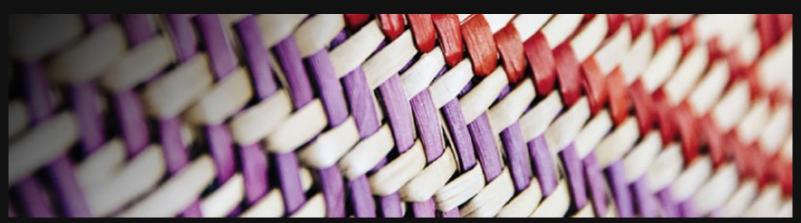
# AUCKLAND PLAN 2050

### 2024 Annual Monitoring Report

October 2024 | Revised March 2025





#### Revision March 2025

The Transport and Access *Measure 5 Household Transport Expenditure* (p.33) originally included in this report was mistakenly the number for New Zealand, rather than the Auckland number as intended. The error has been corrected in this version. It is largely inconsequential as the difference in the figures is minor.

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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 www.theaucklandplan.govt.nz

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### Introduction

This report provides an update on annual monitoring of the Auckland Plan. It assesses progress across the six outcomes through a broad range of measures. As the report shows, there has been mixed progress over time.

This year, we are introducing some new measures for three of the outcomes - Homes and Places, Transport and Access, and Opportunity and Prosperity.

The following sections provide background information and a summary of the updates and progress, before presenting the detailed progress reporting.

#### The Auckland Plan

The Auckland Plan 2050 is our 30-year plan for Auckland that provides broad direction to guide Auckland's growth and development through six outcomes and a Future Development Strategy. The plan outlines the major challenges that we face as a region and recommends ways Aucklanders, and others involved in the future of Auckland, can best respond to them.

Auckland Council adopted the Auckland Plan in 2018 to meet its legislative responsibility to contribute to the social, economic, environmental and cultural wellbeing of the region. The plan was developed with and for all Aucklanders and includes the values that will shape how we work together and identifies key organisations that will play important roles in creating our shared future.

Auckland Council contributes to the Auckland Plan outcomes through its Long-term Plan and is just one of the contributors to the outcomes outlined in the Auckland Plan.

#### **Reporting on the Auckland Plan**

Effective monitoring of progress made towards delivering the six outcomes of the Auckland Plan 2050 is fundamental to its successful implementation. It provides an ongoing evidence base to align our implementation and regulatory plans and funding programmes.

This year, we have reviewed the measures to ensure they remain the most appropriate indicators of Auckland's progress. The resulting changes are concentrated across four of the outcomes – Homes and Places, Transport and Access, Environment and Cultural Heritage, and Opportunity and Prosperity. The total number of measures now stand at 38. Some measures are comprised of several sub-measures to provide a fuller picture. For example, the housing affordability measure contains three sub-measures, which give a more nuanced picture of housing affordability. Appendix A contains more detailed information on the measures review.

The integrated nature of the outcomes means that several of the metrics we track are influenced by trends across multiple outcomes. For example, quality of life (Belonging and Participation) and carbon emissions (Environment and Cultural Heritage) are the result of progress, or lack thereof, in other outcome areas.

This annual monitoring report is a high-level analysis of trends and assesses progress against the outcomes relative to the baseline of 2018 (when data permits; metadata table in Appendix B provides details on the baselines). More detailed analysis is carried out as part of the Three Yearly Progress Report. The most recent Three Yearly Progress Report was published in 2023 (and is available on the Auckland Plan website <a href="https://www.aucklandplan.govt.nz">www.aucklandplan.govt.nz</a>, in the measuring progress section).

#### **Auckland's challenges**

The Auckland Plan 2050 identifies three interconnected challenges to be addressed if we are to achieve the desired long-term outcomes for Auckland. The challenges are high population growth, reducing environmental degradation, and ensuring that prosperity is shared amongst all Aucklanders.

#### Responding to population growth

Auckland's population growth rate is currently at its highest level in two decades, having recovered from the slowdown during and immediately post the pandemic. Currently home to more than 1.6 million people, the latest population projection has our population reaching 2.3 million by 2052. To put Auckland's growth in perspective; one year of growth in Auckland is equivalent to 30 years of projected growth in Queenstown.<sup>1</sup>

Our growing population puts pressure on existing infrastructure and housing. The <u>Future Development Strategy</u> sets out how Auckland will grow and change over the coming decades through a commitment to a quality compact approach to urban growth that addresses our housing and infrastructure needs in a way that enhances liveability and sustainability.

There has been a significant increase in the number of dwellings consented over the past decade, and a clear shift in housing typologies. Multi-unit homes such as apartments and terraced housing now comprise roughly 70 per cent of all new dwellings consented, and most growth (over 80%) occurs within the existing urban area. This progress is largely attributable to the adoption of the Auckland Unitary Plan (operative in 2016), which upzoned large parts of Auckland. More houses have been built as a result and house price growth has slowed. Yet, Auckland's ongoing housing affordability challenges remain, and our housing market continues to be amongst the least affordable in the world.

#### Reducing environmental degradation

As Auckland grows, the impacts of growth on the natural environment must be managed. Raising our ambitions in addressing climate disruption will provide major benefits including cleaner air and water. Air quality has been improving regionally for Auckland but varies at local sites. Increased native tree plantings and active management of threatened native plants, animals and habitats supports improvements in biodiversity. Water quality remains relatively stable across streams, lakes, and coast. Beach swimming safety has improved.

Greenhouse gas emissions decreased in recent years due to COVID-19, but there are signs that emissions are on the rebound. Meeting our emissions reduction goals will require radical and sustained action, especially in the transport sector.

#### Sharing prosperity with all Aucklanders

For Auckland to be truly successful, all residents must thrive and share in its prosperity. As we transition to a low carbon and resilient society, it is crucial that no one is left behind. However, disparities in outcomes, whether in income, employment, health and education, have long existed in Auckland. These disparities manifest across different geographical areas and demographic groups.

Labour productivity and Aucklanders' average wages have been improving in recent years, but the challenging economic conditions of the past couple of years are reflected in the most recent data. Real average incomes have fallen overall in the past year and have impacted ethnic sub-groups differently. Likewise, while the unemployment rate has fallen over time, the past year has seen an increase, hitting those aged 20-24 and Māori and Pacific Peoples the hardest.

Educational achievement of young people has been declining for some years, and the disruption caused by the pandemic exacerbated an already deteriorating picture. Relatively high levels of child poverty show little signs of improving, and NEET rates have been growing. Māori and Pacific children and young people are over-represented in the child poverty and NEET statistics, highlighting the urgent need to address these disparities to ensure all Aucklanders and Auckland can thrive.

<sup>&</sup>lt;sup>1</sup> New Zealand Infrastructure Commission Te Waihanga (2023). Rautaki Hanganga o Aotearoa - New Zealand's infrastructure strategy

### **Updates and Progress**

This section provides a brief summary of the updates and findings based on the data and the trends across the six outcomes.

### **Belonging and Participation**

There was no change to the measures as a result of the measures review. This report provides updated data for one of the six measures for this outcome. Four measures show no change, and a few are tracking in the wrong direction.

Aucklanders' sense of community and their sense of safety walking alone in their neighbourhood after dark remain unchanged. However, Aucklanders' sense of safety in the city centre after dark has declined significantly from 46 per cent in 2018 to 37 per cent in 2022.

In 2022, Aucklanders' quality of life remained high at 82 per cent. Although the proportion of Aucklanders who positively rated their physical health remained high in 2022, the proportion of respondents who rated their mental health positively declined reflecting the negative impact of COVID-19.

In 2018, persistent and deep-seated inequalities existed between different socio-economic groups, with deprivation concentrated in South and West Auckland.

The proportion of respondents who positively rate their knowledge of te Tiriti o Waitangi has declined from 49 per cent in 2018 to 42 per cent in 2024.

#### **Māori Identity and Wellbeing**

There was no change to the measures as a result of the measures review. This report provides updated data for two of the four measures for this outcome.

There has been no updated data since 2018 on the whānau wellbeing and te reo Māori across Tāmaki Makaurau measures. The 2018 data showed that almost three-quarters (73.4%) of Māori in Auckland rated their whānau as doing well, with no significant difference to Māori nationally.

Approximately a fifth (17.5%) of Māori in Auckland reported that they could speak te reo Māori well or very well, and a quarter (25.1%) reported that they could understand spoken te reo Māori well or very well.

The proportion of Māori youth in education, employment or training has been gradually declining since the 2018 baseline, now sitting at 76.5 per cent compared to 81.5% per cent in 2018. The type of employment for Māori has seen a positive change with a growing proportion of Māori employed in higher skilled jobs.

The Māori decision-making measures saw little shift in 2023. The Māori turn-out in the general election falling slightly from the previous general election.

#### **Homes and Places**

The measures review resulted in three Homes and Places measures being retired or replaced, and seven new measures (or sub-measures) introduced across six measures. All measures, except one, were updated this year. Several measures show progress towards the outcome, and a few are tracking in the wrong direction.

The longer-term picture is of an improved housing supply despite the number of dwelling consents declining since the peak in 2022. There has been a drop in the proportion of new dwellings consented within 1,000m of the Rapid Transit Network (RTN).

Housing affordability has also improved, largely due to the increased housing supply. The price to income ratio (median multiple) has decreased, albeit at 7.8 it still places housing affordability in the "severely unaffordable" category. While rental affordability has worsened over the past year, the overall trend shows improvement. When households spend more than 30 per cent of household income on housing, they are experiencing housing cost overburden. Currently, 46 per cent of renters face housing cost overburden, compared to 31 per cent of homeowners. However, renters have seen some improvement in recent years, while the rate for homeowners has stayed the same.

The need for public housing support is strong with wait list numbers at historically high levels, despite a small decrease in the past year.

There has been a growing uptake of sustainable building methods with a growing number of dwellings achieving Homestar certification every year.

#### **Transport and Access**

Three measures based on modelled data have been removed as a result of the measures review and two new measures added. All measures have been updated this year.

The disruption caused by COVID-19, and changing travel patterns following, are reflected in the strong decrease seen in public transport boardings since 2019. Public transport use is now increasing again reaching close to 87 million in the year to June 2024. Numbers are expected to reach pre-COVID levels (more than 100 million) in the next two years. Likewise cycle movements decreased during COVID-19 but are also now recovering.

Transport emissions were also impacted by COVID-19 related lockdowns, generally decreasing since 2018. They have now started to increase again. Congestion on Auckland's arterial network has increased since 2018, although it did decrease over 2020 to 2022, which was attributed to COVID-related restrictions and lower travel demand.

Since 2018, the number of deaths on Auckland's transport network have decreased from 54 to 44. There has been no notable change to the numbers of serious injuries, which were 595 in 2018 and 588 in 2023.

Households are spending a greater proportion of their income on transport related costs (16% in 2023, compared to 14% in 2016).

#### **Environment and Cultural Heritage**

Two sub-measures have been retired based on the measures review. All except one measure have been updated for this year's report.

There has been a decrease (albeit not significant) in the volume of kerbside waste collected by Auckland Council from 179,989 tonnes in 2017/2018 to 176,708 tonnes in 2023/2024. The decrease can be attributed to the 2023 rollout of a kerbside food scraps collection service across much of the region.

Good progress is being made in protecting biodiversity through urban tree plantings and management of native habitats and native species. That is, there has been increased management for possum numbers and plant and animal species vulnerable to extinction. The proportion of priority native habitats on regional parks under active management have also increased.

Water quality measures remain unchanged compared to their baselines. The proportion of time beaches are suitable for contact recreation is now at 86 per cent, up from 77 per cent in 2017/2018.

Air quality measurements vary spatially, but in general regional concentrations of nitrogen dioxide has decreased and particulate matter remain unchanged from 2016.

Greenhouse gas emissions have decreased, due to COVID-19 lockdowns and restrictions, but rebounded in 2021. Transport remains the largest contributor to emissions.

There has been an increase in the number of protected sites and places of significance for mana whenua though the Auckland Unitary Plan since 2018, from 75 to 105. There are also four Māori Heritage Sites protected through the Hauraki Gulf Islands District Plan. Public consultation closed in June 2024 on proposed additional sites through Plan Change 102 and Plan Modification 15.

#### **Opportunity and Prosperity**

Two Opportunity and Prosperity measures have been retired and five new measures introduced. All existing measures have been updated and data for the new measures go back a decade or longer where possible. Five of the ten measures show positive progress, two show a deterioration and three show no change.

Labour productivity has increased, although it remains low relative to international comparator cities. Aucklanders' earnings have increased over time (in real terms) and continued doing so during the pandemic. However, in the past year average incomes fell overall. Ethnic sub-groups have been impacted differently though with incomes increasing for Europeans and Pacific Peoples, while they fell for Māori and Asian.

Unemployment has risen in the past year, disproportionately affecting young people, as well as Māori and Pacific Peoples.

Growth in employment in advanced industries remains unchanged.

Net migration to Auckland from other parts of New Zealand is negative, with more people leaving the city than moving here. The net loss in 2023 was over 11,000, a reduction on 2018.

Auckland's emissions intensity has fallen over time, generally indicating a move to a more sustainable economy. However, both net and gross emissions per million \$NZ increased from 2020 to 2021, breaking the otherwise downward long-term trend.

In terms of movement away from the outcome, lack of progress on child poverty and falling educational achievement is concerning. Over 1 in 10 children (12.8%) experience material hardship in Auckland, a figure that has remained relatively stable over time.

Educational achievement has declined, influenced by the disruption of the pandemic. Fewer 20–24-year-olds now hold a level 4 qualification, and NEET (Not in Education, Employment or Training) rates have also increased.

### **Summary of Auckland Plan Outcome Measures**

#### **Measures overview**

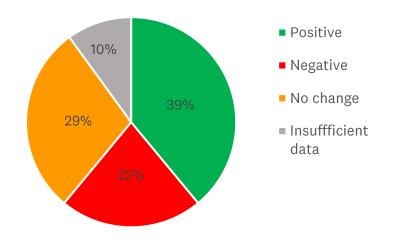
The Auckland Plan Annual Monitoring Report uses 38 measures for tracking progress against the Auckland Plan 2050. Some measures include sub-measures to provide a fuller picture.

New measures have been introduced this year as a result of a recent review (refer to Appendix A) and are marked \*. The table on the following pages provides a summary for each measure in terms of how they are tracking.<sup>2</sup> This shows whether we are making progress towards the outcome.<sup>3</sup> This is relative to the baseline, which in most cases is 2018 (as data permits).

Further commentary and graphs on each measure is provided in the body of the report, and information about the data used for each measure is provided in Appendix B.

# How are the measures tracking towards the outcomes?

The overall picture is one of mixed progress. Almost 40 per cent of all measures are tracking positively, while 22 per cent are moving away from the desired outcomes. There has been no notable change for 29 per cent of all measures. For the remaining 10 per cent of measures there is insufficient data.



 $<sup>^2</sup>$  Note that due to the timing of the Quality of Life Survey 2024, measures that rely on this data have not been updated in this monitoring report.

### **Measures Summary Table**

Progress towards the outcome: ▲ Positive change ■ No change ■ Negative change ... Insufficient data

	Latest Result	towards outcome	Data Source
Belonging and Participation Te whai pānga me te whai wa All Aucklanders will be part of and contribute to society, access opportunities,		velop to their	full potential.
1. Aucklanders' sense of community in their neighbourhood  Percentage of respondents who strongly agree or agree they feel a sense of community in their local neighbourhood	47%	-	Quality of Life Survey ( <b>2022</b> )
2. Aucklanders' sense of safety in their homes and neighbourhood  Percentage of respondents who rate their feelings of personal safety as safe or very safe after dark	64% (safety in local neighbourhood) 37% (safety in city centre)	-	Quality of Life Survey ( <b>2020</b> ) Quality of Life Survey ( <b>2022</b> )
3. Aucklanders' quality of life Percentage of respondents who rate their overall quality of life positively	82%	-	Quality of Life Survey ( <b>2022</b> )
<b>4. Relative deprivation across Auckland</b> Percentage of local board population with a Deprivation Index score of 8, 9 or 10	See body of report for comparison at a local level	•••	Stats NZ ( <b>2018</b> )
5. Aucklanders' health  a) Proportion of respondents who rate their physical health positively	70%	-	Quality of Life Survey ( <b>2022</b> )
b) Proportion of respondents who rate their mental health positively	65%	_	Quality of Life Survey ( <b>2022</b> )
<b>6. Treaty of Waitangi awareness and understanding</b> Percentage of respondents who rate their knowledge of te Tiriti o Waitangi as very well or a fair amount	42%	-	Auckland Council Resident Survey (2024)
Māori Identity and Wellbeing Te tuakiri Māori me tōna or A thriving Māori identity is Auckland's point of difference in the world – it adva		nd benefits al	l Aucklanders.
<b>1. Whānau wellbeing</b> Respondents of Māori ethnicity and/or descent who rate their whānau as doing well	73.2%		Stats NZ ( <b>2018</b> )
2. Māori in employment, education and training	76.5%	_	Household Labour Force Survey ( <b>2024</b>

**Progress** 

a)	Proportion of Māori youth in education, employment or training			
b)	Proportion of Māori in higher skilled jobs	33%	_	Auckland Regional Economic Profile ( <b>2023</b> )
	ori decision making Number of co-governance/co-management arrangement	9	-	Auckland Council ( <b>2024</b> )
b)	Māori voter turnout - General election: Auckland	68.5%	-	Stats NZ ( <b>2023)</b>
<b>4. Te</b> a)	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%	•••	Stats NZ ( <b>2018</b> )
b)	Respondents of Māori ethnicity and/or descent who rate their te reo proficiency as being able to understand te reo fairly well, well or very well	25.1%	•••	Stats NZ ( <b>2018</b> )
<b>1. Ho</b> ւ a)	Ising supply  New dwellings consented by typology	13,855	_	Stats NZ Building Consent Data (2024)
	Homes and Places Ngā kāinga me ngā wāhi haere noa Aucklanders live in secure, healthy, and affordable homes, and have access to a	a range of inclusive public p	laces.	
b)	New dwellings consented by 1,000 residents*	8.9	_	Stats NZ Building Consent Data (2024)
	are of new homes within 1,000m of the Rapid Transit Network (RTN) tage of consented homes with access to RTN within 1000m*	12.3%	•	Stats NZ Building Consent Data (2024)
<b>3. Ho</b> ( a)	using affordability  Median house price to median household income ratio*	7.8		REINZ ( <b>2024</b> ) and Statistics New Zealand ( <b>2024</b> )
b)	Rent affordability: rent as a percentage of household income*	20.1%		Stats NZ ( <b>2024</b> ) an MBIE (2024)
c)	Housing cost overburden: Proportion of households spending more than 30 per cent of income on housing costs*	<b>46%</b> Renters <b>31%</b> Homeowners	_	Stats NZ ( <b>2023</b> )
	using stress r of people on the public housing register*	7,653	•	Min. of Housing and Urban Developmen ( <b>June 2024</b> )
	tainable building methods uptake*	2,448		New Zealand Greer

<b>6. Resident satisfaction with built environment at a neighbourhood level</b> Respondents to the Quality of Life Survey who agree they feel a sense of pride in their local area	56%	_	Quality of Life Survey ( <b>2022</b> )
Transport and Access Ngā mahi kawenga me te noho wāte A low-carbon, safe transport system that delivers social, economic and health			
1. Access to rapid and/or frequent transit stops Percentage of Aucklanders within 500m of a stop on the rapid and/or frequent transit network*	40%	•••	Auckland Transport (2023)
2. Congestion Percentage of arterial network congested	25%	_	Auckland Transport (2023)
<b>3. Transport emissions</b> Gross transport GHG emissions	4,425 kt CO₂e	_	Auckland Transport (2021)
<ul><li>4. Use of public transport, walking, and cycling</li><li>a) Public transport boardings (millions)</li></ul>	86.8	_	Auckland Transport (2024)
b) Cycle movements (millions)	3.22	_	Auckland Transport (2023)
<b>5. Household transport expenditure</b> Average weekly household transport expenditure as a percentage of total household expenditure	16.1%	•	Household Economic Survey (2023)
<b>6. Deaths and injuries from transport network</b> Number of deaths and serious injuries	<b>44</b> Deaths <b>588</b> Serious injuries		Auckland Transport ( <b>Dec 2023</b> )
Environment and Cultural Heritage Te taiao me ngā tika Aucklanders preserve, protect and care for the natural environment as our sha benefit of present and future generations.		intrinsic val	ue and for the
1. People's treasuring and stewardship of the natural environment and cultural heritage <sup>4</sup> <ul> <li>a) Aucklanders engaged in environmental / conservation activity</li> </ul>	<ul> <li>4.0 Biosecurity risk-reducing behaviours</li> <li>3.22 Conservation activities at home</li> <li>1.5 Conservation activities in the community</li> </ul>	-	Auckland Council (2022)
b) Domestic waste management tonnage collected through Auckland Council's kerbside refuse service	-	-	Auckland Council (June 2024)
2. Sustained management of priority native habitats  a) Proportion of rural mainland Auckland under sustained management for possums	39%	_	Auckland Council ( <b>June 2024</b> )

<sup>&</sup>lt;sup>4</sup>Note data for measures a) biosecurity risk-reducing behaviours and c) conservation activities in the community are no longer collected

b) Proportion of priority native habitats on regional parks under sustained management for pest plants	48%		Auckland Council ( <b>June 2024</b> )
c) Number of native plants planted	614,309		Auckland Council ( <b>June 2024</b> )
3. Active management of threatened native plants and animals  a) Number of plants and animals regionally vulnerable to extinction under active management	114	•	Auckland Council ( <b>June 2024</b> )
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		Auckland Council ( <b>June 2024</b> )
4. Marine and freshwater quality a) Stream water quality (Water Quality Index – scale 1-100)	Native <b>89.6</b> Exotic <b>66.5</b> Rural <b>61.2</b> Urban <b>51.2</b>	-	Auckland Council ( <b>2023</b> )
b) <b>Lake water</b> quality (Trophic Level Index – scale of 1-5+)	Pupuke <b>3.9</b> Rototoa <b>3.2</b> Tomarata <b>4.3</b> Wainamu <b>4.1</b> Kuwakatai <b>5.1</b>	•••	Auckland Council ( <b>Dec 2024</b> )
c) <b>Coastal water</b> quality (Coastal Water Quality Index – scale 1-100)	Estuary <b>67.6</b> Open coast <b>82.9</b> Tidal Creek <b>57.7</b>	_	Auckland Council ( <b>2024</b> )
d) Proportion of time Safeswim reference beaches are suitable for contact recreation	86.1%		Auckland Council ( <b>June 2024</b> )
<b>5. Air quality and greenhouse gas emissions</b> a) Concentration of nitrogen dioxide (NO2 μg/m³)	Glen Eden <b>4.7</b> Henderson <b>7.5</b> Penrose <b>13.4</b> Patumahoe <b>3.1</b> Takapuna <b>15.3</b> Queen Street <b>30.5</b>	_	Auckland Council (Queen St – Aug <b>2023</b> ; all others – Dec <b>2023</b> )
b) Concentration of fine particulate matter (PM2.5 µg/m³)	Penrose <b>5.0</b> Patumahoe <b>5.2</b> Takapuna <b>7.0</b> Queen Street <b>8.6</b>	-	Auckland Council (Queen St – Aug 2023; all others – Dec 2023)
c) Greenhouse gas emissions (kilotonne CO2e)	Gross 10,757 Net 9,559		Auckland's Greenhouse Gas Inventory ( <b>2021</b> )
6. Statutory protection of environment and cultural heritage a) Total area (ha) of scheduled Significant Ecological Areas	Terrestrial <b>79,124ha</b> Marine <b>100,732ha</b>	-	Auckland Council ( <b>June 2023</b> )
b) Number protected sites and places of significance to Mana Whenua	109		Auckland Council (2023)
Opportunity and Prosperity Ngā angitū me ngā whai huat Auckland is prosperous with many opportunities and delivers a better standard			
<b>1. Labour productivity</b> Real GDP per filled job	\$147,117	_	Infometrics (Mar 2023)

2. Aucklanders' average wages  Median weekly wages	\$1,360	_	Household Labour Force Survey (June 2024)
3. Employment growth in advanced industries Growth in employment in knowledge intensive industries	<b>2.8%</b> growth  (versus 2.5% growth in total  employment)	-	Auckland Economic Profile ( <b>Mar 2023</b> )
4. Level of unemployment Unemployment level	4.4%	_	Household Labour Force Survey ( <b>June</b> <b>2024</b> )
<b>5. Educational achievement of young people</b> Percentage of those aged 20-24 with a Level 4 qualification or above	35.4%	•	Household Labour Force Survey ( <b>Dec</b> <b>2023</b> )
<b>6. Children in material hardship</b> * Percentage of children in material hardship	12.8%	-	Stats NZ ( <b>2023</b> )
7. Income distribution* Gini index (0 equals perfect equality; 100 equals perfect inequality)	35.5	_	Stats NZ ( <b>2023</b> )
<b>8. NEET rates*</b> Percentage of 15–24-year-olds who are not engaged in Education, Employment, or Training	12.2%	_	Stats NZ ( <b>May 2024</b> )
9. Internal migration* Net loss of people from Auckland	11,200	_	Stats NZ ( <b>2023</b> )
10. Auckland's emissions intensity* Carbon emission (tonnes) per unit (NZ\$ million) of GDP (net and gross)	Net 78 t CO2e Gross 88 t CO2e	_	Auckland's Greenhouse Gas Inventory ( <b>2021</b> )

# **Belonging and Participation**

### Te whai pānga me te whai wāhi atu

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



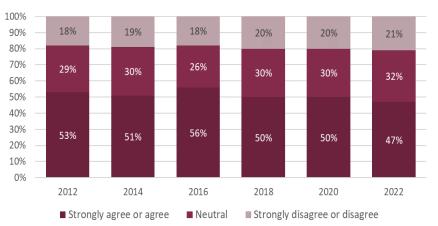
### 1. Aucklanders' sense of community in their neighbourhood

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. In 2022, older residents were more likely to agree that they feel a sense of community.

There is no new data for this measure this year.

Progress towards outcome: no change ( • )

### Respondents to the Quality of Life survey who rated their sense of community in their local neighbourhood (%)



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

### 2. Aucklanders' sense of safety in their homes and neighbourhood

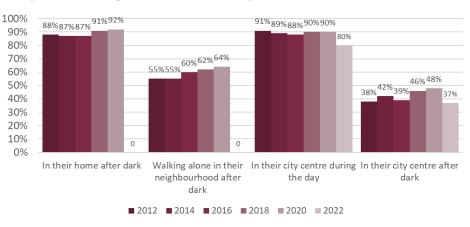
Between 2012 and 2022, there was a decline in respondents' sense of safety across two of the four categories measured. Aucklanders' sense of safety in their home and walking alone in their neighbourhood after dark were not included in the Quality of Life Survey 2022.

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. Respondents aged under 25 were more likely to feel unsafe in the city centre after dark (65 per cent).

#### There is no new data for this measure this year.

Progress towards outcome: Safety in local neighbourhood after dark - no change ( - ); Safety in the city centre after dark - negative change ( ▼ )

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



Source: Auckland Council, Ouality of Life Survey 2012, 2014, 2016, 2018, 2020 and 2022.

#### 3. Aucklanders' quality of life

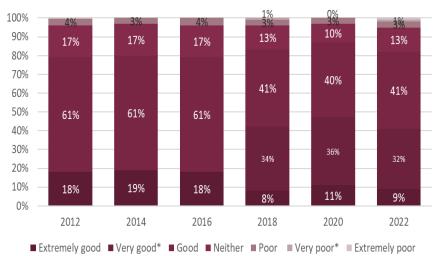
Between 2018 and 2020, there was an increase in the percentage of Aucklanders who rate their quality of life as good, very good or extremely good from 83 per cent to 87 per cent. This declined to 82 per cent in 2022.

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

There is no new data for this measure this year.

Progress towards outcome: no change (-)

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



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

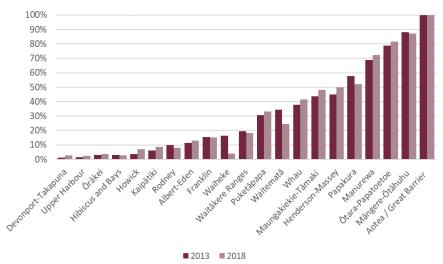
#### 4. Relative deprivation across Auckland

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 socioeconomic 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.

Progress towards outcome: insufficient data to determine trend (...)

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



Source: Department of Public Health, University of Otago, Wellington.

#### 5. Aucklanders' health

#### 5.a) Aucklanders' physical health

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.

Progress towards outcome: no change ( - )

#### 5. b) Aucklanders' mental health

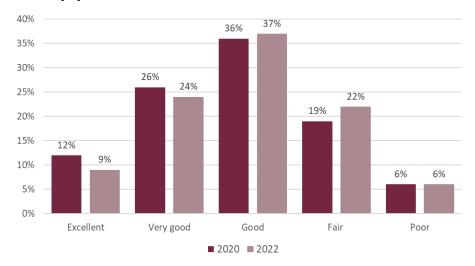
The proportion of respondents who rated their mental health positively (excellent, very good and good) declined from 72 per cent in 2020 to 65 per cent in 2022.

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

There is no new data for this measure this year.

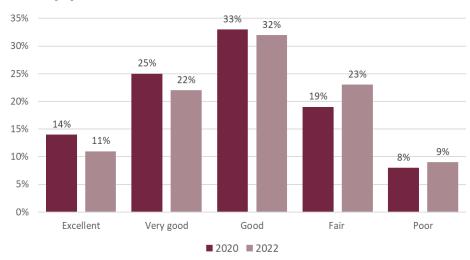
Progress towards outcome: negative change (▼)

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



Source: Auckland Council, Quality of Life Survey 2020 and 2022.

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



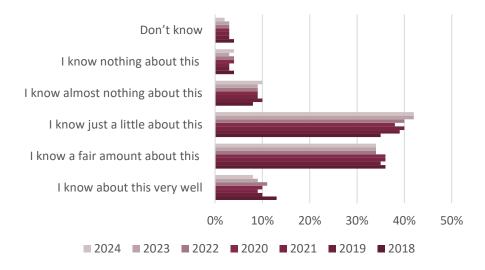
Source: Auckland Council, Quality of Life Survey 2020 and 2022.

#### 6. Treaty of Waitangi awareness and understanding

Between 2018 and 2024, Auckland residents' rating of their knowledge of Te Tiriti o Waitangi - the Treaty of Waitangi has declined (from 49% to 42%). Similarly, there has been a corresponding increase in the proportion of residents who consider that they know almost nothing or nothing about the Treaty (from 43% to 52%).

Progress towards outcome: negative change (▼)

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



**Source:** Auckland Council - Citizen Engagement and Insights.

# Māori Identity and Wellbeing

### Te tuakiri Māori me tōna oranga

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



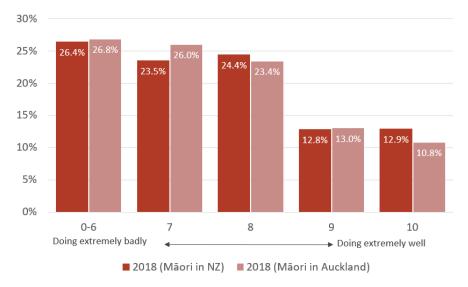
#### 1. Whānau wellbeing

There is no updated information since 2018 when 73.4 per cent of Auckland's Māori rated their whānau as doing well. There was no significant difference (only 0.4% 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) in 2013 to a 10-point scale in 2018 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.

Progress towards outcome: insufficient data to determine trend (...)

#### Percentage of whānau that are doing well (%)



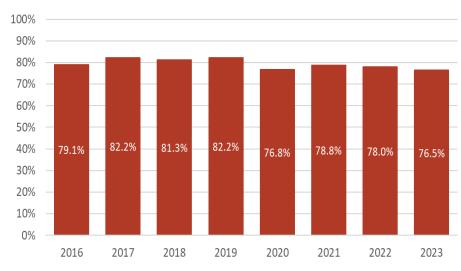
Source: Te Kupenga, Statistics New Zealand.

#### 2. Māori in employment, education and training

There was a slight decrease in the in the proportion of Māori youth aged 15-24 in employment, education or training between 2022 (78%) and 2023 (76.5%). This continues the trend of a decreasing proportion of Māori youth aged 15-24 in employment, education or training that was first seen during the COVID-19 pandemic. Since 2020 the proportion has remained between 76 per cent and 79 per cent to be slightly below the baseline (81%)

Progress towards outcome: negative change (▼)

### 2.a) Proportion of Māori youth in education, employment or training (%)



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

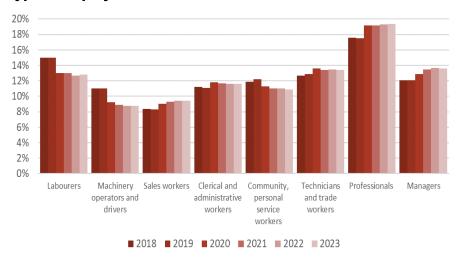
#### 2.b) Proportion of Māori in higher skilled jobs

Māori employed in the higher skilled jobs (professional and managers combined) has increased from 29.7% in 2018 to 33% in 2023 (up by 3.3%).

Those in jobs requiring lower skills (labourers, machinery operators and drivers combined) has decreased from 26% per cent to 21.6% (down by 4.4%) from 2018 to 2023.

Progress towards outcome: positive change ( )

#### Type of employment for Māori (%)



**Source:** Infometrics, Auckland regional economic profile.

#### 3. Māori decision-making

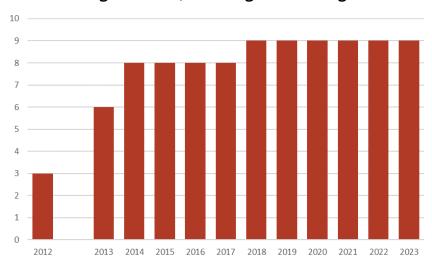
#### 3.a) Number of co-governance / co-management arrangement

The following co-governance / co-management arrangements are 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).

Progress towards outcome: no change (-)

#### Number of co-governance/co-management arrangements



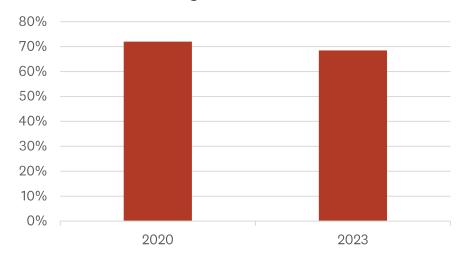
Source: Auckland Council, Ngā Mātārae.

#### 3.b) Māori voter turnout - General election: Auckland

The proportion of Māori voters by those enrolled dropped slightly from 72% in 2020 to 68.5% in 2023. Māori voter turnout (68.5%) in the General election in 2023 was also lower than non-Māori voter turnout (75%).

Progress towards outcome: no change (-)

#### Māori voter turnout in the general elections



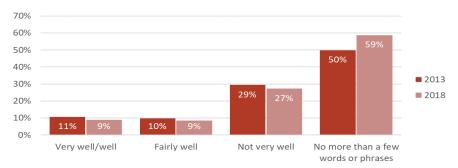
Source: Electoral Commission.

#### 4. Te reo Māori across Tāmaki Makaurau

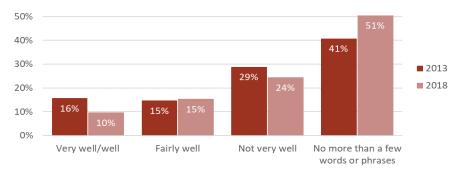
There is no updated data since 2018 when the pre-baseline data showed a steady decline across the ability to speak or understand Te reo Māori among those of Māori ethnicity and/or descent. A fifth of Māori in Auckland (18%) reported they could speak te reo Māori well or very well, with a quarter (25%) reporting they were able to understand spoken te reo Māori well or very well.

There is no new data for this measure this year Progress towards outcome: insufficient data (...)

### 4.a) Te reo Māori proficiency (self-rated): able to speak Te reo Māori (%)



### 4.b) Te reo Māori proficiency (self-rated): able to understand spoken Te reo Māori (%)



Source: Te Kupenga, Stats NZ

# **Homes and Places**

### Ngā kāinga me ngā wāhi haere noa

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



#### 1. Housing supply

#### 1.a) New dwellings consented by typology

The total number of new dwellings consented in Auckland in the year ended June 2024 was 13,855. This is a 27 per cent decrease on the 19,085 dwellings consented in the 12 months to June 2023, and a 36 per cent drop from the peak year of 2022.

In the year to June 2024, apartments, townhouses, flats, units and other dwellings (not including retirement village units) made up 68 per cent of new dwellings consented, a decrease from 72 per cent in 2023. The long-term trend, however, remains a shift in housing typologies over time, in line with the quality compact approach to growth set out in the Future Development Strategy.

Most growth (83% in 2022/2023 FY) is occurring within the existing urban area through intensification in brownfield areas, while the remainder is located in identified future urban areas (11%), and some limited growth in rural areas (6%).

#### Progress towards outcome: positive change (▲)

#### Number of new dwellings consented by type



Source: Statistics New Zealand, building consent data.

#### 1.b) New dwellings consented per 1,000 residents

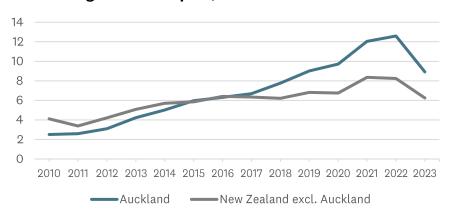
The number of consents per 1,000 people in Auckland increased rapidly after the 2016 introduction of the Auckland Unitary Plan (AUP), relative to the rest of New Zealand. The more flexible use of urban land for housing enabled by the AUP is resulting in more housing being built, thereby helping increase the much-needed housing supply in Auckland.

In the year to June 2023 there was a dip, reflecting both a slowing in building activity, influenced by changing cyclical conditions (i.e. rising cost of debt), and the fact that the population started to increase again post-COVID.

An <u>insights paper</u> from the Auckland Council Chief Economist Unit provides more detailed commentary, including on the patterns of growth across Auckland, finding that the majority of the increase in dwellings occurred in local board areas outside of the Auckland isthmus.

Progress towards outcome: positive change (▲)

#### New dwellings consented per 1,000 residents



**Source:** Statistics New Zealand, building consent data; Statistics New Zealand, population estimates.

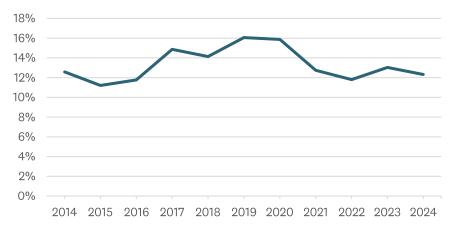
### 2. Share of new homes within 1,000m of the Rapid Transit Network (RTN)

In the year ended June 2024, 12.3 per cent of all consented dwellings were within 1,000m of the Rapid Transit Network (RTN). This is down slightly from 13 per cent in the previous year. There appears to be a downward trend since 2019 when 16.1 per cent of all consented dwellings were within 1,000m of the RTN.

Access to efficient and reliable public transport is critical to a more sustainable, low-carbon city. Auckland must continue focusing on developing the RTN and enabling more of its housing to be within a walkable distance of rapid transit.

Progress towards outcome: negative change (▼)

#### Percentage of consented dwellings within 1,000m of the RTN



Source: Statistics New Zealand, building consents data.

#### 3. Housing affordability

#### 3.a) Median house price to median household income ratio

In 2024, the median multiple was 7.5, down marginally on the previous year. There are some notable changes in the median multiple over the years. The introduction of the AUP in 2016 contributed to a moderation in house price growth and the median multiple declined. House prices surged during the pandemic pushing the median multiple up again to reach a high of 10.8 in 2021. The recent decline reflects a softening of house prices due to high interest rates. It's too early to predict the impact of this year's falling interest rates. It will depend on several factors (including changes in household incomes, lending criteria and investor activity).

Notwithstanding the recent drop, the median multiple remains high reflecting ongoing housing affordability challenges. Auckland continues to be amongst the least affordable housing markets in the world (ranked 83 of 94 cities in English-speaking countries). Few cities rank worse (e.g. Toronto, Melbourne, Vancouver and Sydney).

Progress towards outcome: positive change (▲)

#### Median house price to median household income ratio



Source: REINZ; Statistics New Zealand.

### 3.b) Rental affordability: Rent as a percentage of household income

Rental affordability worsened marginally in Auckland in the year to June 2024, with average rents amounting to 25.0 per cent of household income, up from 24.4 per cent in the previous year. There have been fluctuations in rental affordability over time. Low international net migration and rising incomes during the pandemic resulted in improved rental affordability, but there has been a small turnaround in the past year as inward migration has bounced back and income increases have slowed. Meanwhile, for New Zealand there has been a clear worsening of rental affordability over time.

Recent research has shown that Auckland rents have increased less than they would have if it had not been for the adoption of the Auckland Unitary Plan in 2016, which have driven a significant growth in housing supply and a change in housing types.

Progress towards outcome: positive change ( )

#### Rent as a % of household income



**Source:** Statistics New Zealand; Ministry of Business, Innovation and Employment.

### 3.c) Housing cost overburden: Proportion of households spending more than 30 per cent of income on housing costs

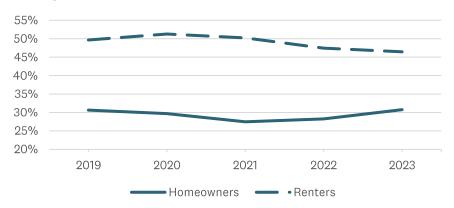
Households who rent are more likely to face housing cost overburden, with 46 per cent spending more than 30 per cent of disposable income on housing cost, compared to homeowners (31%). Housing cost overburden has been declining for renters since 2020, while the opposite is true for homeowners (since 2021), most likely resulting from rising interest rates.

Among homeowners, the Asian sub-group is most likely to experience housing cost overburden (43%), and this sub-group has also seen the largest increase in the year from 2022 to 2023.

For renters, the Asian and European subgroups are most likely to face housing cost overburden, followed by Māori and Pacific. In the year to 2023, the Māori subgroup saw a steep increase in their overburden rate, reversing an otherwise declining overburden rate and bringing it back in line with 2019 (47%).

Progress towards outcome: Renters: positive change ( ); Homeowners: no change ( )

### Proportion spending more than 30% of household income on housing cost



**Source**: Statistics New Zealand, customised dataset.

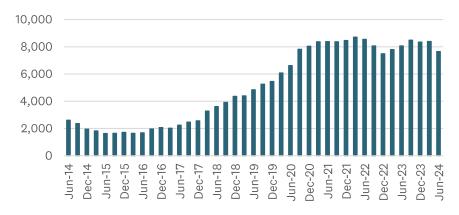
#### 4. Housing stress

The need for public housing support is strong with 7,653 people on the public housing register waiting list in June 2024, down from 8,073 in June 2023. The number of people on the public housing register waiting list peaked in the aftermath of the COVID-19 pandemic (8,864 in April 2022) and fell to 7,494 in December 2022, before rising again.

Notwithstanding the dip in the 2024 June quarter, the wait list numbers are at historically high levels and reflect a shortage of public and affordable housing. The Government is taking a new approach to public housing, with a shift towards community housing providers. Making a dent in the waiting list is likely to require a focus on supporting the community housing sector and increasing the supply of state-owned housing. The latter is at particularly low levels in New Zealand making up only 3.5 per cent of the housing stock compared to the OECD average of 7.0 per cent (Netherlands 34%, Denmark 21%, UK 16%).<sup>5</sup>

Progress towards outcome: negative change (▼)

#### Number of people on the public housing register



Source: Ministry of Housing and Urban Development.

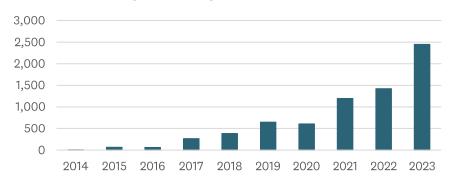
#### 5. Sustainable building methods uptake

In 2023, 2,448 of new Auckland homes achieved Homestar certification, a 72 per cent increase on 2022. There has been a strong increase in the number of dwellings achieving Homestar certification in recent years with more than a 6-fold increase since 2018 (383). While the number of Homestar certified dwellings still accounts for a relatively small share of completed dwellings (13.5% in 2023), this share has been growing year on year. This indicates that Auckland is making progress on building better quality homes that are healthier, more energy efficient and sustainable.

Accelerating the uptake of sustainable building methods is critical to achieving our climate goals. MBIE's Building for Climate Change programme, which aims to improve energy efficiency and reduce whole-of-life embodied carbon in building and construction, is vital. However, the future direction of this initiative is currently under review. The draft second Emissions Reduction Plan appears to de-emphasise the need for reducing embodied and operational emissions in buildings.

Progress towards outcome: positive change ( )

#### Number of dwellings achieving Homestar certification



**Source:** New Zealand Green Building Council, custom request.

<sup>&</sup>lt;sup>5</sup> OECD (n.d.) Affordable Housing Database <a href="https://www.oecd.org/en/data/datasets/oecd-affordable-housing-database.html">https://www.oecd.org/en/data/datasets/oecd-affordable-housing-database.html</a>

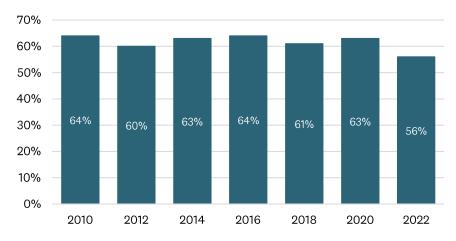
### 6. Resident satisfaction with the built environment at a neighbourhood level

In 2022, 56 per cent of respondents reported that they felt a sense of pride in the built environment, falling for the first time below 60 per cent. While the timeframe is too short to determine if this is an ongoing trend, it does suggest that a growing number of Aucklanders think that their area has become a worse place to live. The top three reasons given by respondents include more housing development / high density housing, and reasons related to crime / crime rates and/or an increase in presence of people they feel uncomfortable around such as gangs.

There is no new data for this measure this year.

Progress towards outcome: no (▼)

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



Source: Auckland Council, Quality of Life Surveys 2010 to 2022.

# **Transport and Access**

### Ngā mahi kawenga me te noho wātea mai

A low-carbon, safe transport system that delivers social, economic and health benefits for all.



#### 1. Access to rapid and/or frequent transit stops

The proportion of Auckland's population within 500m of a rapid or frequent transit service is 40 per cent. The RLTP 2023 set a target to increase this to 52 per cent for 2025/2026 and 57 per cent by 2030/2031. This target will be supported by the delivery of projects prioritised in the RLTP 2024 like the Eastern Busway, Northwest rapid transit and the Climate Action Transport Targeted Rate frequent bus improvements.

A rapid transit network is a key transport priority for Auckland, supporting jobs, growth and housing through increasing access to opportunities and employment, travel unaffected by congestion, and providing integrated and efficient public transportation.

Making the public transport network faster, more accessible, and more reliable is a key priority of the Regional Land Transport Plan (RLTP) 2024. The expansion of Auckland's Frequent and Rapid Transit Network is key to achieving this. Phase 1 of the Auckland Rapid Transit Pathway (ARTP) includes new corridors of City to Māngere, Northwest State Highway 16, and Waitematā Harbour Connections.

### Progress towards outcome: insufficient data to determine trend (...)

Source: Regional Public Transport Plan, Auckland Transport

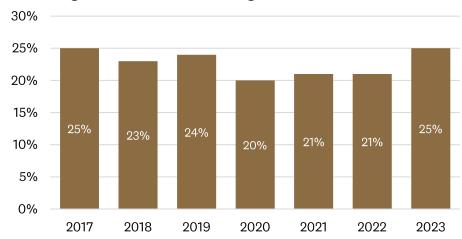
#### 2. Congestion

In 2023, 25 per cent of Auckland's arterial network was considered congested during the AM peak - operating at levels of service C and below (half of the posted speed limit). Lower levels of congestion from 2020 to 2022 can be attributed to COVID-related restrictions and lower travel demand. The return to pre-COVID travel demand levels in 2023 contributed to expected higher levels of congestion.

There is no new data for this measure this year.

Progress towards outcome: negative change (▼)

#### Percentage of arterial network congested



Source: Auckland Transport data.

#### 3. Transport emissions

Since 2016, transport emissions generally increased. They declined between 2019 and 2020 largely due to COVID-related lockdowns and working from home resulting in less travel. However, transport emissions have started to increase again as fuel consumption and vehicle kilometres for 2021 were almost back to pre-COVID levels.

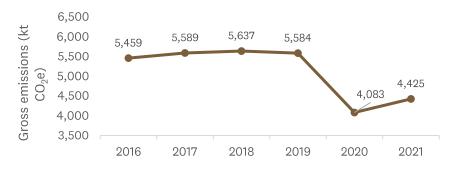
Transport emissions are the main source of Auckland's emissions (41.1 per cent of total gross emissions) of which 90.3 per cent were from onroad transport, 5.6 per cent from aviation, 3.3 per cent from ferries and ships, and 0.2 per cent from trains.

Reducing transport emissions is critical to Auckland achieving its target of halving emissions by 2030 and reaching net zero emissions by 2050. The Transport Emissions Reduction Pathway (TERP) sets out a route to achieving this target.

Auckland's per capita transport emissions are 2.35 tCO2e (2021); many times higher than comparator cities: Barcelona (0.57), Sydney (0.62), Amsterdam (0.74), Oslo (0.83), Copenhagen (0.86). These figures clearly show the scale of Auckland's challenge.<sup>6</sup>

#### Progress towards outcome: positive change ( )

#### **Gross transport emissions**



Source: Auckland Council, Auckland's Greenhouse Gas Inventory to 2021.

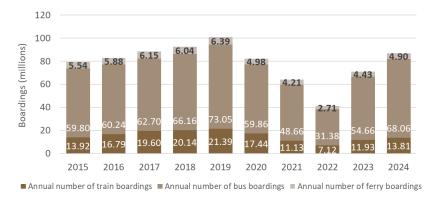
#### 4. Use of public transport, walking and cycling

#### 4.a) Public transport boardings (millions)

Following the large reduction in public transport use during COVID, public transport boardings are now increasing, going from a low of 41.2 million in 2022 (FY) to 86.8 million in the year to June 2024. Based on this recovery trend, it is expected that boardings will reach pre-COVID levels (more than 100 million) in the next two years. Auckland Transport's target is 106 million for financial year 2025/2026 and 174 million by 2033/2034.

Alongside changing travel patterns (i.e. work from home), other factors also contributed to the decline in public transport use seen between 2020 and 2022. These included bus and ferry reliability issues caused by staff shortages and significant disruptions to rail lines due to critical renewals on the rail network. Public confidence in public transport fell and impeded efforts to restore patronage levels. With most of the rebuild work complete, disruption caused by rail network renewal is expected to decrease.

### Progress towards outcome: negative change (▼) Public transport boardings (annual)



Source: Auckland Transport Metro Patronage data.

<sup>&</sup>lt;sup>6</sup> C40 Greenhouse gas emissions interactive dashboard

#### 4.b) Cycle movements (millions)

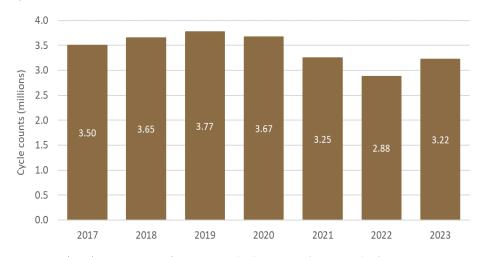
Cycle movements (across selected count sites) were increasing up until 2019. However, due to COVID, counts dropped in 2020 and continued to do so reaching 2.88 million for year ending December 2022. Number of cycle counts have since been increasing, reaching 3.22 million for 2023 with the expectation they will continue to increase.

Cycling supports emissions reduction and safety outcomes. Associated infrastructure complements public transport through improving access to rapid transit stations, along with schools and other high demand locations. Over the last three years, infrastructure improvements have been made on walking and cycling links, connections between railway stations, and safety of unprotected cycleways.

The Auckland Regional Land Transport Plan 2024-2034 has proposed \$755 million in funding for improvements and development of the cycle network.

Progress towards outcome: negative change (▼)

#### **Cycle movements**



Source: Auckland Transport Monthly cycle monitoring reports (26 count sites).

#### 5. Household transport expenditure

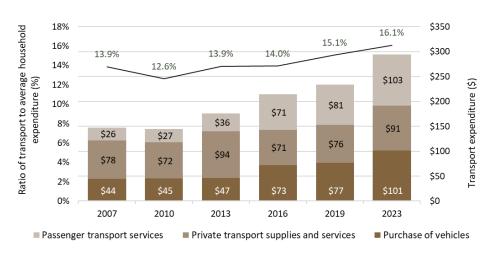
Auckland households have seen increases in average weekly household transport expenditure. In 2023 Auckland household spent on average \$295 on transport related expenditure every week, accounting for 16.1 per cent of total net household expenditure (compared to \$234 and 15.1 per cent in 2019).

Purchase of vehicles as a proportion of household expenditure increased by 32 per cent, from \$77 in 2019 to \$101 in 2023. Passenger transport services expenditure increased by 28 per cent, from \$81 to \$103, while private transport supplies and services increased by 19 per cent from \$76 to \$91.

Progress towards outcome: negative change (▼)

Please note correction made to the 2023 data after the original publication. See page 2.

#### Average weekly household transport expenditure



Source: Statistics New Zealand, HES Household Economic Survey and HES (Income).

#### 6. Deaths and serious injuries

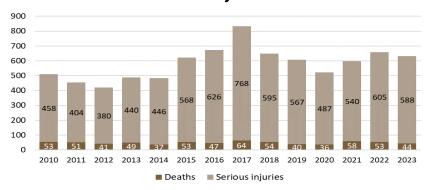
At the end of 2023, there had been a decrease in the number of deaths and serious injuries (DSI) on Auckland's roads compared to 2022. DSI were tracking to the target of no more than 640 DSI for 2023/2024.

- 89 per cent of DSI occurred on local roads with the remainder on the state highway network (including motorways).
- 58 per cent of DSI occurred on a road with a posted speed limit of 50 km/hr.
- 47 per cent of DSI were experienced by people outside of vehicles (people walking, cycling and motorcyclists).

As a result of policy and funding changes, Auckland Transport has reviewed DSI targets to reflect the contribution they expect to make to safety on Auckland's transport system. This will be achieved by delivering safety interventions near schools and at high-risk locations, delivering coordinated road safety education, and supporting increased police enforcement. \$70 million has been allocated to safety through the Regional Land Transport Plan (RLTP) 2024, focused on improvements at high-risk locations.

**Progress towards outcome: Deaths positive change** (▲) and Serious Injuries ( -)

#### Number of deaths and serious injuries



Source: Auckland Transport Safety Performance Dashboard - Board Reports.

# **Environment and Cultural Heritage**

### Te taiao me ngā tikanga ā-iwi tuku iho

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



Measures included for this outcome provide insight into some areas of interest or priority to the function of Auckland Council.

These measures do not provide a full regional picture of environmental and cultural health, which is not practical or possible with a small number of annual measures.

Due to the complexity of the natural environment, changes in environmental health are best measured and reported over longer time frames. The council's <u>State of the Environment Reporting</u> provides the most comprehensive view.

Other recommended reports and links include:

- <u>Land Air Water Aotearoa (LAWA)Coastal and estuarine water</u> <u>quality in Tāmaki Makaurau / Auckland: 2021-2022 annual data</u> report
- River water quality in Tāmaki Makaurau Auckland 2022 annual reporting NPSFM current state assessment

# 1. People's treasuring and stewardship of the natural environment and cultural heritage<sup>7</sup>

### 1.a) Aucklanders engaged in environmental / conservation activities

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

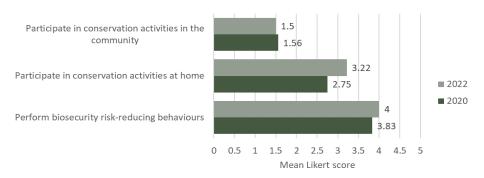
Conservation activities at the individual household level increased significantly during the same period, as more people engaged in planting native species.

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.

There is no new data for this measure this year.

Progress towards outcome: no change (-)

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



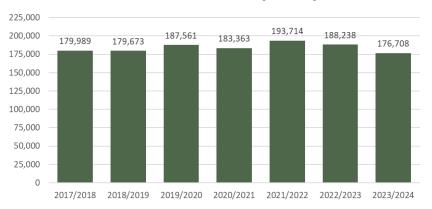
Source: Auckland Council, Environment Services.

### 1.b) Domestic waste tonnage collected through Auckland Council's kerbside refuse service

The total amount of kerbside waste collected by Auckland Council has fluctuated up and down since 2017/18. The amount Auckland Council collected decreased from 193,714 tonnes in 2021/2022 to 176,708 in 2023/2024. This is attributed to the 2023 rollout of a kerbside food scraps collection service across much of the region.

Progress towards outcome: no change (-)

#### Kerbside residential waste collection (tonnes)



Source: Contractor tonnages reporting, Auckland Council.

<sup>&</sup>lt;sup>7</sup> Note data for previous Measure 1.a) Aucklanders who value biodiversity, and Measure 1.c) Number of initiatives with Māori are no longer collected and will not be included going forward.

#### 2. Sustained management of priority native habitats

# 2.a) Proportion of rural mainland Auckland with possum populations at or below target levels for biodiversity protection

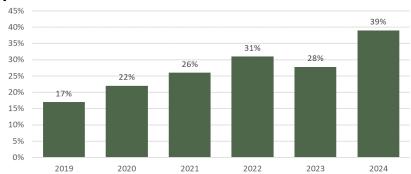
The overall trend for proportions of rural mainland Auckland under sustained possum management has been increasing since 2019, reaching 39 per cent in 2024. This is due to large scale possum control undertaken at Kawakawa Bay, Pakiri, Tamahunga and the eastern Waitākere Ranges as well as at many council parks. Auckland Council also supported community-led possum control and monitoring.

A reduction in the proportion of rural mainland under sustained management of possums in 2023 was due to possum numbers being higher than expected across half of the Āwhitu Peninsula.

The below graph shows the proportion of rural areas in mainland Auckland controlled and achieving a confirmed <3% Residual Trap Catch (RTC) and areas controlled within the current year and achieving a confirmed <6% RTC.

Progress towards outcome: positive change (▲)

### Rural mainland Auckland under sustained management for possums (%)



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

# 2.b) Proportion of priority native habitats on regional parks with pest plants at or below target densities for biodiversity protection, and the area across which sufficient control is underway

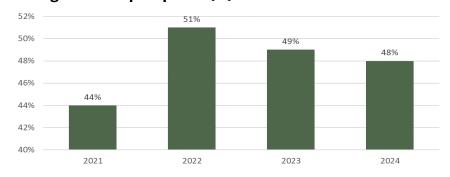
In 2023, the reduction in the percentage of Biodiversity Focus Areas (BFA) receiving monitoring and control decreased in part due to a wet summer season and damage from Cyclone Gabrielle preventing access to some sites along the West Coast.

Due to staffing pressures, a small proportion of surveys have not been carried out for financial year 2023/24, equating to 3.3 per cent of the BFAs on regional parks. Based on the surveys that have been undertaken, 48 per cent (2,800ha) of BFA on regional parks are receiving levels of sustained control of pest plants.

The below graph shows the percentage of Biodiversity Focus Areas 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.

Progress towards outcome: positive change (▲)

### Priority native habitats on regional parks under active management for pest plants (%)



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

#### 2.c) Number of native plants planted

There has been a positive trend in the total number of native trees planted since 2020. The high number of trees planted in the 2022/2023 financial year planting season reflects the ten-year Carbon Sequestration project proceeding ahead of schedule, the scale of remediation planting being higher than anticipated due to unforeseen weather events and an increase in land development projects requiring planting.

Progress towards outcome: positive change ( )

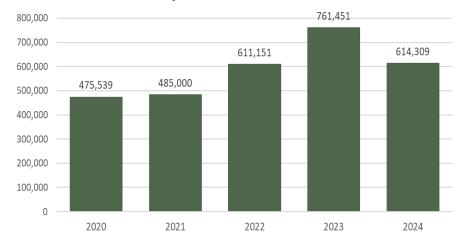
## 3. Active management of threatened native plants and animals

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

In 2024, the number of vulnerable species under active management was 114, up from 94 in the previous year.

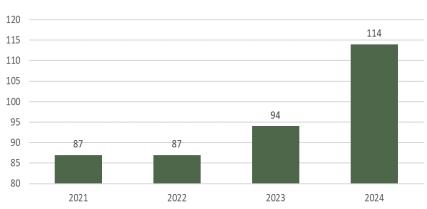
Progress towards outcome: positive change ( )

#### Number of native trees planted8



Source: Auckland Council.

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



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

<sup>&</sup>lt;sup>8</sup> An aggregation of tree planting figures from across Auckland Council including Regional Parks, Community Facilities, Mayor's Million Trees, Trees for Survival, Healthy Waters and the 200 hectare 10-year Carbon Sequestration project.

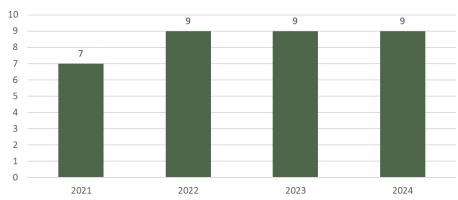
# 3.b) Species-led projects being delivered on Hauraki Gulf islands for the purpose of maintaining or achieving eradication of pest plants and/or pest animals

There has been no notable change in the number of species-led projects. Currently, Auckland Council is leading, or a key funder of, nine species led projects focused on eradicating or keeping pests from islands in the Hauraki Gulf. Examples include eradicating stoats from Waiheke in partnership with Te Korowai o Waiheke and rats from Broken Island in partnership with Tū Mai Taonga.

Auckland Council is no longer trying to eradicate the pest plant Rhamnus from Waiheke as it is too well-established to cost-effectively eliminate from difficult cliff sites, but it will work to continue to control it at high priority sites.

Progress towards outcome: Positive change ( )

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



Source: Islands Programme, Environmental Services, Auckland Council.

#### 4. Marine and freshwater quality

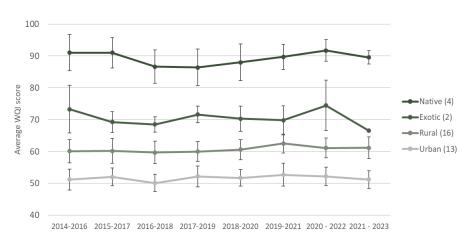
#### 4.a) Stream water quality

There has been little change to stream water quality ratings since 2016, which for each land cover type are:

- Native 'good' with WQI value of 89.6 for 2021/2023
- Exotic 'fair' with WQI value of 66.5 for 2021/2023
- Rural 'marginal' with WQI value of 61.2 for 2021/2023
- Urban 'marginal' with WQI value of 51.2 for 2021/2023

Progress towards outcome: no change ( - )

#### Stream water quality (Water Quality Index - scale 1-100)



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

#### 4.b) Lake water quality

The Trophic Level Index (TLI) is a method of characterising the health of a lake based on the amount of nutrients and algae, as well as water clarity. The lower the TLI score, the better the condition of the lake. It is not the basis of trend analysis.

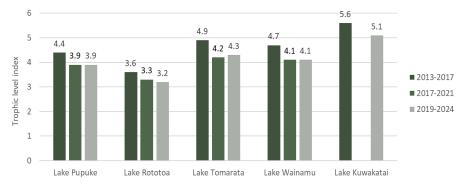
The latest reporting period is 2019 to 2024. Lake Kuwakatai is only based on four years of data (July 2020 – June 2024) due to no sampling between 2017-2020.

#### Progress: analysis will be carried out at the end of 2024

The trophic states of each of the lakes for 2019-2024 are shown in the table below.

Lake	TLI score	Trophic state	Description
Lake Pupuke	3.9	Mesotrophic	Moderate levels of nutrients and algae.
Lake Rototoa	3.2	Mesotrophic	Moderate levels of nutrients and algae.
Lake Tomorata	4.3	Eutrophic	Elevated levels of nutrients and algae, with low water clarity.
Lake Wainamu	4.1	Eutrophic	Elevated levels of nutrients and algae, with low water clarity.
Lake Kuwakatai	5.1	Supertrophic	Saturated with nutrients, high algae growth with blooms possible in summer. Very low water clarity.

#### **Trophic Level Index over time**



**Source:** Lake Water Quality Monitoring Programme, Environmental Evaluation and Monitoring Unit, Auckland Council.

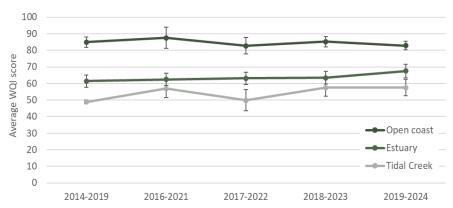
#### 4.c) Coastal water quality

Since 2016, coastal water quality ratings for open coast and tidal creeks have remained 'marginal', whilst ratings for estuaries changed from marginal to fair for 2019/2024.

- Estuary 'fair' with WQI value of 67.6 for 2019/2024
- Open coast 'marginal' with WQI value of 82.9 for 2019/2024
- Tidal creek 'marginal' with WQI value of 57.7 for 2019/2024

Progress towards outcome: no change (-)

#### Coastal water quality (Coastal Water Quality Index - scale 1-100)



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

#### 4.d) Beach swimming safety

In the 2023/24 season, the standardised modelled data shows our beaches have been suitable for contact recreation 86.1 per cent of the time. It is noted that the standardised modelled data uses a fixed rainfall value.

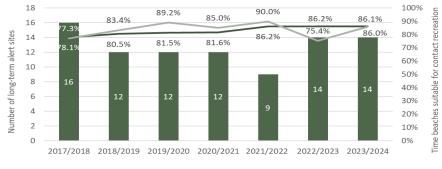
Actual measure for 2023/2024 was 86 per cent which is an increase from 75 per cent for 2022/2023 data. This result is higher than the previous summer due to the impact of the 2023 storm events in the previous financial year. The actual measure for 2023/2024 is much closer to the long-run average, reflecting the more 'normal' rainfall volumes during the reporting period.

The number of sites with long-term water quality site alerts for beaches and streams, have remained at 14.

#### **Progress towards outcome:**

- Proportion of time beaches are suitable for contact recreation using standardised modelled data (
- Proportion of time beaches are suitable for contact recreation using actual statistics (
- Number of sites with long-term water quality alerts ( )

#### Number of alert sites and beaches suitability for recreation



Number of sites with long term water quality site alerts for beaches and streams
 Proportion of time modelled Safeswim marine beaches are suitable for contact recreation (1 Nov to 30 April)
 Proportion of time actual marine beaches are suitable for contact recreation (1 Nov to 30 April)

Source: Auckland Council, Safeswim Programme.

#### 5. Air Quality & Greenhouse Gas Emissions

#### 5.a) Concentration of nitrogen dioxide (NO<sub>2</sub>)

Nitrogen dioxide (NO<sub>2</sub>) concentrations have been decreasing since 2016 continuing with an 8.4 per cent reduction from 2022 to 2023.

Concentrations vary spatially. In the previous year, Patumahoe recorded the lowest annual NO<sub>2</sub> mean concentration of 3.1  $\mu$ g/m³, while Queen Street registered the highest of 30.0  $\mu$ g/m³.

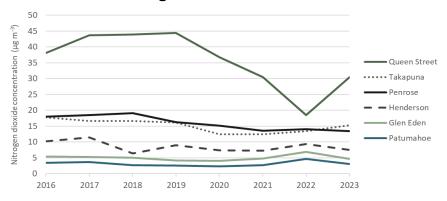
The annual mean concentrations of  $NO_2$  recorded at Queen Street and Takapuna were found to be significantly higher than the previous year whilst there was a significant decrease at the remaining sites. As expected,  $NO_2$  concentrations were highest at city centre sites.

The highest NO<sub>2</sub> concentrations were recorded in winter. Reduced pollution dispersion during the cold winter months increases overall concentrations along with increased emissions from colder vehicle engines. Weekly concentrations are highest between 7am-9am, and 5pm-9pm, likely due to increased traffic volume at those times.

Travel restrictions during the COVID period resulted in a sharp drop in  $NO_2$  concentrations from reduced vehicle emissions.

Progress towards outcome: positive change ( )

#### Concentration of nitrogen dioxide (NO<sub>2</sub>)



Source: Auckland Air Quality 2023 Annual Data Report.

#### 5.b) Concentration of fine particulate matter (PM<sub>2.5</sub>)

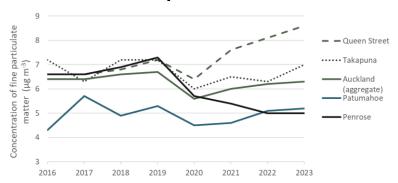
Particulate matter ( $PM_{2.5}$ ) concentrations have remaining largely unchanged since 2016 but have increased by 1.6 per cent from 2022 to 2023. This increase was 26 per cent over the 2021 WHO air quality guideline of 5 µg/m<sup>3</sup>.

As in 2022, the Penrose monitoring site had the lowest annual PM $_{\!2.5}$  mean concentration of 5.0  $\mu g/m^3,$  while Queen Street recorded the highest mean of 8.6  $\mu g/m^3.$  The Patumahoe, Takapuna and Queen Street monitoring sites registered annual mean concentrations higher than the previous year. The Penrose monitoring site recorded annual mean concentrations lower than the previous year.

Concentrations of  $PM_{2.5}$  tend to increase later in the week with the highest concentrations typically occurring on Wednesday to Friday.  $PM_{2.5}$  concentrations were higher in winter most likely due to domestic fires from home heating. Unlike in 2022, weekday average  $PM_{2.5}$  concentrations are slightly lower than weekends. Overall, between the hours 12 noon and 6 pm, lower average  $PM_{2.5}$  values were recorded in 2023 than in 2022. This is most likely due to decreased traffic volumes in 2023 compared to 2022.  $PM_{2.5}$  average concentrations peak in the afternoon and evening.

#### Progress towards outcome: negative change (-)

#### Concentration of fine particulate matter (PM<sub>2.5</sub>)



Source: Auckland Air Quality 2023 Annual Data Report.

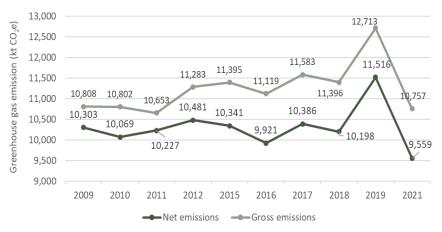
#### 5.c) Greenhouse gas emissions (kilotonnes of CO2e)

Total emissions (gross and net) generally increased from 2009 to 2019, with a marked drop from 2019 to 2020, which was related to COVID-19 restrictions. These continue to have an impact into 2021. During this period, emissions were lower from transport, waste and agriculture sectors but higher from energy and industrial process and product use (IPPU) sources.

In 2021, transport was the largest contributor of emissions (41.1 per cent), followed by the Stationary Energy (29.4 per cent), IPPU (20.9 per cent) and Waste (3.0 per cent) sectors. The AFOLU sector (agriculture, forestry and other land uses) contributed a negative value, indicating removal of emissions.

Progress towards outcome: positive change ( )

#### Greenhouse gas emissions (kilotonnes of CO₂e)



Source: Auckland Council, Auckland's Greenhouse Gas Inventory to 2021.

#### 6. Statutory protection of environment and cultural heritage

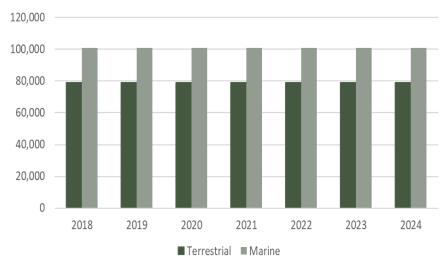
#### 6.a) Total area of scheduled Significant Ecological Areas (hectares)

There has been a slight increase in terrestrial Significant Ecological Areas (SEA) in 2024 of 1.92 hectares (ha), which is likely due to the addition of an SEA as part of Plan Change 74 in Pukekohe Golding Road.

It is noted that the area covered by Marine SEAs (101,731 ha) is the total scheduled area and includes areas of overlap, so the actual area covered when these are removed would be less, around 87,000 ha.

Progress towards outcome: no change (-)

#### **Total area of scheduled Significant Ecological Areas (hectares)**



Source: Schedule 3 and 4 of the Auckland Unitary Plan.

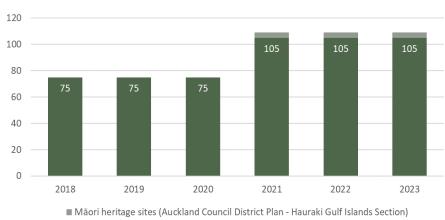
#### 6.b) Number of protected sites and places of significance for mana whenua

105 Sites of Significance to Mana Whenua (SSMW) are protected through the Auckland Unitary Plan (AUP). There are four Māori Heritage Sites protected through the Hauraki Gulf Islands District Plan (HGI).

Plan Change 102 proposes to introduce an additional nine SSMW to the AUP. Plan Modification 15 proposes to introduce five Māori Heritage Sites to the HGI. Public consultation on proposed changes closed in June 2024.

Progress towards outcome: positive change ( )

#### Number of protected sites and places of significance for mana whenua



■ Sites of Māori significance (Auckland Unitary Plan)

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

# **Opportunity and Prosperity**

Ngā angitū me ngā whai huatanga

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



#### 1. Labour productivity

In 2023, real GDP per filled job in Auckland was \$147,117 (in \$2023), up 1.7 per cent on 2022. Auckland's labour productivity is consistently higher than the New Zealand average. This is also the case for Auckland's average annual productivity growth (0.9%), which has exceeded the annual national average (0.7%) over the past 10 years.

While Auckland's productivity performance is better than most of New Zealand's cities, it lags international comparator cities such as Brisbane, Vancouver, Dublin and Copenhagen<sup>9</sup>. This mirrors the New Zealand picture and highlights the need for a strong and continued focus on enhancing Auckland's skills and innovation ecosystem.

Progress towards outcome: positive change ( )

#### Real GDP per filled job (\$2023)



Source: Infometrics, Auckland regional economic profile.

<sup>9</sup> Tātaki Auckland Unlimited (2024). Auckland Economic Monitor.

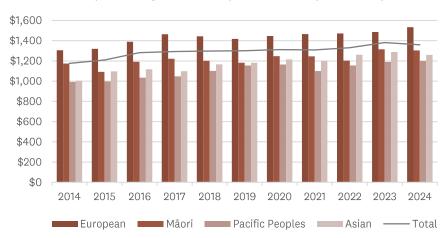
#### 2. Aucklanders' average wages

In 2024, real median weekly earnings for all Aucklanders stood at \$1,360, down 2 per cent on the previous year. However, this drop was not experienced by all ethnic groups. European and Pacific Peoples' median weekly earnings rose by 3 and 1 per cent respectively, while Māori and Asian experienced decreases of 1 and 2 per cent respectively. These movements in weekly median earnings over the past year are exacerbating existing disparities in incomes.

Looking at the longer-term trend, all ethnic groups have seen an increase in their median weekly earnings since 2018. While average incomes for the European subgroup is significantly higher than for any other ethnic subgroup, the gap has been narrowing slowly since 2018, as the income increases for Māori (9%), Pacific Peoples (9%) and Asian (8%) have exceeded that experienced by European (6%).

Progress towards outcome: positive change ( )

#### Median weekly earnings of employed people by ethnicity (\$2024)



**Source:** Statistics New Zealand, Labour market statistics (incomes) and Consumer Price Index (CPI).

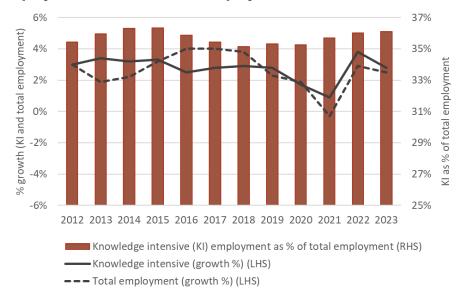
#### 3. Employment growth in advanced industries

In the year to 2023, knowledge intensive (KI) employment growth was 2.8 per cent, a slight drop from 2022 (3.8%), bringing growth back to pre-pandemic levels. Auckland's growth of knowledge intensive employment in 2023 was also lower than the national growth of 3.0 per cent. Total employment growth in Auckland was 2.5 per cent, also down slightly from 2022.

Knowledge intensive employment made up 36 per cent of total employment, compared to 32.9 nationally. 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.

Progress towards outcome: no change (-)

### Growth (%) in knowledge intensive employment and KI employment as share of total employment



**Source:** Infometrics, Auckland regional economic profile.

#### 4. Level of unemployment

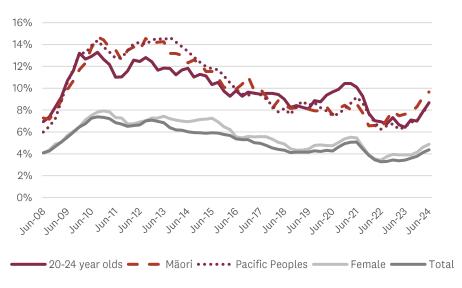
The average annual unemployment rate in Auckland is currently trending upwards reflecting a slowing economy and increased competition in the labour market. The annual average unemployment rate in Auckland was 4.4 per cent in the year to June 2024 (compared to 4.2% nationally), up from 3.4 per cent in the previous 12 months.

Māori, Pacific and young people are being particularly hard hit by the impact of rising unemployment. For example, in the year to June 2024, the average annual unemployment rate for 20–24-year-olds was 8.7 per cent, up from 6.4 per cent in the previous year. Likewise, Māori has seen a large increase and currently has the highest unemployment rate (9.7%) of any sub-group.

The <u>Auckland regional household labour force survey: quarterly overviews</u> examine changes in unemployment in more detail.

Progress towards outcome: no change ( - )

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



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

#### 5. Educational achievement of young people

In 2023, the percentage of those aged 20-24 with a level 4 qualification<sup>10</sup> or above was 35.4 per cent, a 0.8 percentage point increase on the previous year. However, achievement levels of the past two years are notably down from 2021.<sup>11</sup>

The fall in educational achievement is principally explained by the disruption caused by COVID-19, which has had ongoing impacts on learners' progress, especially for students in 'poorer communities.<sup>12</sup>

Progress towards outcome: negative change (▼)

#### Percentage of 20-24-year-olds with Level 4 qualification or above



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

<sup>10</sup> Level 4 qualification corresponds to more advanced post-secondary education, i.e. certificate level on the NZ Qualifications and Credentials Framework (NZOCF).

#### 6. Children in material hardship

In 2023, 12.8 per cent of Auckland children were living in households experiencing material hardship, up from 11.7 per cent in 2021. That is approximately 51,000 children living in households that have to go without six (or more) of 17 items identified as essential for wellbeing. That means, for example, going without fresh fruit and vegetables, doctor's and dentist visits, being unable to pay utility bills, and not replacing/repairing appliances.

While data by ethnicity is not readily available at a regional level, national level data shows that Māori and Pacific children are heavily overrepresented among children in material hardship and more than twice as likely to experience material hardship than European and Asian children.

#### Progress towards outcome: no change ( - )

#### Percentage of children in material hardship



**Source:** Statistics New Zealand, child poverty statistics.

 $<sup>^{11}</sup>$  Note that the 2024 level 4+ for 20-24 has error margin +/- 7% (i.e. +/- 2.5 percentage points) so care should be taken in interpretation.

<sup>12</sup> Education Review Office (2023)

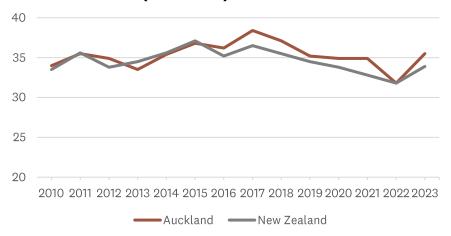
#### 7. Income distribution

In the year ended June 2023, the Gini index<sup>13,14</sup> for Auckland was 35.5, above the Gini index for New Zealand (33.9). It appears that there may be a reversal in the otherwise downward trend since 2017, albeit care must be taken in interpretation due to potential issues with the 2022 data.<sup>15</sup>

A potentially worsening Gini index suggests that the gap between the rich and poor is widening, signalling underlying social and economic issues e.g. increasing poverty and a struggling middle class.

#### Progress towards outcome: positive change ( )

#### **Income distribution (Gini Index)**



Source: Statistics New Zealand.

<sup>13</sup> The Gini index is a common method used to measure inequality in a distribution. A higher Gini index indicates greater inequality in a population (0 equals perfect equality; 100 equals perfect inequality).
<sup>14</sup> The Gini index for equivalised household income before housing costs.

## 8. NEET rates: 15-24-year-olds who are Not in Education, Employment or Training

In the year ended March 2024, the average annual NEET rate was 12.2 per cent, up from 11.0 per cent in the year to March 2023, reflecting worsening labour market conditions. The recent increase is a reversal of the declining NEET rates otherwise seen since the peak (14.1%) in March 2021, when young people were particularly hard hit by the impacts of COVID-19.

Māori and Pacific experience higher NEET rates than other ethnic groups. NEET rates for Māori fell less slowly following the peak in 2021, and a major recent uptick in the year ended March 2024 brings their NEET rate (23.5%) back to the peak rate in March 2021 (23.7%).

The <u>Auckland regional household labour force survey: quarterly overviews</u> examine NEET rates more closely, including by Auckland locations (TSI; local boards).

Progress towards outcome: negative change (▼)
NEET rates (% of 15-24 year olds) (by ethnicity)



Source: Statistics New Zealand, HLFS Custom data (May 2024).

<sup>&</sup>lt;sup>15</sup> Statistics NZ has noted that the Gini estimate for the year ended June 2022 is likely biased due to the disrupted survey collection that year.

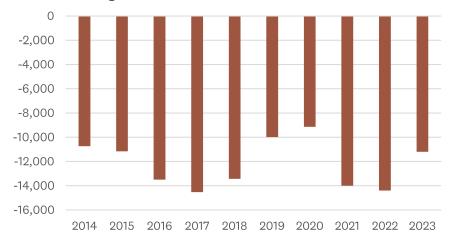
#### 9. Internal migration

Auckland has been losing residents to elsewhere in New Zealand for a number of years. In 2023, the net loss was 11,200, down 22% from 2022. Top destinations for net outflows of migrants from Auckland are Tauranga, Waikato, Whangarei and the Far North.

These internal migration numbers suggest that many people judge that they are better off living in other regions. The rising cost of living in Auckland, particularly housing affordability, is a key factor driving this trend. The growing acceptance of remote work is another contributing factor as it enables Aucklanders to relocate within New Zealand while still staying connected to the work opportunities that Auckland offers.

Progress towards outcome: positive change ( )

#### **Net internal migration**



Source: Statistics New Zealand.

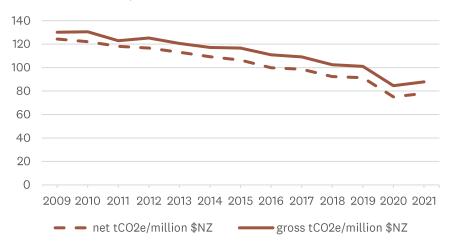
# 10. Auckland's emissions intensity (emissions intensity per unit GDP)

In 2021, net emissions were 78 t CO2e per million \$NZ GDP, and gross emissions were 88 t CO2e per million \$NZ GDP. Both net and gross emissions per million \$NZ increased from 2020 to 2021. Whether it is a reversal of the otherwise long-term downward trend is too early to say.

Carbon emission per unit of GDP, referred to as carbon intensity of the economy, provides an indication of how efficiently an economy uses carbon-based energy and resources to generate economic output. That is, lower carbon intensity generally indicates a more sustainable economy with less environmental impact.

Progress towards outcome: positive change ( )

#### **Emissions intensity**



Source: Auckland Council, Auckland's Greenhouse Gas Inventory to 2021.

<sup>&</sup>lt;sup>16</sup> Auckland Council Chief Economist Unit (2022). Auckland Economic Quarterly. https://www.aucklandcouncil.govt.nz/about-auckland-council/business-in-auckland/docsoccasionalpapers/auckland-economic-quarterly-march-2022.pdf

# Appendices

### **Appendix A**

## **Review of Auckland Plan Measures**

During the current reporting period, a review of the Auckland Plan performance measures was conducted to ensure they remain the most appropriate indicators of Auckland's progress. The review aimed to address issues around the completeness of measures and data availability.

As a result of the review, changes to measures were proposed across four of the six Auckland Plan outcomes – Homes and Places, Transport and Access, Environment and Cultural Heritage, and Opportunity and Prosperity. This has resulted in ten previous measures (or sub-measures) being retired and/or replaced, and 14 new measures (or sub-measures) introduced. In total, the Auckland Plan now has 38 measures. The changes are detailed in the table below.

#### **Homes and Places**

Measure	Outcome	Assessment/Rationale
New dwellings consented and completed	Retired and replaced	Measure does not add additional information – already measure consents by type.
Housing cost as a percentage of household income	Retired and replaced	Data for this measure changes very little year to year and includes people that have paid off their mortgages, which skews the data.
Homelessness	Retired and replaced	Measure relies on census data and is therefore not able to be updated with the frequency required.
Housing supply: New dwellings consented per 1,000 residents	New sub-measure	The measure of housing supply contains two sub-measures. One new sub-measures added.  This sub-measure of housing supply controls for population growth, and together with the measure 'number of dwellings consented', it will provide a better picture of Auckland's housing supply.
New dwellings consented with access to rapid transit network (RTN) within 1,000 metres	New measure	Provides additional information to show progress towards being a better-connected region where residents enjoy easy access to public transport.
Housing affordability:		These new sub-measures replace 'housing cost as a percentage of household income' providing a more nuanced picture of housing affordability. There are three new sub-measures as follows:
a. Median housing price to median household income ratio	New sub-measure	Commonly used measure of housing affordability, which allows for national / international comparison.

Measure	Outcome	Assessment/Rationale
b. Rent affordability (rent as percentage of household income)	New sub-measure	Provides a critical element in understanding housing affordability given the increasing number of Aucklanders who are renters. May allow for international comparison.
c. Housing cost overburden rate (Proportion of households spending more than 30 per cent on housing cost)	New sub-measure	This is a commonly used measure of the extent to which households are overburdened by the cost of housing. It is also a measure used by MHUD as part of their housing and urban development monitoring. It can be broken down by renters /owners (and ethnicity), which gives useful additional insight.
Number of people in Auckland on the public housing register	New measure	This measure replaces the homelessness measure.  This is a reasonable replacement for the homelessness measures as a measure of housing stress, albeit acknowledging it does not fully capture homelessness. Data is available quarterly.
Uptake of sustainable building methods (Number of Homestar certified homes, and as a percentage of all completed dwellings)	New measure	This measure shows how we are progressing towards more sustainable building methods.

**Note** that efforts were made to identify a measure to track progress on greening (e.g. canopy coverage; access to green spaces; amount of green space per resident), but at this stage it is has not been possible to identify a measure suitable for annual reporting purposes. We will continue monitoring this area with the goal of introducing a measure in the future.

### **Transport and Access**

Measure	Outcome	Assessment/Rationale
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)	Retired and replaced	This measure is based on modelled data and does not provide any insight into progress.
Delay from congestion a. Per capita annual delay from congestion (minutes)	Retired	This measure is based on modelled data and does not provide any insight into progress.
Use of public transport, walking and cycling: Proportion of trips made by public transport, walking and cycling in the AM peak (%)	Retired	This measure is based on modelled data and does not provide any insight into progress.

Measure	Outcome	Assessment/Rationale
Percentage of Aucklanders within 500m of a stop on the rapid and/or frequent transit network	New measure	Allows for more comprehensive measure of access beyond just access to jobs (previous measure) and about people being able to get to a range of places (e.g. education).
Transport GHG emissions	New measure	As transport is the single largest contributor to Auckland's emissions, measuring transport emissions is critical to our understanding progress towards a more sustainable, low carbon transport system.

### **Environment and Cultural Heritage**

Measure	Outcome	Assessment/Rationale
Aucklanders who value biodiversity	Retired	Continuation of survey-based data collection unlikely due to concerns with the validity of the selection criteria.
Number of initiatives with Māori, which protect and improve the environment, improve water quality and reduce pollution	Retired	No consistent approach available to collect these data.

### **Opportunity and Prosperity**

Measure	Outcome	Assessment/Rationale	
Zoned industrial land Retired		This measure is very granular and does not convey much information in relation to the overall outcome.	
Internet usage based on income	Retired	Data for this measure is not readily available.	
Children in material hardship (% of children living in households in Material hardship)		A key wellbeing measure that looks at children's lived experience. Strong outcome relevance.	
Income distribution (Gini index)	New measure	Widely used measure of income inequality. Relatively easy to understand. Direct link to one of the key challenges of the Auckland Plan - ensuring that prosperity is shared amongst all Aucklanders.	
Percentage of 15-24 year old NEET (by ethnicity)	New measure	Tracking NEET rates helps understand social and economic wellbeing for young people and can highlight inequalities in society. High NEET rates can signal problems in the education and training system.	

Net internal migration	New measure	Useful addition as it indicates Auckland's attractiveness relative to other parts of the country.
Auckland's emissions intensity	New measure	The emissions intensity per unit GDP shows whether Auckland is making progress on transitioning to a low-carbon economy. It also enables comparison with other cities.

### **Appendix B**

available on Knowledge Auckland.

## **Metadata Table**

Data	Note	Relevance	Baseline				
Belonging and Participation							
Measure 1. Aucklanders' sen	se 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 (%).  Source: Auckland Council, Quality of Life Survey  Frequency: Every 2 years.  Availability: The reports are available on Knowledge Auckland.	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 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.	A sense of community is an important component of the liveability of a region, as it enables the establishment of social networks and builds social capital.	In 2018, 50 per cent of Auckland respondents agreed that they felt a sense of community with others in their neighbourhood.				
Measure 2. Aucklanders' ser	nse of safety in their homes and neighbourhood						
Proportion of respondents to the Quality of Life Survey who rate their feelings of personal safety as very safe or fairly safe.	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	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	In 2018, ninety-one per cent of Auckland respondents felt safe in their home after dark. Sixty-two per cent of Auckland respondents felt				
<b>Source</b> : Auckland Council, Quality of Life Survey 2012, 2014, 2016, 2018, 2020 and 2022.	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	talk to their neighbours, use public transport, go out in the evening, use public amenities and generally	safe walking alone in their neighbourhood after dark. Ninety per cent of Auckland respondents				
<b>Frequency</b> : Every 2 years. <b>Availability</b> : The reports are	to complete the survey either online or via a hard copy of the questionnaire. In 2020, respondents under the age of 35 years were only able to complete the survey online, unless they	participate in their communities.	felt safe in their city centre during the day. Forty-six per cent of Auckland respondents felt safe in				

proactively requested a hard copy questionnaire to be sent to

their city centre after dark.

Data	Note	Relevance	Baseline
	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.		
Measure 3. Aucklanders' qu	ality of life		
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.	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 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.	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.	In 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.
Measure 4. Relative depriva	tion across Auckland		
Socio-economic Deprivation Index 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	The deprivation index assigns a value to Census Area Units (CAUs) across New Zealand as a way to indicate relative socioeconomic 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.	The deprivation index allows investigation of spatial patterns of relative socio-economic deprivation, which can be used in planning both council and community projects.	2018 - Not applicable at the regional level, this measure is only meaningful at the local level.

website.

#### Measure 5. Aucklanders' health

#### 5.a) Aucklanders' physical health

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).

Respondents were previously asked to rate their general overall health. In 2020, respondents 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.

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.

In 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.

#### 5. b) Aucklanders' mental health

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 a

**Availability**: The reports are available on Knowledge Auckland.

In 2020, respondents 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.

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.

In 202, 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.

#### Measure 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.

**Source**: Auckland Council – Citizen Engagement and Insights.

Frequency: Annual.

Availability: On request from

Auckland Council.

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.

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.

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

Data	Note	Relevance	Baseline
			<ul> <li>8 percent considered they knew almost nothing</li> <li>4 per cent considered they knew nothing about the Treaty of Waitangi</li> <li>4 per cent said they didn't know their knowledge level.</li> </ul>

### Māori Identity and Wellbeing

### Measure 1. Whānau wellbeing

Respondents who rate their whānau as doing well (7, 8, 9 and 10).	Whānau relationships - "Whānau will flourish when they are cohesive, practise	In 2018, 73.2 per cent of Auckland's Māori rated their whānau as doing
Source: Te Kupenga, Stats NZ.	whānaungatanga, and are able to foster	well (rated 7, 8, 9 and 10).
, ,	positive intergenerational transfers.	
Frequency: 5-yearly.	Whānau cohesion includes: the quality of	
Availability	relationships within households and	
Available from the Stats NZ website.	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,	

Data	Note	Relevance	Baseline
		boards, voluntary efforts" - Te Puawaitanga o ngā whānau.	

#### Measure 2. Māori in employment, education and training

#### 2.a) Proportion of Māori youth in education, employment or training

Derived from youth (aged 15-24) NEET rates (Not in Employment Education or Training) by ethnicity and age.

**Source:** Stats NZ, 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/infoshar e/?url=/infoshare/ - Work income and spending). Detailed Auckland breakdowns from Auckland Council, Research and Evaluation Unit (RIMU) custom dataset. Education and training data is only available for youth (ages 15-24). Employment 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.

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.

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

#### 2.b) Type of employment for Māori

## 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. Detailed Auckland breakdowns from Auckland

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

In 2018, employment by occupation for Māori relative to the total population:

- Labourers 15 per cent (Total population 8.7%)
- Machinery operators and drivers –
   11 per cent (Total population –
   5.2%)
- Sales workers 8.4 per cent (Total population 10%)

Data	Note	Relevance	Baseline
Council, Research and Evaluation Unit custom dataset.			Clerical and administrative workers – 11.2 per cent (Total population 11.9%) Community, personal service workers – 11.9 per cent (Total population - 8.9%) Technicians and Trade workers – 12.7 per cent (Total population – 12.5%) Professionals – 17.6 per cent (Total population – 25.3%) Managers – 12.1 per cent (Total population – 17.5%).
Measure 3. Māori decision m	aking		
3.a) Number of co-governance	co-management arrangements		
Number of co-governance / co- management arrangements.  Source: Auckland Council, Ngā Mātārae.  Frequency: Annual.  Availability: On request from Auckland Council, Ngā Mātārae.	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.	Recognising and providing for te Tiriti o Waitangi outcomes enable Māori to exercise rangatiratanga in decisions that matter to and affect them.	In 2018, there were nine cogovernance arrangements (with one in abeyance), some of which were initiated by Treaty of Waitangi Settlement legislation.
3.b) Māori voter turnout in the	local body elections		
Auckland Local Body Election voter turnout 2022.  General election voter turnout 2023.  Source:  Local election:	New measure in 2022/23  We report on turnout in local body and general elections when new data released.	Recognising and providing for te Tiriti o Waitangi outcomes enable Māori to exercise rangatiratanga in decisions that matter to and affect them.	Local body election: 2019 baseline - 25% General election: baseline 2020 – 72%
2023 and 2020 General election: NZ Electoral Commission – customised data from Stats NZ			

Data	Note	Relevance	Baseline
Frequency: 3-yearly.  Availability: Knowledge Auckland.			
Measure 4. Te reo Māori acro	oss Tāmaki Makaurau		
Self-rated te reo Māori proficiency (able to speak and able to understand). Source: Te Kupenga, Stats NZ. Frequency: 5-yearly. Availability: Stats NZ website.		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.	In 2018, self-rated Te reo Māori proficiency (able to speak and able to understand spoken Te reo Māori) for New Zealand Māori:  • able to speak Te reo Māori very well/well (8.9%)  • able to speak Te reo Māori fairly well (8.9%)  • able to understand spoken Te reo Māori very well/well (9.7%)  • able to understand spoken Te reo Māori fairly well (15.4%).

#### **Homes and Places**

#### **Measure 1. Housing supply**

#### 1.a) New dwellings consented by typology

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

**Source:** Stats NZ, building consent data.

**Frequency:** Annual (financial year, also available monthly).

**Availability:** Stats NZ's Infoshare website. Auckland council processes this data and publishes the Monthly Housing Update, which can be accessed on Knowledge Auckland.

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).

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.

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.

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.

Data	Note	Relevance	Baseline
1.b) New dwellings consented k	by 1,000 residents		
Number of new dwellings consented (per annum); estimated population (annual).  Source: Stats NZ.	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).	This is a useful measure on housing supply that controls for population growth.	In 2018, 7.8 dwellings were consented per 1,000 Auckland residents.
<b>Frequency:</b> Dwelling consents data is annual (financial year, also available monthly); Population estimated (annual).			
<b>Availability:</b> Consents data available from Stats NZ or Auckland council Monthly Housing Update (as above). In-house calculations available upon request from Auckland council.			
Measure 2. Share of new hon	nes within 1,000m of the Rapid Transport Netwo	rk	
Number of dwellings consented within 1,000m of the Rapid Transit Network.  Source: Stats NZ, Auckland Council Monthly Housing Update contains data on the number of new dwellings within 1,000m of the Rapid Transit Network.	The measure is calculated as the number of new dwellings within 1,000m of the Rapid Transit Network as a share of all new consented dwellings (financial year).	This is an important measure to show progress towards being a better-connected city where residents enjoy easy access to public transport.	In 2018, 14.1 per cent of new dwellings consented were within 1,000m of the Rapid Transport Network.
<b>Frequency:</b> Annual (financial year, also available monthly).			
<b>Availability:</b> Auckland council Monthly Housing Update, available on Knowledge Auckland.			
Measure 3. Housing affordat	bility		
3.a) Median house price to med	lian household income ratio		
Median house price; Median household income (annual).	The median house price is derived using average monthly median over the year to June.	Commonly used measure of housing affordability. It allows for national / international comparison.	In 2018, the median house price to median household income ratio was 8.5.

Data	Note	Relevance	Baseline
<b>Source</b> : REINZ for median house price; Stats NZ for median household income.	Median household income (from all sources) for Auckland is for the year ended June.		
Frequency: Median house price, annual (based on monthly data); Income data, annual.			
<b>Availability:</b> In-house calculations available upon request.			
3.b) Rent affordability: rent as	a percentage of household income		
Rent as a percentage of household income.	Rental affordability is calculated as median weekly rent as a percentage of median weekly household income.	More Aucklanders are renters. It is critical that we understand what is	In 2018, rent as a percentage share of household income was 26.7 per
Source: Stats NZ for median household income; Ministry of Business, Innovation and Employment (Tenancy Bond database) for median rent.	Median household income (from all sources) for Auckland is for the year ended June.	happening to rental affordability as a specific element of housing affordability.	cent.
<b>Frequency:</b> Household income data, annual; Rent data, monthly.			
<b>Availability:</b> in-house calculations available upon request.			
3.c) Housing cost overburden:	proportion of households spending more than 30 per	cent of household income on hous	ing cost
The percentage of households spending more than 30 per cent of household disposable income on housing cost.  Source: Stats NZ; customised request (annual).  Frequency: Annual.  Availability: Customised dataset from Stats NZ. For more information contact Auckland Council.	Housing costs includes expenditure on rents and mortgages, property rates, and building-related insurance. 2019 is the earliest available data, hence the baseline is set to 2019.	This is a commonly used measure of the extent to which households are overburdened by the cost of housing. If a household is spending more than 30 per cent of household disposable income on housing-related cost, it is deemed unaffordable.  This measure is also used by the Ministry of Housing and Urban Development (MHUD) as part of their housing and urban development monitoring.  It can be broken down by renters / owners (and ethnicity), which gives useful additional insight.	In 2019, 31 per cent of homeowners spent more than 30 per cent of household income on housing related cost. For renters, the figure was 50 per cent.

Data	Note	Relevance	Baseline
Measure 4. Housing stress:	The number of people on the public housing register	,	
The number of people on the public housing register in Auckland.  Source: Ministry of Housing and Urban Development (MHUD).  Frequency: Quarterly.  Availability: MHUD Housing Dashboard	In our analysis, we have referred to June data.	This is a reasonable replacement for the homelessness measures as a measure of housing stress, albeit acknowledging it does not fully capture homelessness.  Data is available quarterly.	In June 2018, there were 3,609 people on the public housing register in Auckland.
Measure 5. Sustainable build	ding methods uptake: Homestar certified homes, in	cluding as percentage of all compl	eted dwellings
Annual data (calendar year) on number of new dwellings in Auckland that achieve Homestar certification in that year.  Source: New Zealand Green Building Council (NZGBC), custom dataset from NZGBC.  Frequency: Annual.  Availability: Customised dataset from NZGBC. For more information contact Auckland Council.	The share of dwellings that have received Homestar certification is calculated as the percentage share of all dwellings completed in Auckland in the same calendar year.  Homestar certification is one particular certification scheme. It does not capture all activities that would evidence the uptake of sustainable building methods in Auckland. However, it is still useful as a proxy for an important aspect that is otherwise difficult to assess.	The Auckland Plan 2050 acknowledges the importance of accelerating the uptake of sustainable building methods as critical to achieving our climate goals. More sustainably built homes are also healthier homes.	In 2018, 383 dwellings in Auckland achieved Homestar certification.
6. Resident satisfaction with	n built environment at a neighbourhood level		
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	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 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	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.	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.

survey.

Data	Note	Relevance	Baseline	
Transport and Access				
Measure 1. Access to rapid a	nd/or frequent transit stops			
Proportion of Auckland's population within 500m of a rapid or frequent transit service.  Source: Auckland Transport data.  Availability: The data is available as part of the Regional Public Transport Plan		A rapid transit network is a key transport priority for Auckland, supporting jobs, growth and housing through increasing access to opportunities and employment, travel unaffected by congestion, and providing integrated and efficient public transportation.  Making the public transport network faster, more accessible, and more reliable is a key priority of the Regional Land Transport Plan (RLTP) 2024. The expansion of Auckland's Frequent and Rapid Transit Network is key to achieving this.	In 2023, 40 per cent of Auckland's population was within 500m of a rapid or frequent transit service	
Measure 2. Congestion: Perce	entage of arterial network congested			
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: Monthly and quarterly indicator reports are available on the Auckland Transport website	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.	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.	In 2018, there was an annual congestion rate of 23 per cent in the AM peak period.	
Measure 3. Transport emissions				
Gross transport emissions. Source: Auckland's Greenhouse Gas Inventory. Frequency: 2 years.	Carbon dioxide equivalent (CO <sub>2</sub> e) is a standard unit for measuring greenhouse gas (GHG) emissions and is a term used to compare the emissions from various sectors based upon their global warming potential.	Transport is the largest source of emissions for Auckland, largely from onroad transport, and requires a 64 per cent reduction by 2030. This requires	In 2018, 43.4 per cent of regional emissions came from transport sources.	

Data	Note	Relevance	Baseline
Availability: Auckland's Greenhouse Gas Inventory is available through Auckland Council's Knowledge Auckland website	Transport emissions come directly from combusting fuel or indirectly from consuming grid-delivered electricity to transport vehicles, mobile equipment or machinery.  Included in the transport emissions profile are on-road transport, trains, water transport, and aviation. Details of how these emissions have been calculated are provided in Auckland's Greenhouse Gas Inventory report.	rapid and complete transformation of the transport and land use system.  Reducing how much greenhouse gas emissions are released from our transport system is critical to Auckland achieving its target of halving our total emissions by 2030 and reaching net zero emissions by 2050.  The Transport Emissions Reduction Pathway (TERP), adopted by Auckland Council in 2022, sets out a route for achieving this target.	
Measure 4. Use of public tra	nsport, walking and cycling		
4.a) Public transport boarding	s (millions)		
Annual number of public transport boardings (millions) (FY).  Source: Auckland Transport data.  Frequency: Annual and monthly.  Availability: Auckland Transport public transport figures are available on their website	Public transport boardings include buses, trains and ferries.  From 2024 financial year data will be used (previously calendar year) in line with the changed approach by Auckland Transport.	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.	In 2018, there were 92.33 million annual public transport boardings.
4.b) Cycle movements (million	es)		
Annual number of cycle movements past selected count sites.  Source: Auckland Transport data.  Frequency: Annual and monthly.  Availability: Auckland Transport cycling figures are available in their website	The number of cycle movements in Auckland is collected at sites across the region using permanent, automated cyclemonitoring equipment. There are currently 26 sites with counters across the region, which report the number of cyclemovements all day, every day. The data 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.	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	In 2018, the number of cycle movements past selected count sites was 3.65 million.

Data	Note	Relevance	Baseline
		distance trips, reducing congestion, contributing toward our climate change commitments, and providing health benefits.	
Measure 5. Household trans	port expenditure		
Average weekly transport costs. Source: Stats NZ, HES Household Economic Survey and HES (Income). Frequency: 3-yearly survey. Availability: Stats NZ website.	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.	Reducing household transport expenditure can help to improve equity across the region. It can also drive change in mode choice. Transport expenditure contains 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.	As of 2016, the average weekly transport expenditure as a percentage of average total household expenditure was 14 percent.  • purchase of vehicles - \$72.50 perweek  • private transport supplies and services - \$70.50 per week  • passenger transport services - \$71.00 per week
Measure 6. Deaths and injur	ies from transport network		
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.	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.	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.	In the year to December 2018, there were: • 595 serious injuries • 54 fatalities.

Data	Note	Relevance	Baseline
Environment and Cult	ural Heritage		
Measure 1. People's treasuri	ng and stewardship of the natural environment a	and cultural heritage	
1.a) Aucklanders who perform	environ-mental / conservation activities		
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 report is available on Knowledge Auckland	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.	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	In 2020, the baseline figures are Biosecurity behaviour (3.83), conservation at home (2.75) and conservation activities in the community (1.56).
	 collected through Auckland Council's kerbside refuse	   service	
The weight of waste generated by households per capita. Refuse collected by private waste collectors is excluded.  Source: Contractor tonnages reporting, Auckland Council.	Domestic waste from households, which is 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	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	The current baseline is set against the 2017/2018 financial year data, which was 179,989 tonnes per annum.
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.	comparator with other council areas and gives insights into individual behaviours.	opportunities for organics and recyclables, and the impact of service costs and container volume on household behaviour.	

Data	Note	Relevance	Baseline
Measure 2. Sustained manag	ement of priority native habitats		
2.a) Proportion of rural mainla	nd Auckland under sustained management for possu	ıms	
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: Annual.  Availability: Auckland Council, Annual Report.	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.	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, improved ecological integrity and ecosystem resilience to other stressors such as climate change.	In 2019, 17 per cent of rural mainland Auckland was under sustained management for possums.
2.b) Proportion of priority nativ	ve habitats on regional parks under sustained manag	gement for pest plants	
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: Annual.	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.	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.	In 2021, 44 per cent of Biodiversity Focus Areas (BFAs) on regional parks received monitoring and control for pest plants. This was measured for the first time in the 2021 financial year and the result is the baseline for this measure.
<b>Availability:</b> Auckland Council, Annual Report.			

Data	Note	Relevance	Baseline
2.c) Number of native plants p	lanted	,	
The number of native plants planted by Auckland Council, its contractors, or through community activities it funded or facilitated. Source: Auckland Council. Frequency: Annual. Availability: Auckland Council, Annual Report.	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	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.	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.
Measure 3. Active managem	ent of threatened native plants and animals		
3.a) Number of plant and anim	al species regionally vulnerable to extinction under a	active management	
Number of plant and animal species regionally vulnerable to extinction under active management.  Source: Threatened Species Project – Biodiversity Focus area Programme,	"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	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	In 2021, 87 plant and animal species were under active management. This was measured for the first time in 2021, and the result is the baseline for this measure.

Environmental Services, Auckland Council.

Frequency: Annual.

Availability: Annual Report,

Auckland Council.

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

population trend of these species and improve their resilience to other pressures, such as climate change.

Data	Note	Relevance	Baseline
	stable or improving. These will be conducted every 3-6 years.  National threat assessments for all species are conducted by DOC every 3 years.		

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

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: Annual.

Availability: Auckland Council,

Annual Report.

"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 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.

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.

#### Measure 4. Marine and freshwater quality

#### 4.a) Stream water quality

#### 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.

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.

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 per cent

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.

Data	Note	Relevance	Baseline
	Monitoring sites are grouped as 'urban' where upstream urban land cover is >15% and as 'rural' where upstream land cover is >25%.	urban land cover upstream and water quality is marginal at this site.	
	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.  • 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		
4.b) Lake water quality			,
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.	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.  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.  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	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

Data	Note	Relevance	Baseline
4.c) Coastal water quality  Coastal Water Quality Index (WQI).	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  The water quality index compares results across five years of	Water quality in our estuarine and	The current baseline is set against
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.	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 was 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.  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	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.	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.

Data	Note	Relevance	Baseline
4.d) Beach swimming safety			
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.	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 the 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	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.	The 2017/2018 baseline results 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.
Measure 5. Air Quality & Gre	enhouse Gas Emissions		
5.a) Concentration of nitrogen	dioxide (NO <sub>2</sub> )		
Nitrogen dioxide (NO <sub>2</sub> ) average annual concentrations from 2006 to 2022 at Glen Eden, Henderson, Patumahoe, Penrose, Queen Street and Takapuna.	Emissions from vehicles (especially diesel) contribute nitrogen oxides (NOx), mainly nitric oxide (NO). Nitric oxide reacts with oxygen in the atmosphere to form NO <sub>2</sub> , which can cause the brown haze that affects our health.	There is a statistically significant increase in the number of admissions to hospital for respiratory disorders following brown haze events over Auckland. This is because the brown haze is a stagnant pool of polluted air	The current baseline is set against 2016 data: • Glen Eden 5.4 µgm-3 • Henderson 10.2 µgm-3 • Patumahoe 3.4 µgm-3

Data	Note	Relevance	Baseline		
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.		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.	· Penrose 18 μgm-3 · Queen Street 38.1 μgm-3 · Takapuna 17.7 μgm		
5.b) Concentration of fine part	iculate matter (PM <sub>2.5</sub> )				
Fine particulate matter (PM <sub>2.5</sub> ) 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.	PM <sub>2.5</sub> 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.	PM <sub>2.5</sub> 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 <sub>2.5</sub> , 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, neurodevelopment and diabetes.	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		
5.c) Greenhouse gas emissions	5.c) Greenhouse gas emissions (kilotonnes of CO₂e)				
Net and gross Greenhouse gas emissions (kilotonnes of CO₂e) for the Auckland Region.	There are multiple indicators and data sets that can be used to report on greenhouse gas emissions.	Climate change mitigation contributes to all focus areas and directions of the Environment and Cultural Heritage	The current baseline is set against 2016 data - 11,119 ktCO <sub>2</sub> e (gross) 9,921 ktCO <sub>2</sub> e (net).		

Data	Note	Relevance	Baseline
Source: Auckland's Greenhouse Gas Inventory. Frequency: Annual. Availability: Auckland's Greenhouse Gas Inventory is available in the natural environment section of Auckland Council's Research and Evaluation Unit website	Carbon dioxide equivalent (CO <sub>2</sub> e) is a standard unit for measuring greenhouse gas (GHG) emissions and is a term used to compare the emissions from various sectors based upon their global warming potential.  Net emissions take into account CO <sub>2</sub> e 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.	Outcome, as well as Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan. The measure of greenhouse gas emissions enables us to align with national and international best practice and to better measure progress.	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%).
	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 <sub>2</sub> emission sources on land (e.g. fertiliser use, liming and urea application, and harvested wood products).		
Measure 6. Statutory protec	tion of environment and cultural heritage		
6.a) Total area of scheduled Si	gnificant Ecological Areas (hectares)		
Area of Significant Ecological Areas scheduled in the Auckland Unitary Plan.  Source: Schedule 3 and 4 of the Auckland Unitary Plan.	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	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	In 2018: • Terrestrial – 79,121 ha • Marine – 100,691 ha

Data	Note	Relevance	Baseline
Frequency: Annual.  Availability: Auckland Unitary Plan - unitaryplan.aucklandcouncil.govt.nz	means that the number of scheduled areas is likely to change slowly.  A proposed National Policy Statement for Indigenous Biodiversity was gazetted in 2023. This requires reassessment of current SEAs but is likely to not lead to a material change.	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.	
6.b) Protected sites and places	of significance for mana whenua		
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-	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 comanagement / 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.	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.	In 2018, seventy-five sites of Māori significance including wāhi tapu were scheduled in the Auckland Unitary Plan and 0 Māori heritage sites were scheduled in the Auckland Council District Plan - Hauraki Gulf Islands Section.

Data	Note	Relevance	Baseline
projects-policies-reports-bylaws/our- plans-strategies/hgi-district-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 per cent of actual sites. This means that sites currently scheduled in Schedule 12 represents a small percentage of Māori ancestral sites.		
Opportunity and Prosperity			

## **Measure 1. Labour productivity**

Output per worker: real Gross Domestic Product (GDP) in constant 2023 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.

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 Stats NZ 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).

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.

In 2018, GDP per filled job in Auckland was \$141,128 (NZD) in 2023 dollars.

## Measure 2. Aucklanders' average wages

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

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

In 2018, the average weekly earnings for all Aucklanders was \$1,298. By ethnicity, the figures were: European \$1,442, Māori \$1,202, Pacific Peoples \$1,102, Asian \$1,165 (all figures in \$2024).

Data	Note	Relevance	Baseline
Source: Stats NZ, 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: Stats NZ	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).	that help fund government services and transfers to other households.	
Measure 3. Employment in a	dvanced industries		
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.	Employment 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 NZ'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.	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.	In 2018, growth in knowledge intensive industries and the total employment market was 2.7 per cent and 3.6 per cent respectively.

## **Measure 4. Level of unemployment**

Unemployment rate by ethnicity, age group and gender	Employment is the number of individuals in paid employment (including self-employed and working proprietors and part-
<b>Source:</b> Stats NZ, Household Labour Force Survey (HLFS).	timers). Unemployed excludes people whose only job search method was to look at job advertisements in newspapers or
Frequency: Quarterly.	online. All data is subject to sampling errors, which can be prohibitive for small sub-samples. Quarterly data is seasonal, s
Availability: High-level data	annual avorages are recommended

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

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.

Frequency: Annual (year ending

**Availability:** Public access funded by Council subscription to <u>Infometrics</u>

March).

website portal.

Detailed Auckland breakdowns from

annual averages are recommended.

Data	Note	Relevance	Baseline
the Research and Evaluation Unit (RIMU) at Auckland Council (custom dataset).		lacking the skills to improve their economic situation.	<ul> <li>4.9 per cent of females were unemployed.</li> <li>4.3 per cent was the total level of unemployment.</li> </ul>
Measure 5. Educational achi	evement of young people		
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.	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.	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 (e.g. employment, income) and higher life satisfaction than those with low qualifications. 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.	In 2018, 38.7 per cent of Aucklanders aged between 20 and 24 had a NZQF qualification at Level 4 or above.
Measure 6. Children in mate	rial hardship		
Percentage of children living in households in Material hardship for the financial year.  Source: Stats NZ.  Frequency: Annual.  Availability: Stats NZ, Child Poverty Statistics (Table 3.02).	A key wellbeing measure that looks at children's lived experience. It is defined as those children in households that have to go without six (or more) of 17 items identified as important for wellbeing, such as putting off doctor's or dentist's visits, not paying utility bills, putting up with feeling cold and not replacing/ repairing appliances.	This measure is highly relevant to the outcome. Children in poverty have much less opportunities than their peers who are not disadvantaged. Growing up in material poverty has a significant and negative impact on a child's life trajectory.	In 2019, 13.3 per cent of Auckland children were living in households experiencing material hardship.

Data	Note	Relevance	Baseline
Measure 7. Income distribut	ion		
Income distribution Auckland / New Zealand. Source: Stats NZ. Frequency: Annual. Availability: custom dataset from Stats NZ.	The Gini index is a common method used to measure inequality in income distribution. A higher Gini index indicates greater inequality in a population (0 equals perfect equality; 100 equals perfect inequality).  The Gini index is calculated using equivalised household income before housing costs.  Stats NZ has noted that the Gini estimate for the year ended June 2022 is likely biased due to the disrupted survey collection that year.	Direct link to one of the key challenges of the Auckland Plan i.e. ensuring that prosperity is shared amongst all Aucklanders.	In 2018, the Gini index for Auckland was 37.1.
Measure 8. NEET rates			
Percentage of 15–24-year-olds who are Not in Education, Employment or Training.  Source: Stats NZ, Household Labour Force Survey.  Frequency: Annual (March), also available quarterly.  Availability: Stats NZ, custom dataset.		Tracking NEET rates helps understand social wellbeing and inclusion for young people and can highlight inequalities in society. Young people who are NEET are at greater risk of long-term poorer outcomes (e.g. long-term unemployment, lower lifetime earnings, reduced career prospects). High NEET rates can signal problems in the education and training system.	In 2018 (March), 11.6 per cent of Auckland youth between 15 and 24 years were NEET. By ethnicity, the figures were: European 9.6 per cent, Māori 18.2 per cent, Pacific Peoples 18.6 per cent, Asian 8.5 per cent.
9. Internal migration			
Auckland net internal migration. Source: Stats NZ. Frequency: Annual. Availability Stats NZ, Subnational population component changes and median age.		This measure indicates Auckland's attractiveness relative to other parts of New Zealand. If Auckland is considered a less attractive place to live, due to for example higher cost of living than elsewhere in New Zealand, it is plausible that more people will leave the city for other parts of New Zealand (and elsewhere), and likewise, fewer people from other parts of New Zealand will want to move to Auckland.	In 2018, the net internal migration figure for Auckland was -13,428.

Data	Note	Relevance	Baseline
10. Auckland's emissions int	tensity (emissions intensity per unit GDP)		
Net and gross emissions (t CO <sub>2</sub> e per million \$NZ GDP).  Source: Auckland Council Emissions Inventory.  Frequency: data is annual but released with a 3-year lag.  Availability: Knowledge Auckland.	The Auckland's GHG inventory is prepared using the relevant international guidance and best practices, including the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC), which is a globally recognised standard consistent with IPCC guidelines.  The inventory and technical report (available on Knowledge Auckland, forthcoming) describes the methods and data input used to calculate the emissions.  Changes in emissions from the Land Use, Land Use Change and Forestry (LULUCF) sector from 2016 were not estimated due to lack of data. This means that gross emissions are a better measure for trends as they do not include the LULUCF sector.	The emissions intensity per unit of GDP shows whether Auckland is making progress on transitioning to a low-carbon economy. It integrates environmental and economic data, indicating whether economic growth is occurring at the expense of the climate / environment. It provides a measure of how efficient an economy is at producing goods and services relative to its carbon emissions. It enables comparison with other cities and thereby provides a picture of what cities are growing and developing more sustainably and can highlight best practice.	In 2018, net emissions were 92 t CO₂e per million \$NZ GDP while gross emissions were 102 t CO₂e per million \$NZ GDP.

