 sites

Relevance

Swimming in water with faecal pollution can result in gastro-intestinal illnesses, respiratory tract infections and infected wounds.

Faecal pollution can be from human, avian, canine, or other animal sources. Human faecal contamination of stormwater occurs from either onsite wastewater networks in rural areas or reticulated wastewater networks in urban areas.

In general, there is a higher risk of poor water quality at Auckland's beaches:

- after rain, especially after heavy rain events
- in or near stormwater outlets and urban streams feeding onto beaches
- in areas serviced by ageing network infrastructure in the city centre
- in areas that have experienced significant residential growth in the past few decades putting existing infrastructure under stress and
- in areas serviced by ageing onsite septic systems on the edge of the city or in rural areas where development has exceeded the capacity of those systems.

Baseline (2018)

The 2017/2018 baseline are:

- Long-term water quality alerts: 16
- Proportion of time modelled Safeswim marine beaches were suitable for contact recreation during the summer swimming season: 78.1 per cent.
- Proportion of time real-time Safeswim marine beaches were suitable for contact recreation during the summer swimming season: 77.3 per cent.

Analysis

The amount of time it is suitable for summertime contact recreation at Auckland beaches has consistently increased since 2017/18 when using the Safeswim standardised modelled data. In the 2022/23 season, the standardised modelled data shows our beaches have been suitable for contact recreation 86 per cent of the

time (well above the 2018 baseline of 78%). It is noted that the standardised modelled data uses a fixed rainfall value.

Actual statistics from 2018 to 2021/22 have consistently improved from the baseline and been suitable for contact recreation between 83 and 90 per cent of the time. In the 2022/23 summer season, the actual statistics for the 84 beaches was lower than the baseline for the first time. The high volumes of rainfall observed at Auckland's beaches caused higher levels of wastewater contamination and this impacts on coastal (beach) water quality. Actual statistics have no clear trend but rather fluctuate from year to year. This is expected due to variability in annual summer rainfall.

The decreasing trend for the number of sites with long-term water quality alerts has not continued in summer 2022/23. Five new long-term alert sites (beaches or streams) occurred in 2022/23 including four sites new to Safeswim. This takes the total number of sites with consistently poor water quality up to 14 sites (which is not far from the baseline of 16 sites).

Trend

↑ A positive trend from 2017 to 2023 for proportion of time beaches are suitable for contact recreation using standardised modelled data

- No trend from 2017 to 2023 for proportion of time beaches are suitable for contact recreation using actual statistics.

- No trend for number of sites with long-term water quality alerts.

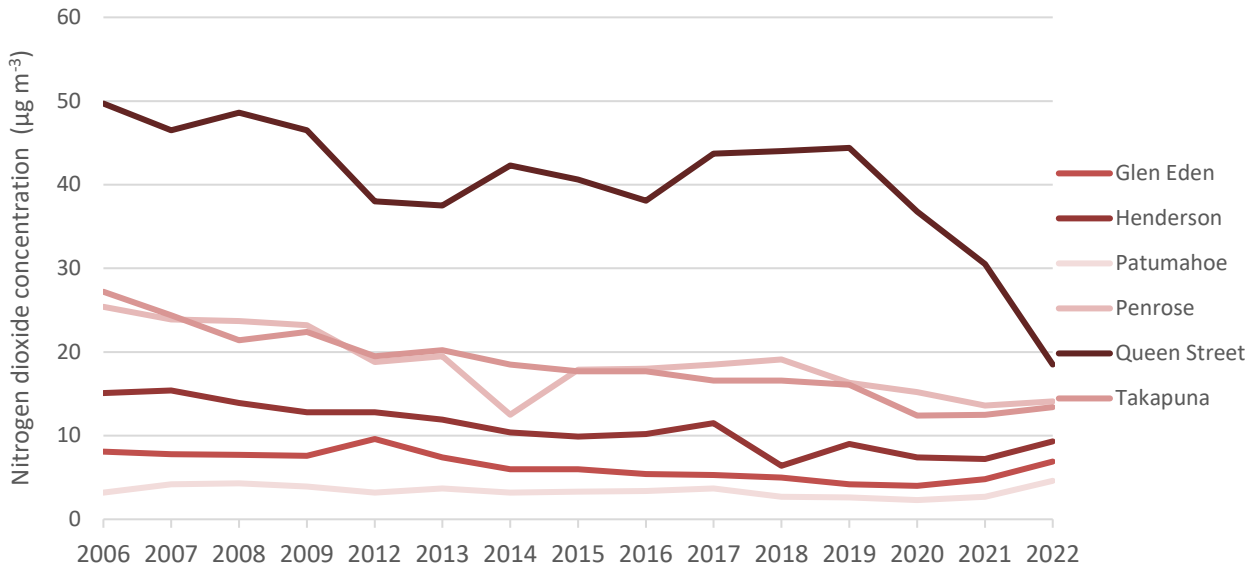
Outcome

Environment and Cultural Heritage

Measure 5

Air Quality & Greenhouse Gas Emissions

Measure 5a. Concentration of nitrogen dioxide (NO_2)



Data

Nitrogen dioxide (NO_2) average annual concentrations from 2006 to 2022 at Glen Eden, Henderson, Patumahoe, Penrose, Queen Street and Takapuna.

Source

Auckland Council ambient air quality monitoring programme.

Frequency

Continuous data is collected every minute and averaged over 10 minutes, 1-hour and 24-hour periods.

Availability

Real-time and historical data are available from Auckland Council on request. Technical and summary reports describing Auckland's air quality are available at Knowledge Auckland. (https://knowledgeauckland.org.nz/natural-environment/).

Note

Emissions from vehicles (especially diesel) contribute nitrogen oxides (NO_x), mainly nitric oxide (NO). Nitric oxide reacts with oxygen in the atmosphere to form NO_2, which can cause the brown haze that affects our health.

Relevance

There is a statistically significant increase in the number of admissions to hospital for respiratory disorders follow brown haze events over Auckland. This is because the brown haze is a stagnant pool of polluted air sitting over a large area of Auckland's airshed. These events tend to occur on clear calm mornings in winter when people go out and exercise, unaware of the risks of exacerbating existing bronchial and respiratory disorders.

Baseline (2016)

The current baseline is set against 2016 data:

- Glen Eden 5.4 μgm^{-3}
- Henderson 10.2 μgm^{-3}
- Patumahoe 3.4 μgm^{-3}
- Penrose 18 μgm^{-3}
- Queen Street 38.1 μgm^{-3}
- Takapuna 17.7 μgm^{-3}

Analysis

NO_2 is largely emitted from on-road vehicles. Changes in vehicle numbers, improvements in engine efficiency and cleaner fuels affect pollution emissions.

Glen Eden and Patumahoe had decreasing trends in NO_2 concentration from 2016 to 2020 and has been increasing since to be at their highest concentrations in 2022 (both exceeding the baseline values). Both sites have been below the baseline level from 2017 to 2021 and then exceeded it in 2022.

Henderson NO_2 levels fluctuate and have been consistently below the baseline level since 2017.

Penrose and Takapuna display similar concentrations, despite being almost 10km apart. This is due to similarities in their relative proximity to the State Highway 1 motorway. The similarity in data demonstrates that they are measuring the same emission source with similar emission rates. Penrose has had NO_2 concentrations below the baseline level since 2019, while Takapuna has had a decreasing trend since 2016 and remained below the baseline level.

The highest NO_2 concentrations occur on Queen Street. From 2016 to 2019 there were increasing NO_2 levels and since then they have been declining with the lowest levels recorded in 2022 (well below the baseline). Queen Street NO_2 levels have been below the baseline since 2020.

During Level 4 COVID-19 lockdown, $N0_2$ concentrations dropped sharply and remained below normal levels in Level 3. This is primarily associated with reduced vehicle emissions.[4]

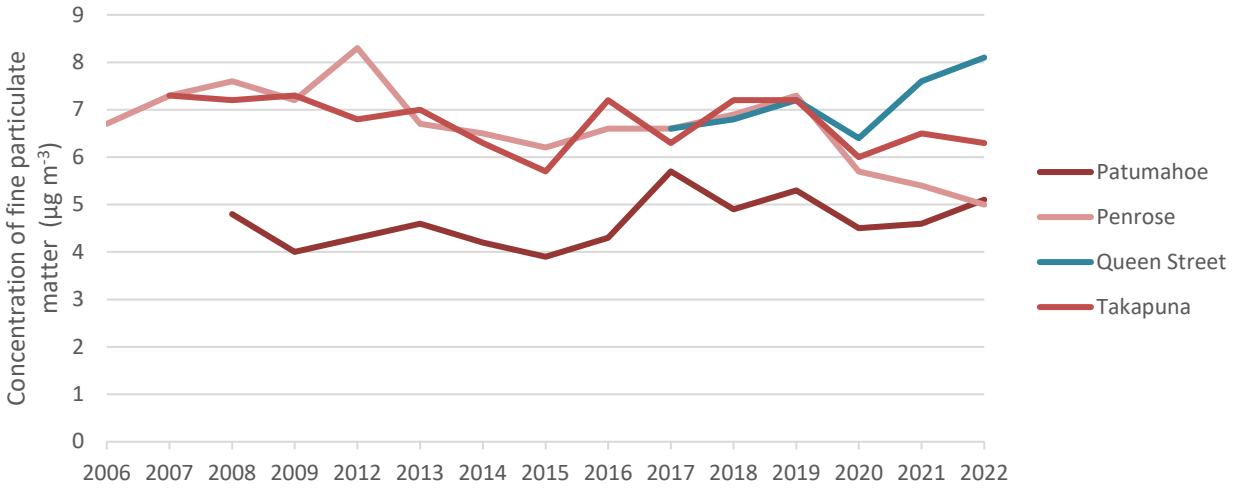
Trend

↑ A positive trend from 2016 to 2022 for Takapuna.

- No trend from 2016 to 2022 for Glen Eden, Henderson, Patumahoe, Penrose, Queen Street.

[4] Boamponsem, L. (2022) Auckland Air Quality 2021 Annual Data Report

Measure 5b. Concentration of fine particulate matter ($PM_{2.5}$)



Data

Fine particulate matter ($PM_{2.5}$) average annual concentrations from 2006 to 2022 at Patumahoe, Penrose, Queen Street and Takapuna.

Source

Auckland Council ambient air quality monitoring programme.

Frequency

Continuous data is collected every minute and averaged over 10 minutes, 1-hour and 24-hour periods. Most national and regional standards and targets are based on 1-hour and 24-hour periods.

Availability

Real-time and historical data are available from Auckland Council on request. Technical and summary reports describing Auckland's air quality are available at Knowledge Auckland. (https://knowledgeauckland.org.nz/natural-environment/).

Note

$PM_{2.5}$ is currently monitored at four sites in Auckland; however, this is likely to increase in response to proposed changes to National Environmental Standard for Air Quality.

Relevance

$PM_{2.5}$ measures the smallest size fraction of particulates that are most commonly anthropogenic in origin, including combustion sources, home heating and secondary particulates emanating from gas emissions.

Short- and long-term exposure to $PM_{2.5}$, even at low levels, is linked to respiratory and cardiovascular disease, and increased risk of premature death, especially in vulnerable people (the young, the elderly and people with respiratory illness). Emerging evidence points to possible links with cognitive function, neuro-development and diabetes.

Baseline (2017)

The current baseline is set against 2017 data:

- Patumahoe – 5.7 μgm^{-3}
- Penrose – 6.6 μgm^{-3}
- Queen Street – 6.6 μgm^{-3}
- Takapuna – 6.3 μgm^{-3}

Analysis

The Patumahoe site has a fluctuating pattern of $PM_{2.5}$ concentrations and has remained below its baseline level since 2017. The Penrose site exceeded the baseline in 2018 and 2019 and has been decreasing since then and remained below the baseline.

Queen Street has a fluctuating pattern and been consistently above the baseline except for one year (2020). It has reached its highest $PM_{2.5}$ concentration in 2022. Similarly, the Takapuna site has consistently exceeded the baseline except for 2020 and 2022 (same level).

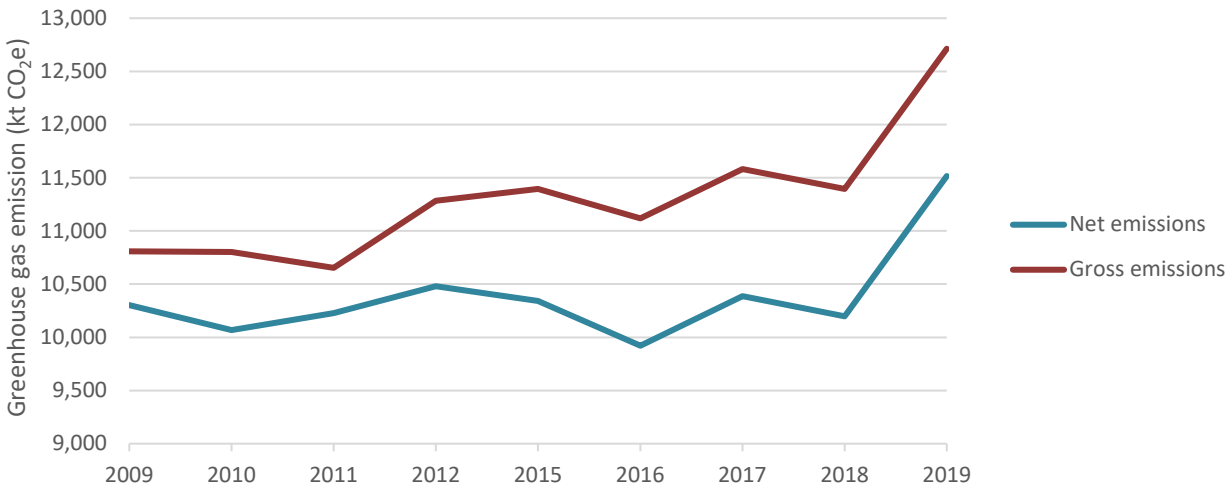
The burning of wood for home heating, transport emissions, and marine aerosols are the main sources of $PM_{2.5}$ across the Auckland region. Higher traffic volumes and vehicles getting heavier with larger engines offset reductions in $PM_{2.5}$ emissions from improved engine technology and fuel quality.

Trend

↑ A positive trend from 2017 to 2022 for Patumahoe.

- No trend from 2017 to 2022 for Penrose, Queen St and Takapuna.

Measure 5c. Greenhouse gas emissions (kilotonnes of CO_2e)



Data

Net and gross Greenhouse gas emissions (kilotonnes of CO_2e) for the Auckland Region.

Source

Auckland's Greenhouse Gas Inventory.

Frequency

Annually.

Availability

Auckland's Greenhouse Gas Inventory is available in the natural environment section of Auckland Council's Research and Evaluation Unit website (https://knowledgeauckland.org.nz/natural-environment/).

Notes

There are multiple indicators and data sets that can be used to report on greenhouse gas emissions.

Carbon dioxide equivalent (CO_2e) is a standard unit for measuring greenhouse gas (GHG) emissions and is a term used to compare the emissions from various GHGs based upon their global warming potential.

Net emissions take into account CO_2e removed by forests.

The percentage of gross emissions comes from five main sources or sectors: stationary energy, transport, waste, industrial processes and product use (IPPU), and agriculture. These have been calculated from 2018 onwards.

Stationary energy comes from energy consumption in buildings and non-mobile equipment and machinery. These emissions are split into sub-sectors of residential buildings, commercial and institutional buildings and facilities, manufacturing industries and construction, and agriculture, forestry and fishing activities.

Transport emissions come directly from combusting fuel or indirectly from consuming grid-delivered electricity to transport vehicles, mobile equipment or machinery. These emissions are split into subsectors of on-road vehicles, railways, water transport, aviation, and off-road transport.

Waste emissions come from the processing and disposal of solid waste and wastewater treatment.

Industrial processes and product use (IPPU) emissions come from non-energy related industrial processes (e.g. steel and iron production) or activities and product use (e.g. fuels, solvent use).

Agriculture emissions come from agriculture, forestry and other land use. The sub-categories are livestock, land, and aggregate sources and non-CO_2 emission sources on land (e.g. fertiliser use, liming and urea application, and harvested wood products).

Relevance

Climate change mitigation contributes to all focus areas and directions of the Environment and Cultural Heritage Outcome, as well as Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan. The measure of greenhouse gas emissions enables us to be in line with national and international best practice and to better measure progress.

Baseline (2016)

The current baseline is set against 2016 data - 11,119 ktCO_2e (gross) 9,921 ktCO_2e (net).

The baseline for gross emissions per sector is 2018: stationary energy (26.7%), transport (43.4%), waste (2.9%), industrial processes and product use (21.3%) and agriculture (5.6%).

Analysis

Since 2016, both net and gross emissions have exceeded the 2016 baseline value and have reached their highest values in 2019.

The largest contributor to gross emissions in 2019 come from transport, followed by stationary energy and industrial processes and product use. While transport and stationary energy gross emissions have risen since 2018, the opposite has occurred for waste, industrial processes and product use (IPPU), and agriculture.

Trend

↓ A negative trend for total emissions from 2016 to 2019.

- No trend for gross emission sources.

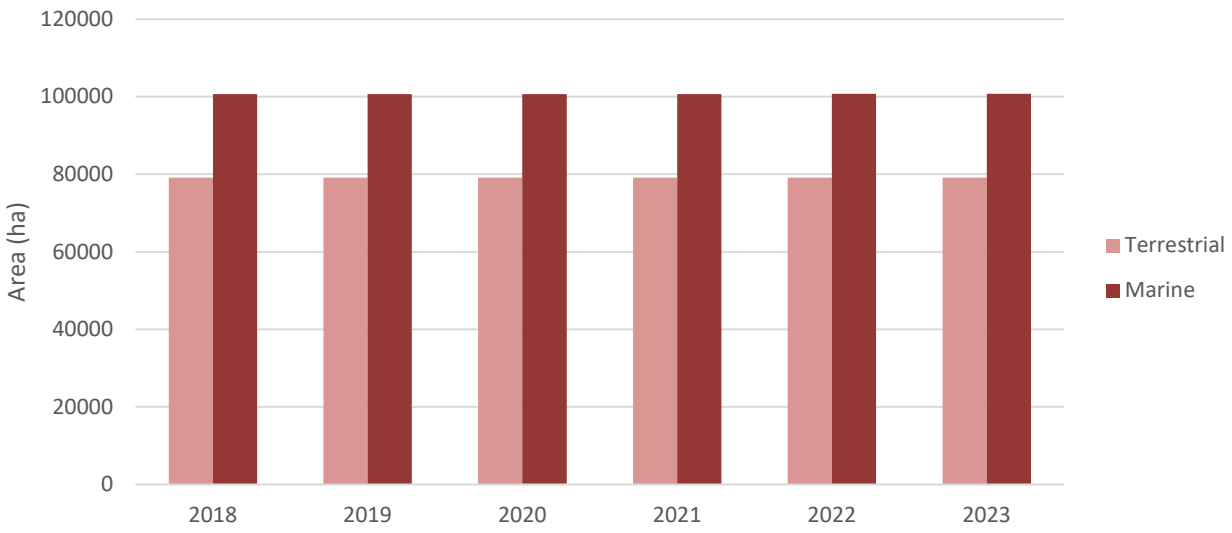
Outcome

Environment and Cultural Heritage

Measure 6

Statutory protection of environment and cultural heritage

Measure 6a. Total area of scheduled Significant Ecological Areas (hectares)



Data

Area of Significant Ecological Areas scheduled in the Auckland Unitary Plan.

Source

Schedule 3 and 4 of the Auckland Unitary Plan.

Frequency

Annual.

Availability

Auckland Unitary Plan - unitaryplan.aucklandcouncil.govt.nz

Notes

Areas of important native biodiversity can be protected in a number of ways other than scheduling such as through covenants or acquisition.

Scheduling a new Significant Ecological Area (SEA) requires a Unitary Plan plan change and evidentiary threshold, which means that the number of scheduled areas is likely to change slowly.

A proposed National Policy Statement for Indigenous Biodiversity is expected to be gazetted in the coming

year. This would require reassessment of current SEAs but is likely to not lead to a material change.

Relevance

Natural ecosystems and indigenous biological diversity contribute to the character and identity of Auckland and distinguish it from other regions of New Zealand. Healthy and functioning ecosystems contribute to improved water quality, soil conservation and carbon sinks, as well as providing opportunities for our recreation, economic and cultural use.

Development has resulted in the loss of habitats and a reduction of biodiversity. Urban expansion and development, changes in coastal and rural land uses, and the ongoing degradation from pest species continue to threaten the maintenance of indigenous biodiversity.

Significant Ecological Areas have additional planning objectives, policies and rules aimed to protect and better provide for the management of these areas that contribute significantly to Auckland's biodiversity.

Baseline (2018)

- Terrestrial – 79,121 ha
- Marine – 100,691 ha

Analysis

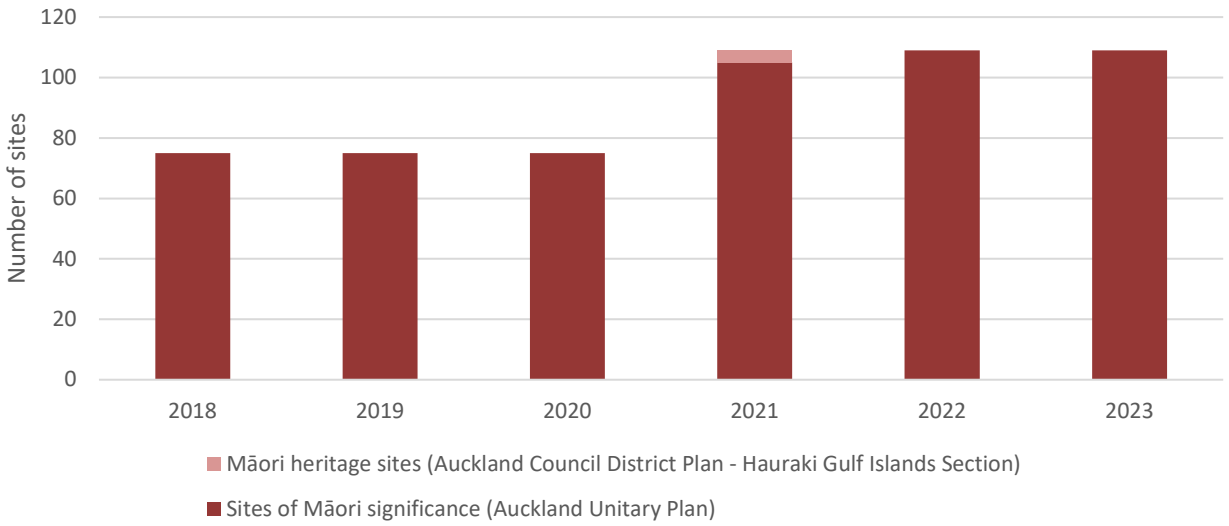
There has been a slight increase in terrestrial SEAs in 2022 (~1ha) and in marine SEAs scheduled (~40ha). This represents the first increase in the marine area since 2018. There has been no change in 2023.

Work is ongoing in the marine area to determine whether additional marine SEAs should be implemented.

Trend

- From 2018 to 2022, no significant change.

Measure 6b. Protected sites and places of significance for mana whenua



Data

Number of sites of Māori significance including wāhi tapu scheduled in the Auckland Unitary Plan and Māori heritage sites scheduled in the Auckland Council District Plan - Hauraki Gulf Islands Section.

Source

Schedule 12 of the Auckland Unitary Plan and appendices 1f and 2f of the Auckland Council District Plan - Hauraki Gulf Islands Section.

Frequency

Annual.

Availability

Auckland Unitary Plan - unitaryplan.aucklandcouncil.govt.nz

Auckland Council District Plan - Hauraki Gulf Islands Section - aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/hgi-district-plan/

Notes

Scheduling sites and places of significance to mana whenua requires a plan change and evidentiary threshold, which means that the number of scheduled areas is likely to change slowly.

There are a number of other ways in which sites of significance to mana whenua can be protected other than scheduling in Schedule 12 of the Auckland Unitary Plan. These include recording the Māori values of these sites in other schedules in the Auckland Unitary Plan, iwi management plans, covenants, land acquisition, transfers of powers, heritage orders, the Heritage New Zealand list, adding precincts in the Auckland Unitary Plan, conservation / reserve management plans, and co-management / co-governance arrangements.

Work is currently underway to implement an alert layer to map sites and areas that have been nominated by mana whenua as being significant. This spatial trigger will assist council officers to be better informed for engagement with local iwi and ensure that any resource consent application processes appropriately consider the mana whenua-related provisions in the RMA and the Auckland Unitary Plan.

There are over 11,000 recorded archaeological sites in the Auckland Region, almost all of Māori origin. These are estimated to be around 30% of actual sites. This means that sites currently scheduled in Schedule 12 represents a small percentage of Māori ancestral sites.

Relevance

Sites and places of significance to mana whenua have tangible and intangible cultural values in association with historic events, occupation and cultural activities. Scheduling of these sites and places seeks to protect them from inappropriate subdivision, use and development, including inappropriate modification, demolition or destruction.

Baseline (2018)

Seventy-five sites of Māori significance including wāhi tapu scheduled in the Auckland Unitary Plan and 0 Māori heritage sites scheduled in the Auckland Council District Plan - Hauraki Gulf Islands Section.

Analysis

In 2021, Plan change 22 added 30 sites of significance across the Auckland mainland, and plan modification 12 added four Māori heritage sites on Waiheke Island. These were the first increases to the numbers of sites in either plan since they were made operative. There have been no new sites of significance added in 2022. There has been no change in 2023.

Trend

↑ From 2018 to 2023, a positive trend.

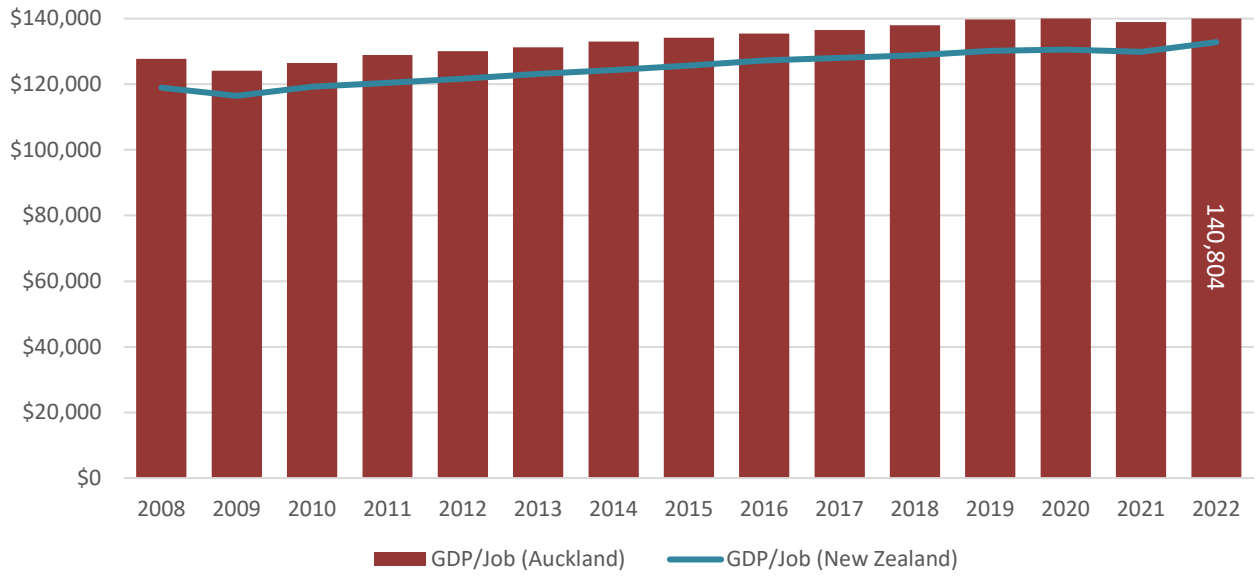
Outcome

Opportunity and Prosperity

Measure 1

Labour productivity

Real GDP per filled job ($2022)



Data

Output per worker: real Gross Domestic Product (GDP) in constant 2021 dollars, per filled job.

Source

Infometrics, Auckland regional economic profile.

Frequency

Annual (year ending in March).

Availability

Public access funded by Council subscription to Infometrics website portal (https://ecoprofile.infometrics.co.nz/Auckland/Productivity), which also includes a variety of related data such as productivity breakdowns by industry and location and changes over time.

Note

Labour productivity uses GDP per employed person (in constant dollars). GDP measures the value economic units add to their inputs - broadly equivalent to its sales revenue less the cost of materials and services purchased from other firms. Infometrics breaks national production-based GDP (published by Statistics New Zealand for years ended March) down to territorial authority (TA) level by applying estimated TA shares to the national total.

Note that in each annual monitoring report, data is reported in constant dollars which is an adjusted value based on inflation to compare dollar values from one period to another. In each reporting year, the data is therefore updated (and backdated).

Relevance

Productivity relates to how efficiently a firm, or any other organisation can turn its inputs, such as labour and capital, into outputs in the form of goods and services. Labour productivity is a measure of the amount produced for a certain amount of labour effort. It is closely related to individual incomes (i.e. wages and salaries) and living standards.

Growth in labour productivity over time can imply an increase in the efficiency and competitiveness of the economy. However, comparisons of labour productivity over time or between regions should be done with caution, as each worker may have different levels of access to other production inputs (such as machinery, technology and land) over time or between regions whose economies have vastly different industrial structures.

Baseline (2018)

In 2018, GDP per filled job in Auckland was $137,940 (NZD) in 2022 dollars.

Analysis

In 2022, real GDP per filled job in Auckland was $140,804 (in $2022), up 1.3 per cent on 2021. Real GDP per filled job in Auckland remains consistently higher than the New Zealand average.

Trend

↑ From 2008 to 2022, a positive trend.

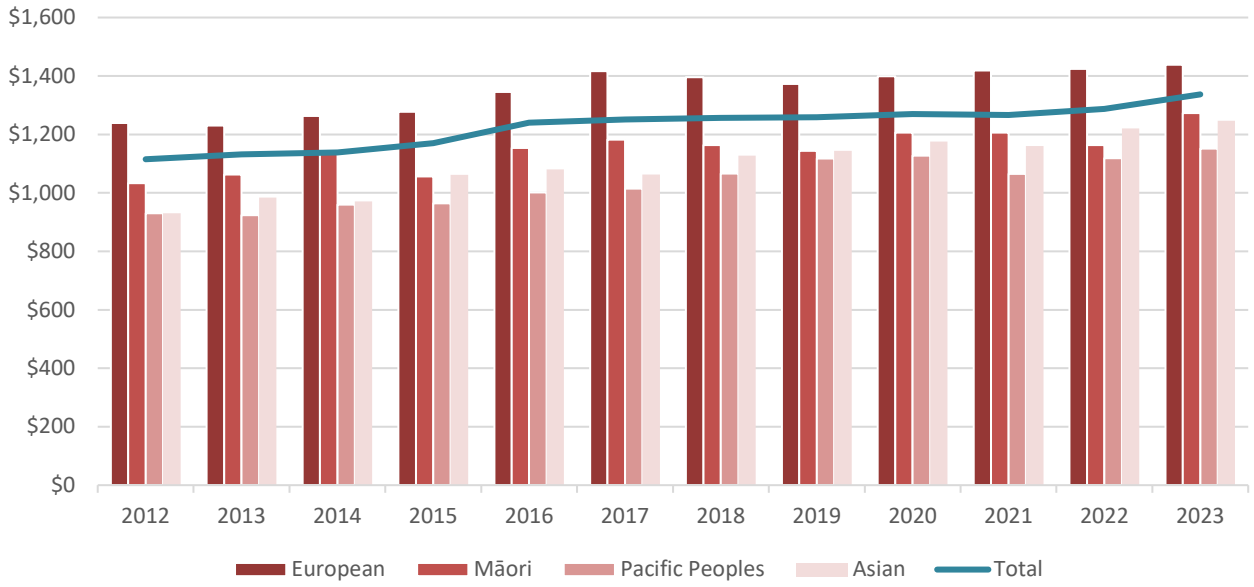
Outcome

Opportunity and Prosperity

Measure 2

Aucklanders' average wages

Median weekly earnings of employed people by ethnicity ($2023)



Data

Earnings of people in paid employment by region, age, sex and ethnic group - median and average, hourly and weekly; inflation-adjusted.

Source

Statistics New Zealand, Labour market statistics (incomes) (formerly NZ Income Survey, now from June quarter of Household Labour Force Survey) and Consumer Price Index (CPI).

Frequency

Annual (June quarter).

Availability

Published on the Stats NZ website (http://nzdotstat.stats.govt.nz/wbos/index.aspx).

Note

All data is subject to survey error margins. Coverage is people over 15 years old who work for wages or salaries or are self-employed. Earnings now comprise income from wages and salaries, self-employment and government transfers, but no longer include private transfers or investment income. Variations in weekly earnings arise from variation in both hourly earnings and hours worked. Weekly earnings comprise full- and

part-timers, but median hourly rates typically equate to 37 - 40 hours / week. Respondents can – and often do – select multiple ethnic groups. Dollar values are CPI adjusted each year (including the baseline data).

Relevance

Employment earnings are the main source of income for most people and their households, and the main way that improved prosperity benefits the general population. They also generate taxes that help fund government services and transfers to other households.

Baseline (2018)

In 2018, the mean weekly earnings for Aucklanders who identify as European were $1,396, $1,163 for Māori, $1,066 for Pacific Peoples, and $1,128 for Asian (Aucklanders' average wages were $1,256) (all figures in $2023).

Analysis

Between 2012 and 2023 median weekly earnings in Auckland increased for all ethnicities. In 2023, the median weekly earnings for all Aucklanders were $1,337. For Aucklanders who identify as European median weekly earnings were $1,438, $1,273 for Māori, $1,151 for Pacific Peoples, and $1,247 for Asian (all figures in $2023). With a 9 per cent increase from 2022, the median weekly earnings increased the most for Māori, while Europeans, Pacific Peoples and Asian experienced increases of 1, 3 and 2 per cent respectively.

Trend

↑ From 2012 to 2023, a positive change.

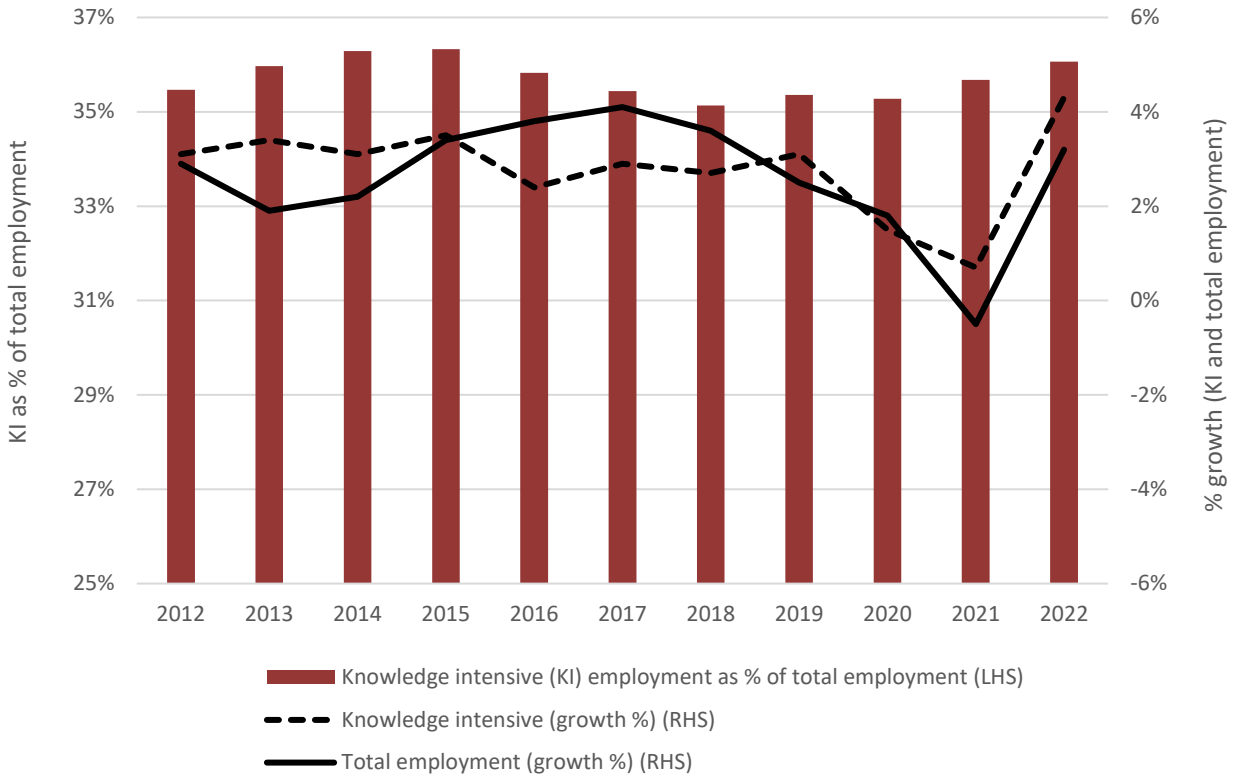
Outcome

Opportunity and Prosperity

Measure 3

Employment in advanced industries

Knowledge Intensive industries as share of total employment and growth (%) in knowledge intensive industries employment and total employment



Data

Employment in advanced industries (Australian & New Zealand Standard Industrial Classification, NZSIC 7 digit) defined as knowledge intensive: 25 per cent of workforce have degrees and 30 per cent are professional, managerial or scientific and technical.

Source

Infometrics, Auckland regional economic profile.

Frequency

Annual (year ending March).

Availability

Public access funded by Council subscription to Infometrics website portal (https://ecoprofile.infometrics.co.nz/Auckland/Skills).

Note

Employment here is average number of filled jobs (including self-employed and working proprietors and part-timers) for the year ended March, estimated by Infometrics from Stats New Zealand's quarterly Linked Employer Employee Data (LEED). Advanced industries are largely a subset of knowledge intensive industries (11 per cent versus 36 per cent of Auckland's workforce), defined by high spending on research and development, and workers having degrees in science, technology, engineering and mathematics (STEM). Data reported is revised (and backdated) each year.

Relevance

Knowledge Intensive (KI) industries are those in which the generation and exploitation of knowledge play the predominant part in the creation of economic activity. They represent an increasing share of the New Zealand economy's output and employment and may be a source of future productivity growth.

Baseline (2018)

In 2018, growth in knowledge intensive industries and the total employment market was 2.7 per cent and 3.6 per cent respectively.

Analysis

In 2022, knowledge intensive employment made up 36 per cent of total employment. This share has remained largely unchanged over the past 10 years. There was a fall in both knowledge intensive and total employment growth during the pandemic, but this has now recovered. At 4.3 per cent in 2022, knowledge intensive employment growth recovered strongly from 2021 (0.7%) and was at a level not seen since early 2000. Likewise, total employment growth was 3.2 per cent, up significantly from 2021.

Trend

↑ From 2018 to 2022, no significant change (growth in knowledge intensive industries).

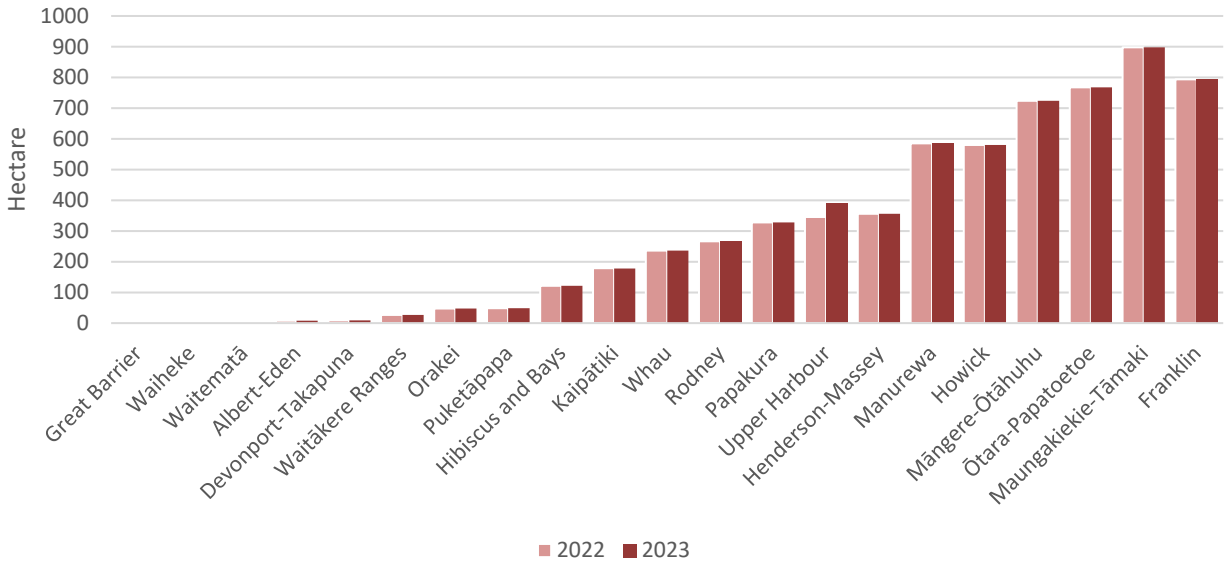
Outcome

Opportunity and Prosperity

Measure 4

Zoned industrial land (also a Development Strategy measure)

Zoned industrial land by local board (hectare)



Data

Hectares of zoned industrial land.

Source

Auckland Council.

Frequency

Annual (by request).

Availability

The area of zoned industrial land is calculated in geospatial software, using zoning data from the Auckland Unitary Plan, as of 2017. Detailed data at sub-regional level is available on request from the Research and Evaluation Unit (RIMU) at Auckland Council.

Note

Business zoned land under the Auckland Unitary Plan are zones that are classified as being in either the Light Industry or Heavy Industry zones. Land can get rezoned either from a new district or unitary plan (typically every 10 years), or via a plan change targeting a specific area.

Note that this measure is also reported in the Auckland Plan Development Strategy monitoring report.

Relevance

This is a high-level strategic measure directly related to the Development Strategy required to track zoned land for light and heavy industry. The Development Strategy identifies the need for up to 1,400 hectares of business land (mainly industrial) in the future urban areas, and the retention of existing business land. This will require monitoring as locations of industrial land may shift as they compete with other uses for well-located land.

Baseline (2018)

6,336 hectares.

Analysis

There has been some change in industrial zoned land since the Auckland Unitary Plan became operative in 2016. The number of hectares of zoned industrial land in Auckland has dropped from 6,455 in 2017 to 6,362 in 2023. The area of zoned industrial land in the Auckland Region had a net increase of 42 hectares between 2022 and 2023. This net increase is driven by a large increase (45 hectares) of industrial zoned land in Upper Harbour as a result of a private plan change – Spedding Block – in Whenuapai from Future Urban Zone to Business – Light Industry Zone.

Trend

- From 2022 to 2023, no significant change.

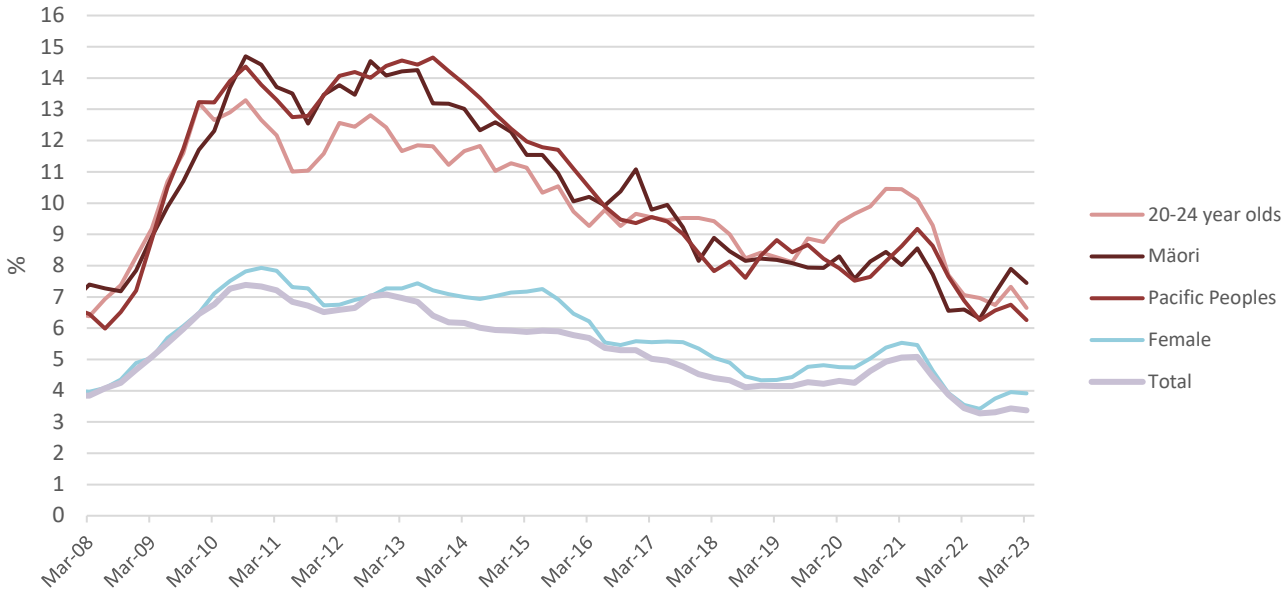
Outcome

Opportunity and Prosperity

Measure 5

Level of unemployment

Unemployment rate for selected age, ethnicity and gender (%)



Data

Unemployment rate by ethnicity, age group and gender.

Source

Statistics New Zealand, Household Labour Force Survey (HLFS).

Frequency

Quarterly.

Availability

High-level data available from Stats NZ website (http://infoshare.stats.govt.nz/). Detailed Auckland breakdowns from the Research and Evaluation Unit (RIMU) at Auckland Council (custom dataset).

Note

Employment here is the number of individuals in paid employment (including self-employed and working proprietors and part-timers). Unemployed excludes people whose only job search method was to look at job advertisements in newspapers or online. All data is subject to sampling errors, which can be prohibitive for small sub-samples. Quarterly data is seasonal, so annual averages are recommended.

Relevance

Employment generates wealth for society and income for the individual, so unemployment diminishes these benefits. Unemployed people (especially youths) who are also not in education or training are particularly at risk of becoming socially excluded – individuals with income below the poverty-line and lacking the skills to improve their economic situation.

Baseline (2018)

In June 2018:

- 9.0 per cent of 20-24 year olds were unemployed.
- 8.5 per cent of Māori were unemployed.
- 8.1 per cent of Pacific people were unemployed.
- 4.9 per cent of females were unemployed.
- 4.3 per cent was the total level of unemployment.

Analysis

Since 2013, there has been a downward trend in the unemployment rates for those aged 20-24 years, Māori, Pacific peoples and females. The pandemic resulted in a lift in unemployment rates for all groups, but this was relatively short-lived, and by mid-end of 2021 unemployment rates were falling again to historically low levels for all groups in the middle of 2022.

The unemployment rate for those aged 20-24 years (6.6%), Māori (7.4%) and Pacific Peoples (6.3%) has remained consistently higher than the overall unemployment rate (3.4%).

Trend

↑ From 2018 to 2023, a positive improvement.

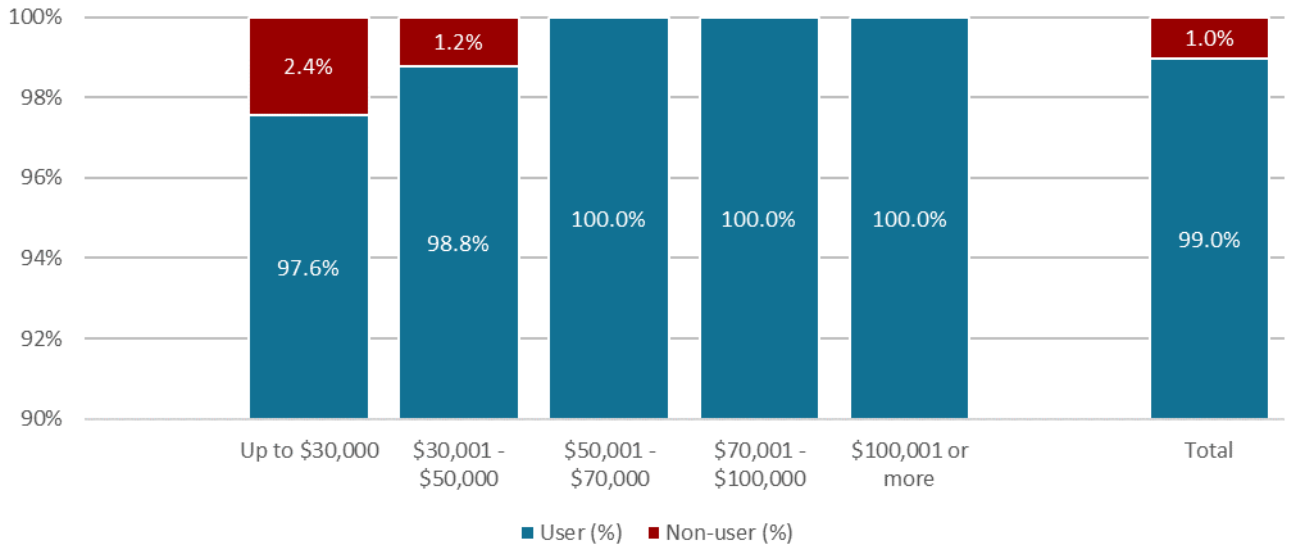
Outcome

Opportunity and Prosperity

Measure 6

Internet usage based on income

Proportion of respondents under 65 years of age by internet user status by household income bracket (%)



Data

Proportion of respondents under 65 years old to the World Internet Project New Zealand survey of internet usage who gave their household income information, by internet user status and household income brackets.

Source

Auckland University of Technology, New Zealand Work Research Institute (NZWRI), World Internet Project New Zealand (WIPNZ) survey of internet users 2017, 2021.

Frequency

The WIPNZ survey is generally undertaken every 2-3 years. The last survey began in July 2020 and finished in May 2021.The next survey is expected to commence in 2023.

Availability

The full report of the 2021 survey's final results for Auckland and New Zealand was published by NZWRI in late 2021 (https://workresearch.aut.ac.nz/research/primary-surveys/world-internet-project-nz). Data and analysis of the 2017 results for Auckland are available on request from the Research and Evaluation Unit (RIMU) at Auckland Council.

Note

The World Internet Project launched in 2000 by the Centre for the Digital Future, at the University of Southern California, Annenberg School for Communication and Journalism. Currently, WIP is an international collaboration, with surveys conducted by partners across 38 countries. The survey is based around a set of common questions, agreed to by all partners and updated regularly. The common questions for the WIP-NZ 2021 survey included income and whether the person is an internet user, and for how long, and for those who do not use the internet, why they do not. Data shown here is for users (used the internet in the past 3 months) and non-users (never used the internet or those that have not used it in the last 3 months).

Relevance

Indication of how lower incomes may affect the level of internet usage among Aucklanders. A higher proportion of non-users or low-level users among those at the lower income brackets could suggest that those who are socio-economically disadvantaged may also be more likely to be digitally-disadvantaged, which constrains their access to information, education and employment opportunities available online. Data on those aged 65 or above have been excluded as 65 is the retirement age, so the incomes of people in this age group tend be significantly below those who are under 65.

Baseline (2018)

The 2017 data is shown in the table below.

	UP TO $35,000	$35,001 TO $50,000	$50,001 TO $70,000	$70,001 TO $100,000	$100,000 OR MORE	ALL INCOME GROUPS
Users	95.0%	98.5%	98.6%	100.0%	99.6%	98.9%
Non-users	4.9%	1.6%	1.4%	0.0%	0.4%	1.1%

Analysis

There is no new data to report this year.

In 2021, for respondents under 65 years of age who gave their income information, two per cent of the up to $30,000 household income bracket in Auckland indicated that they are non-users. This is only slightly higher compared to those across all other income brackets. Age is the most common demographic that affects internet usage and income appears to be less of a factor.

The final results for Auckland were published in late 2021. The data provided is not directly comparable with 2017 results, however the total percentage of users and non-users in both surveys remains consistent and usage for low-income earners appears to have improved. Those considered ‘non-users’ include those that have never used the internet and those that have not used it in the last 3 months. For respondents under 65 years of age who gave their income information, only one per cent indicated they are non-users. The proportion of non-users is two per cent for those households in the $30,001-50,000 income bracket.

Trend

↑ In 2021, a positive trend emerging.

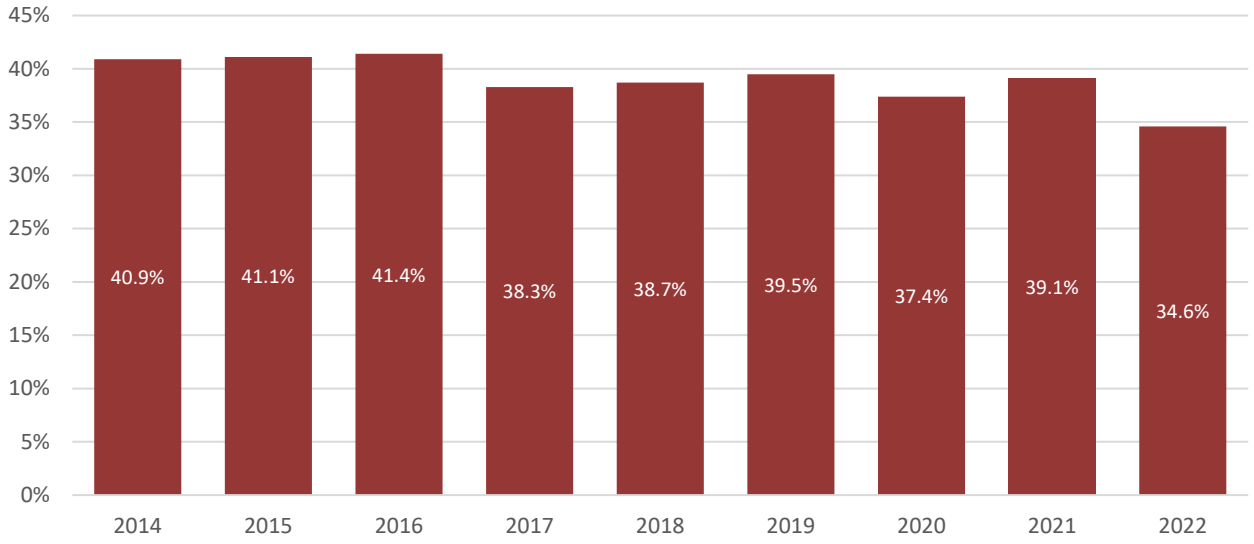
Outcome

Opportunity and Prosperity

Measure 7

Educational achievement of young people

Percentage of those aged 20-24 with a Level 4 qualification or above (%)



Data

Proportion of young people aged 20-24 with a qualification registered on the New Zealand Qualifications Framework (NZQF) at Level 4 or above.

Source

Stats NZ Household Labour Force Survey (HLFS).

Frequency

Annual (annual average, year ending December).

Availability

Available by custom order from Stats NZ.

Note

All data is subject to survey error margins. Annual data is obtained by averaging quarterly data across four quarters and is rebased (slightly) as new population estimates are released. Data from previous years have therefore been backdated with revised data.

Relevance

Higher-level qualifications, including vocational education and training at NZQF levels 4, and bachelor's level and above, have the greatest benefits for students. People with higher qualifications tend to have better economic and social outcomes and higher life satisfaction than those with low qualifications. In particular, individuals with higher level qualifications are more likely to be employed and generally have higher incomes. National Certificate of Educational Achievement (NCEA) is the national qualification system for New Zealand's senior secondary school students and NCEA sits within the larger New Zealand Qualifications Framework (NZQF). A secondary student with qualifications at NCEA Level 1, 2 or 3 has achieved Levels 1, 2 and 3 of the NZQF respectively. Levels 4 and above are usually studied after finishing secondary school. Measuring the NZQF Level 4 and above achievement of young people aged 20 to 24 gauges levels of achievement in both vocational training and tertiary education. This provides insight into how well young people are prepared with the skills required to access employment. As well, this is an indication of how well the education system is assisting young Aucklanders to develop the skills and qualifications to support Auckland's workforce and economic growth.

Baseline (2018)

In 2018, 39 per cent of Aucklanders aged between 20 and 24 had a NZQF qualification at Level 4 or above.

Analysis

In 2022, the percentage of those aged 20-24 with a level 4 qualification or above was 34.6 per cent, a decrease of 4.5 percentage points from 2021.

Trend

↓ From 2014 to 2022, declining trend.

Auckland Council

Te Kaunihera o Tāmaki Makaurau