

Waikato progress indicators – *Tupuranga Waikato*

Summary update June 2020



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1 Purpose

This document summarises latest results from the Waikato Progress Indicators (WPI) – *Tupuranga Waikato* monitoring programme, updated in May 2020. The WPI is an online dashboard of 32 environmental, social, cultural and economic indicators, see www.waikatoregion.govt.nz/wpi/.

The WPI is a long-term initiative that does not yet capture any impacts associated with the COVID-19 pandemic. This will be available in the 2021 annual update.

The WPI dashboard provides an overview of the economic, social, cultural and environmental wellbeing of the Waikato region and helps gauge progress towards Waikato Regional Council's (WRC's) [Strategic Direction](#). Selected measures relevant to Council's activities are included in WRC's [Annual Report](#).

The data and website information are refreshed annually.

This update compares the latest available data for each of the WPI indicators with 2006-07 baseline results, enabling regional progress to be assessed over more than a decade. Around half of the WPI indicators also have historical data going back to 2001 or earlier, giving a longer-term view. The aim is to inform the Waikato public, planners and decision-makers of genuine progress against key indicators of wellbeing. Note that the Local Government (Community Well-being) Amendment Act 2019 restored the purpose of local government to be "*to promote the social, economic, environmental, and cultural well-being of communities in the present and for the future*".¹

The structure of this update report is:

1. Purpose
2. Latest results
3. Economic trends
4. Social and cultural trends
5. Environmental trends
6. Impacts of COVID-19
7. Overall progress (experimental indexes).

For background on the development and design of the WPI programme, including the selection of indicators, refer to Killerby and Huser (2014).²

¹ Refer www.legislation.govt.nz/act/public/2002/0084/latest/versions.aspx/

² Refer www.waikatoregion.govt.nz/services/publications/technical-reports/tr/tr201444/

2 Latest results

Results from the WPI monitoring programme are presented through:

- Indicator Report Cards
- Scorecard
- Circle of wellbeing
- Comparisons with other regions and New Zealand
- Quality of Life [infographics](#) and [Story Map](#)

The 32 indicators are described in Appendix 1 and the results for each indicator (primary dataset 2001 – 2018/19) are tabulated in Appendix 2.

2.1 Indicator Report Cards

Results for each indicator are summarised in online Report Cards, along with supporting information. These are available online at: www.waikatoregion.govt.nz/wpi/. Each of the 32 report cards includes a summary of the current state and recent changes and trends in relation to that indicator (results) and information about what the particular indicator means, why it is important and how the results were obtained (for example, by listing the data source).

2.2 Waikato Region Scorecard

The Scorecard (Figure 1) gives an overview of the Waikato region's progress towards wellbeing since approximately 2006-07.

Positive measured trends over the period approximately 2006-07 to 2018-19 are, in declining order:

- + Improved air quality – decrease in annual exceedances per year of the regional quality guideline for particulate matter in air, from 20 in 2007 to just 5 in 2019.
- + Increase in building activity – increase in real value of new building consents issued per year from \$1.4 billion in 2007 (expressed in 2019 dollars) to \$2.1 billion in 2019.
- + Increased road safety – long-run decrease in the social cost of road injury crashes from approximately \$1,900 per capita in 2007 to a low of \$923 in 2013, before rising to approximately \$1,300 per capita in 2017 (all expressed in 2018 dollars).³
- + Higher average incomes – increase in real median weekly household income from \$1,400 in 2007 (expressed in 2019 dollars) up to \$1,728 in 2019.
- + Better educational attainment – increase in the percentage of school leavers with NCEA level 2 or above from 64% in 2009 to 78% in 2018.
- + Less crime – close to record low levels of recorded victimisations, with around 23,000 in the Waikato Police District in the year to June 2019 (approximately 600 per 10,000 population).
- + Growth in regional GDP – increase in real regional GDP per capita from approximately \$47,000 in 2007 (expressed in 2019 dollars) to over \$54,000 in 2019.
- + Improved perceptions of safety – increase in the percentage of people who report feeling safe walking alone in their neighbourhood after dark, from 60% in 2006 to 64% in 2018.

³ Despite a significant improvement in road safety over the last decade, the Waikato region still has a higher cost of road crashes per person than the national average (see Table 1). This is influenced by the extent of open roads in the Waikato region.

- + More recycling – increase in the percentage of people who said their household recycles ‘all/most of’ their waste, from approximately 66% in 2008 to 70% in 2012.⁴
- + Longer life expectancy – currently approximately 79 years for males and 83 years for females. Gains in life expectancy since the mid-1980s can be attributed to better living standards and improved health care.⁵

Negative trends over this period include, in declining order:

- Poorer perceptions of community engagement – decrease in the percentage of Waikato survey respondents who agreed that the public has an influence over the decisions their local Council makes (down from 62% in 2006 to 36% in 2018).
- Less physical activity – decrease in the percentage of Waikato survey respondents who report having been physically active on five or more of the past seven days (down from 61% in 2006 to 40% in 2018).
- Higher water use – increase in water allocation as a percentage of primary allocable flow at the Waikato River mouth during the summer months from 67% in 2007 to 85% in 2019.⁶
- More residential expansion onto versatile land – increase in residential use of versatile land in the Waikato region, from 13,727 hectares (ha) in 2008 to 17,287 ha in 2017. The greatest amount of subdivision has been occurring on land classed as having higher productive capabilities.
- Lower levels of cultural respect – decrease in the percentage of Waikato survey respondents who agree that New Zealand becoming home for an increasing number of people with different lifestyles and cultures from different countries makes their city/area a better place to live, from 51% in 2006 to 41% in 2018.
- Worse perceived health – decrease in the percentage of Waikato survey respondents who rate their overall health positively, from 90% in 2006 to 79% in 2018.
- Lower levels of community pride – decrease in the percentage of Waikato survey respondents who agree they feel a sense of pride in the way their local area looks and feels, from 70% in 2006 to 62% in 2018.
- Less use of public transport – decrease in public transport boardings per person from 9.1 during 2007/08 to 8.3 in 2018/19.
- Lower levels of life satisfaction – decrease in the percentage of people who rated their overall quality of life positively, from 90% in 2006 to 87% in 2018.

The remaining WPI indicators do not show a significant change between 2006-07 and 2018-19.

⁴ There was no recycling question in the 2014, 2016 or 2018 New Zealand General Social Survey (GSS). Frequency of the recycling question under the GSS supplement framework will likely be at least 10 yearly intervals. National on the amount of recycled waste are limited and outdated (1993/94).

⁵ Latest available life tables for 2017-19 released in February 2020 show national average male life expectancy at birth is 80.0 years for males and 83.5 years for females. The Waikato region age profile has historically been slightly younger than the national average. Latest regional life expectancy data for 2017-19 are expected to be available later in 2020.

⁶ While increased allocation of water up to 100% of the allocable flow is not necessarily negative, the observed trend of increasing water use puts an added pressure on our water resources. The more rapid increase of water use compared with the economy (GDP growth) in recent years indicates that water is being used less efficiently.

Scorecard 2020

Waikato progress indicators - tupuranga Waikato



The Waikato Progress Indicators (WPI) Monitoring Programme enables us to put measures around societal and environmental progress in the Waikato region as well as growth in the regional economy. This scorecard has been developed to help measure the Waikato region's overall progress. Latest data is compared with baseline results for each indicator (2006 - 2007). Results are shown as improving trends, worsening trends or no significant change.



SOCIETY



May 2020

Figure 1 WPI trends – Scorecard for approximately 2006-07 to 2018-19 (refer Appendix 2 for data).

Source: WPI Monitoring Programme database (Waikato Regional Council)

2.3 Circle of Wellbeing

The WPI circle of wellbeing captures trend information about many indicators in one diagram. The central circle represents the WPI score for each indicator in the Waikato region in approximately 2006-07 and the spokes show WPI score progress to 2018-19. Where a spoke extends outside the white circle it means regional wellbeing has improved over the past decade. Where a spoke falls within the circle, regional wellbeing has declined. The length of the spokes reflects the size of change.

As per the overall WPI Scorecard (Figure 1), the most notable positive trends are (in declining order) air quality, building activity, road safety, incomes, educational attainment, crime, regional GDP growth, perceptions of safety, recycling and life expectancy. The largest adverse trends over this period are poorer perceptions of community engagement, lower levels of physical activity, higher water use, more residential expansion onto versatile land, lower perceptions of cultural respect, worse perceived health, lower levels of community pride, less use of public transport and lower levels of overall life satisfaction.

It is only from 2006-07 that there is a robust enough regional data set to cover all the WPI indicators. Over time, as the WPI monitoring programme extends into the future, the diagram below will give an increasingly accurate signal of long-term regional progress.

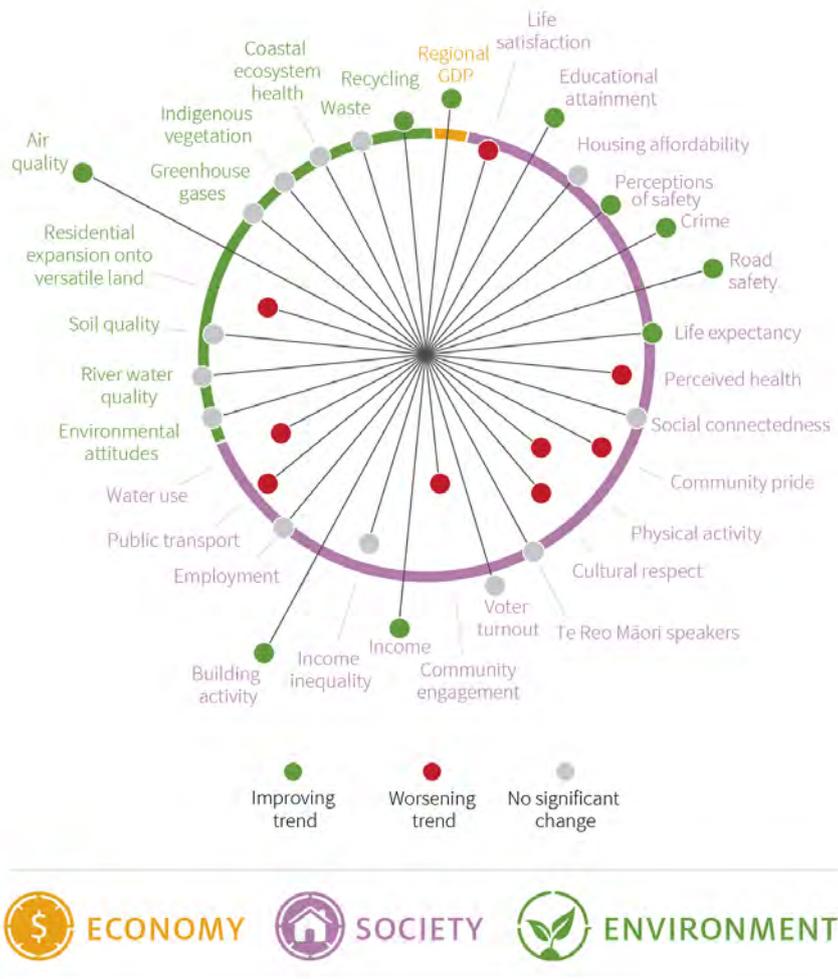


Figure 2 WPI indicator trends 2006-07 to 2018-19, Waikato region

Source: WPI Monitoring Programme database (Waikato Regional Council)

2.4 Comparison of Waikato with other regions and New Zealand

Table 1 and Figure 3 below show the latest indicator comparisons between the Waikato region, selected other regions and the New Zealand average where comparable data is available. This shows that the Waikato region is behind the national average on a range of economic, social and environmental wellbeing indicators.

Indicator	Waikato	Auckland	Wellington	Bay of Plenty	New Zealand
Regional GDP	\$54,128	\$69,974	\$74,251	\$53,700	\$62,165
Life satisfaction	87%	83%	85%	n/a	84%
Educational attainment	77.7%	83.7%	85.9%	75.6%	79.4%
Housing affordability	19.4%	23.8%	20.1%	19.4%	21.0%
Perceptions of safety	64%	62%	75%	n/a	65%
Crime	594	TBC	TBC	TBC	532
Road safety	\$1,265	\$682	\$560	\$1,207	\$1,008
Life expectancy	81.0	82.3	81.6	81.1	81.4
Perceived health	79%	78%	81%	n/a	79%
Social connectedness	62%	50%	57%	n/a	52%
Community pride	62%	61%	71%	n/a	60%
Physical activity	40%	37%	42%	n/a	39%
Cultural respect	41%	54%	63%	n/a	57%
Te Reo Māori speakers	5.9%	2.4%	3.5%	8.6%	4.0%
Voter turnout	40.6%	35.0%	43.6%	42.8%	42.9%
Community engagement	36%	31%	43%	n/a	34%
Income	\$1,728	\$1,967	\$1,990	\$1,657	\$1,764
Income inequality	0.419	0.475	0.432	0.399	0.435
Building activity (\$m)	2,128	n/a	n/a	n/a	n/a
Employment	67.8%	67.8%	71.6%	65.5%	67.4%
Public transport	8.3	57.8	74.4	8.5	33.1
Water use	85%	n/a	n/a	n/a	n/a
Environmental attitudes	87%	n/a	n/a	n/a	n/a
River water quality	29%	n/a	n/a	n/a	n/a
Soil quality	82%	n/a	n/a	n/a	n/a
Residential expansion onto versatile land	17,287	n/a	n/a	n/a	n/a
Air quality	5	n/a	n/a	n/a	n/a
Greenhouse gases	13,797,097	n/a	n/a	n/a	n/a
Indigenous vegetation	27.2%	n/a	n/a	n/a	n/a
Coastal ecosystem health	0.39	n/a	n/a	n/a	n/a
Waste	220,741	n/a	n/a	143,523	n/a
Recycling	70.3%	86.1%	79.2%	72.6%	80.1%

Table 1 Comparison of WPI with selected other regions and New Zealand

Source: WPI Monitoring Programme database (Waikato Regional Council)

Note: Several indicators do not have comparable regional and/or national results (n/a) because either: (1) the WPI data are from a Waikato regional-specific survey (e.g. environmental attitudes) or (2) comparable regional data are not collected or comparison is not meaningful (e.g. soil quality, river water quality) or (3) scale-related data rather than dimensionless data are being used for the WPI indicator (e.g. building activity, residential expansion onto versatile land) or (4) in the case of greenhouse gases, historical estimates are based on overall national greenhouse gas emission trends.

Comparisons of the Waikato region with New Zealand average for specific key indicators are shown in Figure 3 using latest available data. In this diagram, the central circle represents national average wellbeing. Where a spoke extends outside the white circle it means regional wellbeing is better than the national average, and where it falls within the white circle, wellbeing is worse than the national average.

The diagram shows that the Waikato region:

- has a relatively high percentage of Te Reo Māori speakers, high level of social connectedness (sense of community experienced), relatively good housing affordability, above-average levels of community engagement (perception of public's influence on Council decision making), life satisfaction (overall quality of life) and community pride;
- but is behind the national average on a range of social, economic and environmental wellbeing indicators, including GDP, crime, cultural respect, road safety and recycling.

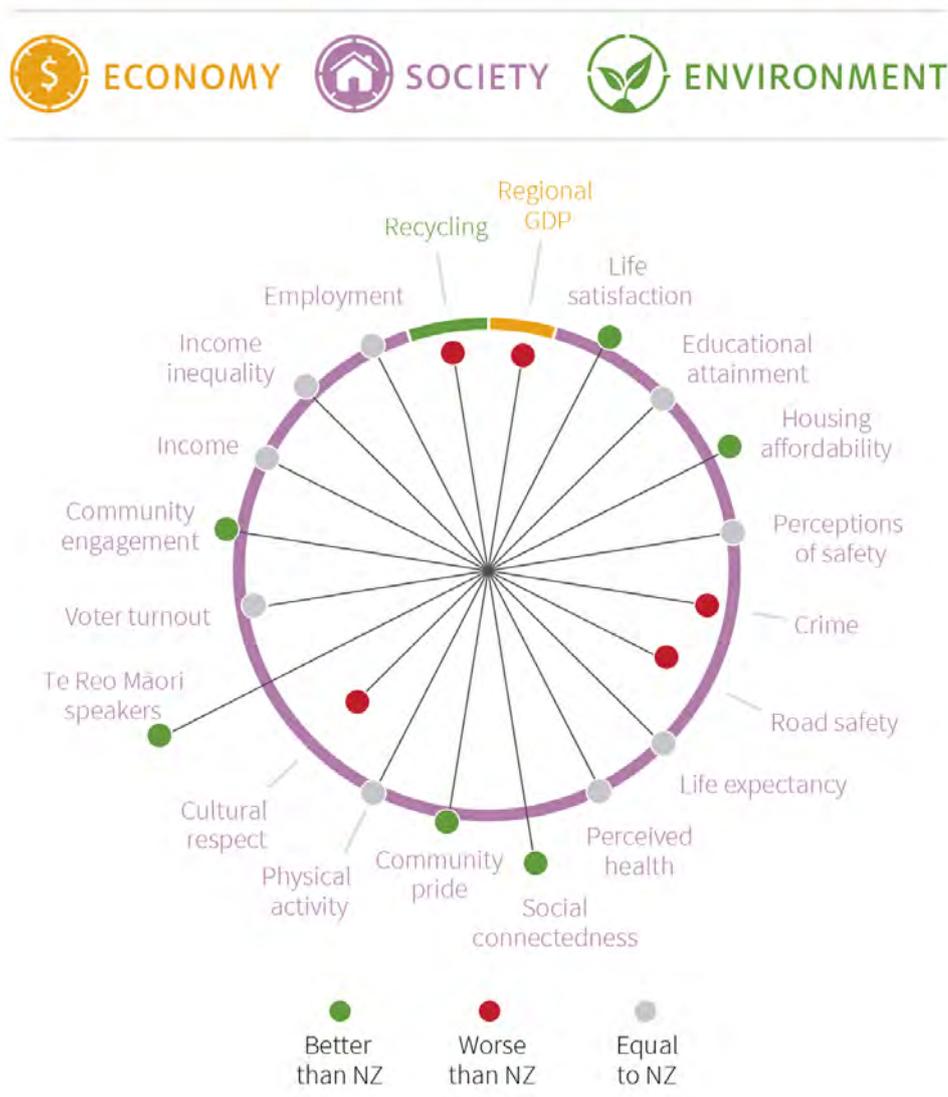


Figure 3 Comparison Waikato region with New Zealand (selected indicators only)

Source: WPI Monitoring Programme database (Waikato Regional Council)

Note: Excludes indicators that do not have comparable regional or national results. Information based on latest measured data (i.e. no imputed or estimated missing values).

3 Economic trends

The WPI is a long-term initiative that does not yet capture data associated with the COVID-19 pandemic. This will be available in the 2021 annual update.

WPI results between 2007 and 2019 show an expansion in economic activity including:

- + Building activity, a lead indicator of economic activity, increased rapidly in recent years (Figure 4).
- + Real median weekly household income also increased rapidly (Figure 5).
- + Regional GDP per person expanded 15 per cent in real terms between 2007 and 2019 (Appendix 2).

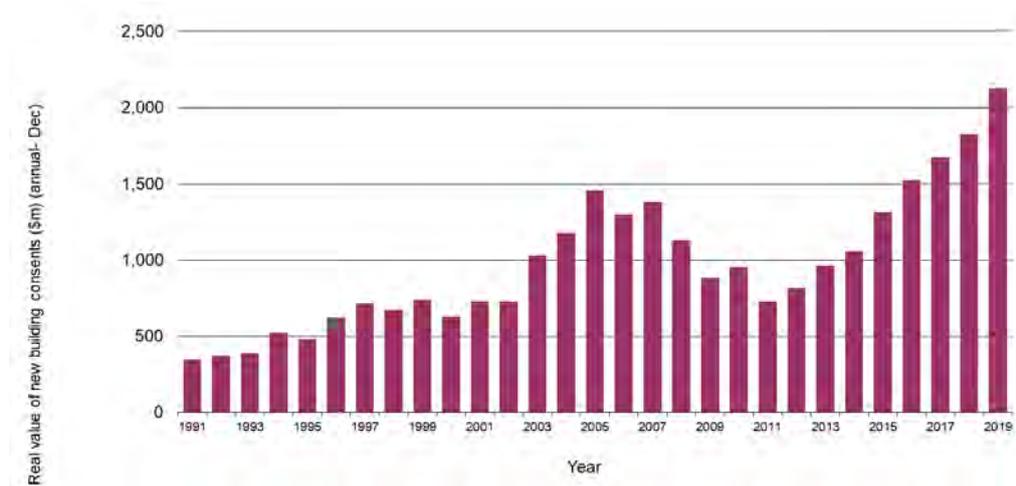


Figure 4 Real value of building consents authorised (\$m) (annual – Jun)

Source: WPI Monitoring Programme database (Waikato Regional Council)

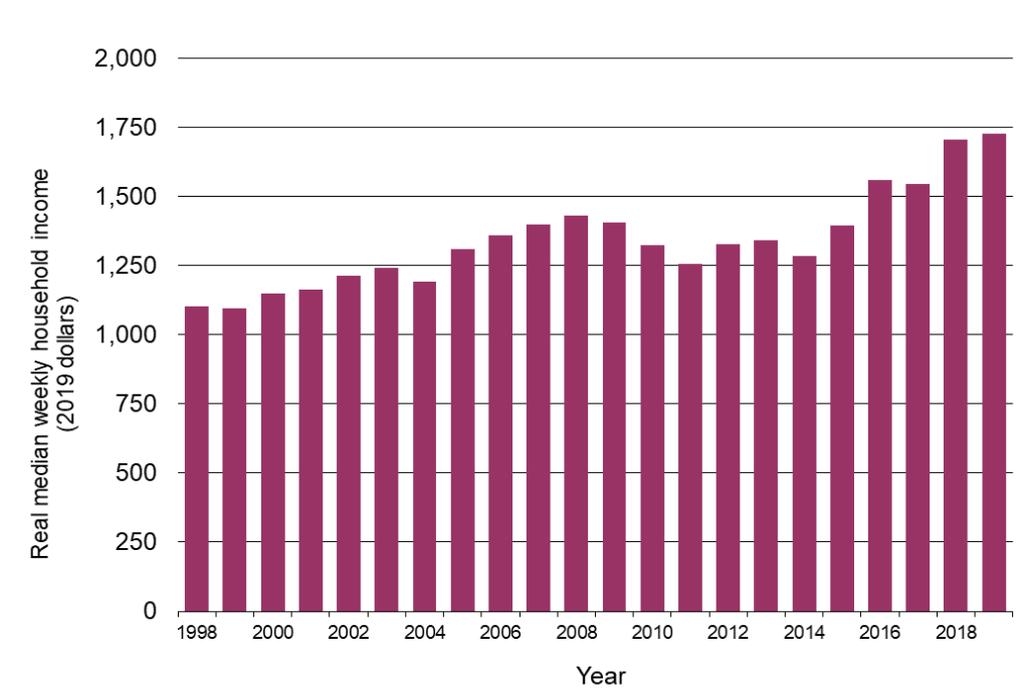


Figure 5 Real median weekly household income (June 2019 dollars)

Source: WPI Monitoring Programme database (Waikato Regional Council)

4 Social and cultural trends

A notable difference compared to last year's WPI update is that the percentage of Te Reo Māori speakers in the region is no longer on a downward trend (Figure 6). Te Reo Māori, the Māori language, is central to Māori culture and identity, and forms part of the cultural identity and heritage of New Zealand. According to 2018 Census results, when asked what languages they spoke, 5.9% of residents in the Waikato region said they speak Te Reo Māori.⁷ This compares to a record low level of 5.3% in the 2013 Census. There has also been a rebound at the national level, increasing from 3.5% in 2013 to 4.0% in 2018, confirming anecdotal reports of Te Reo's revival.⁸

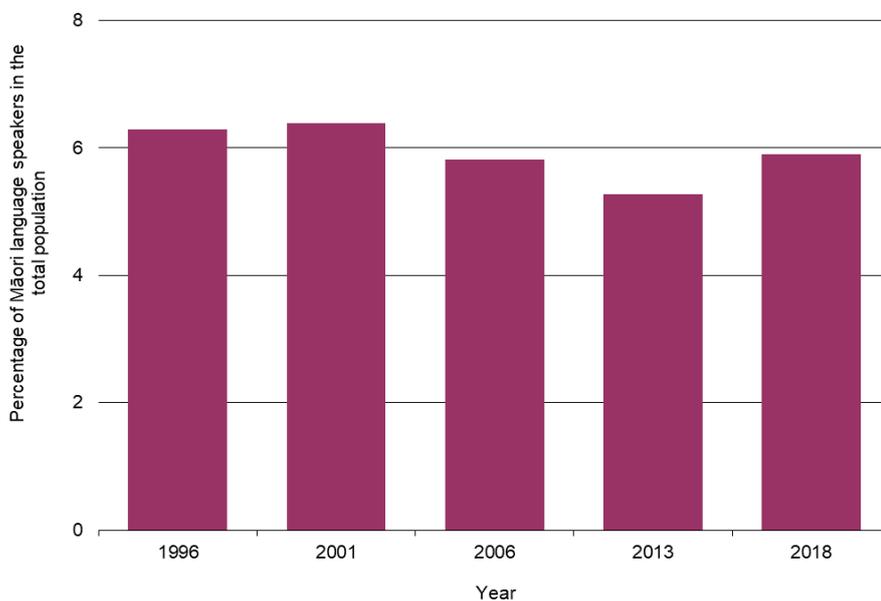


Figure 6 Percent of Māori language speakers in the total population

Source: WPI Monitoring Programme database (Waikato Regional Council)

Overall, the latest WPI results show a mix of positive and negative social and cultural trends over the past decade. Positives include:

- + Decrease in the social cost of road injury crashes.
- + Increase in the percentage of school leavers with NCEA level 2 or above.
- + Reduction in annual reported rate of criminal victimisations.
- + Increase in the percentage of people who report feeling safe walking alone in their neighbourhood after dark.
- + Longer life expectancy.

Negative social and cultural trends include decreases in the percentage of people who:

- Agree the public has an influence over the decisions their local Council makes.
- Are physically active on a regular basis.
- Agree that New Zealand becoming home for an increasing number of people with different lifestyles and cultures from different countries makes their city/area a better place to live.
- Rate their overall health positively.
- Feel a sense of pride in the way their local area looks and feels.
- Use public transport.
- Rate their overall quality of life positively.

⁷ Refer Census 2018 Place Summary for the Waikato Region: www.stats.govt.nz/tools/2018-census-place-summaries/waikato-region.

⁸ For example, The Guardian, July 2018: www.theguardian.com/world/2018/jul/28/google-disney-maori-new-zealand.

5 Environmental trends

Latest WPI results show a mix of positive and negative environmental trends over the past decade. Positives include:

- + Decrease in the number of annual exceedances per year of the regional air quality guideline for particulate matter.
- + Increase in recycling from 66% of households regionally in 2008 to 70% in 2012 (most recent data available).

Negatives include:

- Increase in water use (Figure 7).
- Increase in residential expansion onto versatile land (Figure 8).

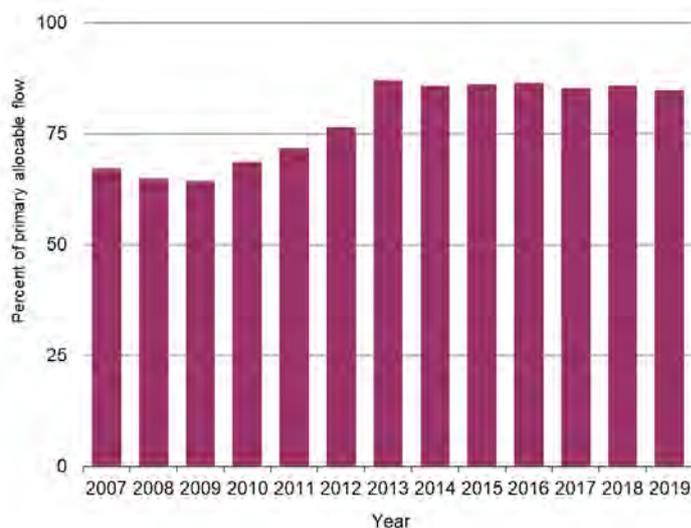


Figure 7 Water allocation as a percent of primary allocable flow

Source: WPI Monitoring Programme database (Waikato Regional Council)

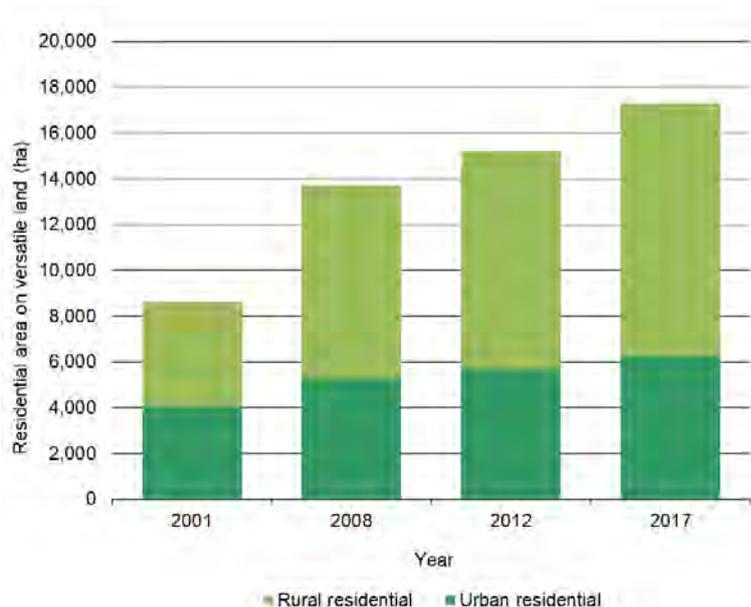


Figure 8 Residential expansion onto versatile land (ha)

Source: WPI Monitoring Programme database (Waikato Regional Council)

6 Impacts of COVID-19

The WPI is a long-term comprehensive initiative that provides an overall picture across all the four wellbeings. It is not designed to analyse and report on specific events such as COVID-19. However, COVID-19 is expected to be reflected in some of the WPI indicators over coming years. The 2020 WPI Update includes all the available data up to the end of 2019 and does not yet capture data associated with the pandemic.

Timeliness of data availability is a significant issue for responsive and evidence-based decision-making, especially time lags associated with environmental data (see Appendix 2). The COVID-19 crisis has triggered the analysis and publishing of real-time data portals (mainly economic data):

- [Statistics NZ](#) – Latest available data for key economic, health and social indicators.
- [Treasury](#) – Weekly economic dashboard.
- [Ministry of Business and Employment](#) – Data for industry sectors and regions.
- [Te Waka Economic Radar](#) – Updates and information for businesses.
- [Hamilton City Council](#) – Economic dashboard.
- [Impacts on transport](#) – information related to transport.

In New Zealand's, as in other countries, COVID-19 is having severe economic impacts, including a significant drop in employment and income for many people, and for regional and national GDP overall, with particularly strong impacts in some industries such as tourism and hospitality. There could be long-term social and economic impacts, including less building activity over coming years.

The COVID-19 health Impacts have been most severe amongst elderly people and people with underlying medical conditions. It will impact on future life expectancy forecasts and potentially perceived health for some people. The virus has fundamentally changed society, for example public transport use is down due to social isolation and distancing. More difficult to predict is the pandemic's impact on measures such as social connectedness, community pride and cultural respect, particularly as communication technologies are being used more than ever.

A small number of WPI indicators are expected to improve due to the pandemic. Residential expansion onto versatile land may slow in response to lower levels of private investment, less greenhouse gases are being omitted and road safety may have improved due to lower traffic volumes.

7 Overall progress (experimental indexes)

Work has been undertaken to investigate methods for deriving a composite index using the WPI dataset (Huser *et al.* 2016).⁹ This has involved combining all 32 WPI indicators into a single composite index. Approaches explored to derive an experimental Waikato Wellbeing Index have included Principal Components Analysis (PCA) and the Canadian Index of Wellbeing (CIW) reference-year method (Michalos *et al.* 2011).

Both approaches, PCA and CIW (Figures 9 and 10) illustrate the gap over time between growth in GDP vs for all 32 WPI indicators combined (Wellbeing Index). Both graphs reveal a strikingly similar pattern over a common time period. The gap between GDP and the Wellbeing Index grows from 2003 to 2009, then narrows and eventually grows again as the economy rebounds after the global financial crisis (GFC). Further work may be undertaken to develop and test these and other composite indices of regional wellbeing.

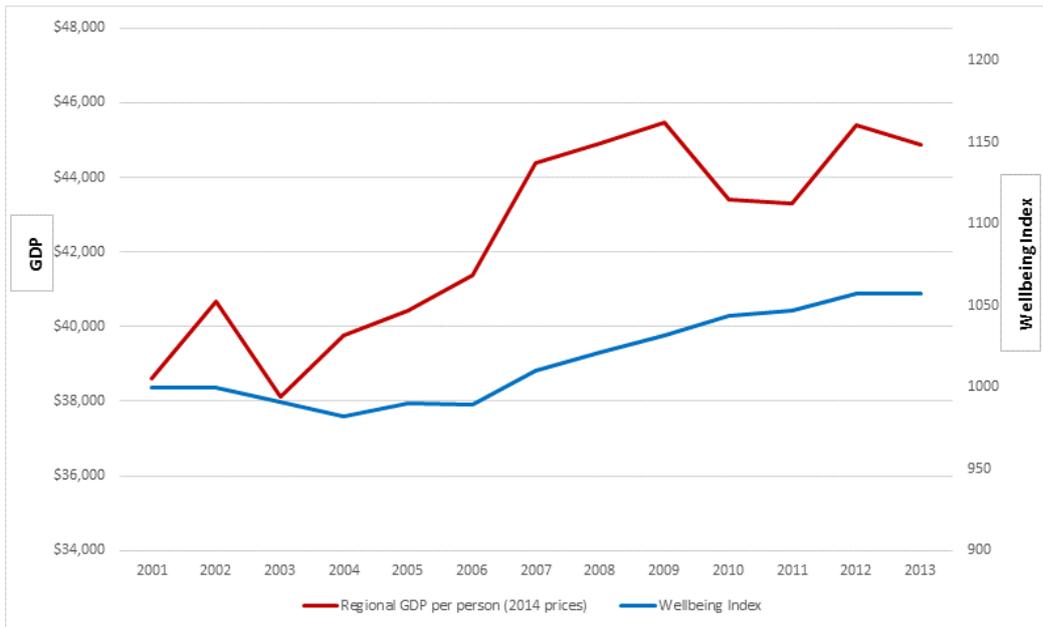


Figure 9 GDP vs Waikato Wellbeing Index (PCA method) 2001-2013

Source: Huser, Killerby and Patterson 2016. Note: Based on actual and imputed data.

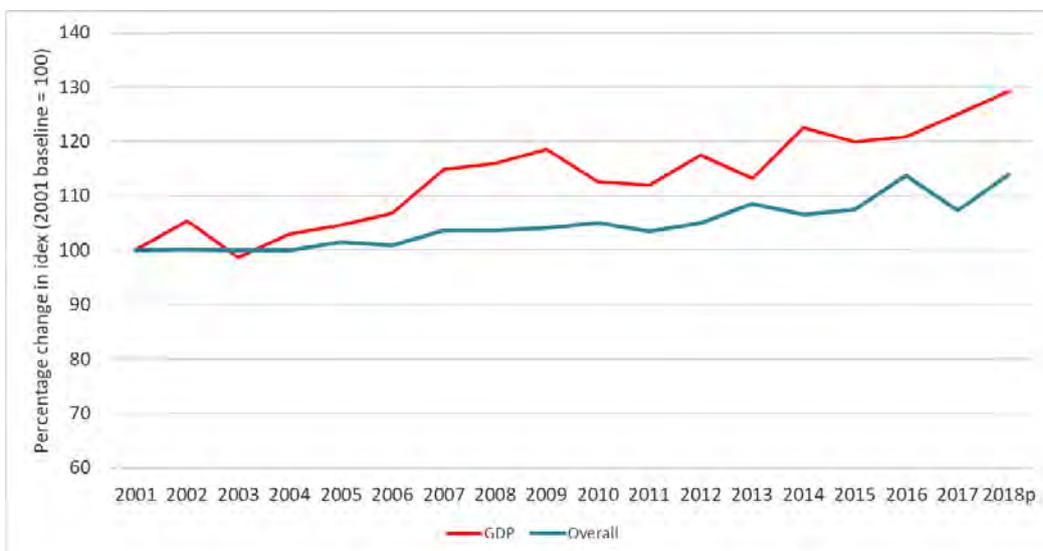


Figure 10 GDP vs Waikato Wellbeing Index (CIW method) 2001-2018

Source: WPI Monitoring Programme database (Waikato Regional Council)

Note: Based on actual and imputed data (2018 index is provisional).

⁹ Towards a wellbeing index for the Waikato Region. New Zealand Planning Quarterly, Issue 200, March 2016.

8 Next steps

The results of the WPI programme provide a robust basis for discussing regional challenges and opportunities and identifying priorities for closer collaboration and partnerships. Results from the WPI help monitor and inform Council's strategic direction and other region-wide initiatives, such as the [Waikato Plan, economic development](#) and [Future Proof](#). Selected individual indicators that reflect Waikato Regional Council's functions and roles are also included as performance measures in Council's Long Term Plan and Annual Report, and other relevant council reports.

The WPI wellbeing frameworks and measures support national initiatives. Treasury has developed a [Living Standards Framework and associated Dashboard](#) to monitor intergenerational wellbeing and support Government's Wellbeing Budgets. This is supported by Statistics NZ's set of wellbeing indicators ([Ngā Tūtohu Aotearoa - Indicators Aotearoa New Zealand](#)).

A priority for the WPI monitoring programme in 2020/21 will be to continue working with Treasury, Statistics NZ and local government (SOLGM) to align national, regional and local data and indicators. Further work is ongoing towards indicator improvements, better accessibility and communication of indicator results and more harmonised monitoring in New Zealand. This includes working with other regional councils through the Land, Air, Water Aotearoa (LAWA) organisation¹⁰, and with the Ministry for the Environment and Statistics NZ on environmental reporting.¹¹

A continuing focus for the WPI programme will be engaging with strategic regional and local partners to share data, align indicators and combine knowledge to tell progress and wellbeing stories from different perspectives. Partners include Iwi, Hamilton City Council, district councils, Waikato Mayoral Forum, Waikato Plan, Waikato District Health Board, Te Waka: Waikato's Economic Development Agency and other business and sector groups, New Zealand Transport Agency, The Treasury, Statistics New Zealand, Ministry for the Environment, Ministry of Social Development, Ministry of Business, Innovation and Employment, community trusts (WEL Energy Trust, Trust Waikato, Momentum/Vital Signs) and other non-government organisations.

In addition to the 32 high level measures, the WPI programme compiles secondary indicators and data broken down by territorial authority (where available) to support more detailed analysis and develop 'progress stories' about how and why levels of wellbeing are changing over time in the Waikato region. This includes information about distributional aspects, such as by age, gender, ethnicity, income or locality. Regional data can mask local trends so information at the community level is important, for example the mix of drivers for deprivation across the territorial authorities are totally different.¹² The Quality of Life survey 2018, undertaken jointly with Hamilton City Council, also provides information about people's views and perceptions at the district council level (Killerby and Huser, 2019).

¹⁰ Land, Air, Water Aotearoa (LAWA): <https://www.lawa.org.nz/about/>

¹¹ Environmental indicators: http://archive.stats.govt.nz/browse_for_stats/environment/environmental-reporting-series/environmental-indicators/Home.aspx

¹² The report *Socioeconomic Deprivation in the Waikato Region – using the Index of Multiple Deprivation* (McMillan and Exeter, 2018) shows that areas within the Waikato region rank among the most deprived areas in New Zealand. The New Zealand Index of Multiple Deprivation (IMD), released by the University of Auckland looks at 28 indicators which are grouped into seven domains of deprivation: employment, income, crime, housing, health, education and access to services.

At the global level, the Sustainable Development Goals (SDGs)¹³ adopted in 2015 by all the 193 UN member countries, provide a yardstick to evaluate, assess and measure progress from now to 2030. The SDGs include 17 Goals and 169 targets, and over 230 indicators (under development). The SDGs aim to end poverty, protect the planet and ensure prosperity for all as part of a new sustainable development agenda with specific targets to be achieved by 2030. Governments, communities, corporates and business are adopting the SDGs to demonstrate their relevance and value. Work has started to map and align the WPI with the SDG indicators as they are being developed. The WPI monitoring programme will also continue to work with the Waikato Wellbeing Project¹⁴, a collaborative initiative to achieve a cleaner, greener, fairer Waikato by 2030. Phase One of the project, the development of a defined set of widely agreed wellbeing targets for the Waikato based on the UN Sustainable Development Goals, has been completed in February 2020.

¹³ Sustainable Development Goals (SDGs): <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

¹⁴ WEL Energy Trust and Waikato Regional Council are collaborating with Trust Waikato, other community funders, Iwi, business, industry groups, central and local Government, tertiary education and research providers, economic development agencies, community organisations and citizens – working in partnership and alignment with Te Ao Māori.

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Appendix 1 The Waikato Progress Indicators

Key questions	Topic	Indicator	Definition (current as at June 2020)
Economy			
How prosperous is our region? How are we planning for a prosperous future?	Economic growth	Regional GDP	Real (inflation adjusted) regional Gross Domestic Product (GDP) per capita
Society			
Are we generally happy with our life? How satisfied are we with our work life balance?	Life satisfaction	Life satisfaction	Percentage of people who rate their overall quality of life positively
What are the educational opportunities How qualified and skilled is our workforce? Are education opportunities accessible and adequate	Education	Educational attainment	Percentage of school leavers with NCEA level 2 or above
Are we satisfied with our housing? How accessible, adequate and affordable is our housing?	Housing	Housing affordability	Ratio of housing costs to household disposable income
Do we feel safe?	Community safety	Perceptions of safety	Percentage of adults who feel safe walking alone in their neighbourhood after dark
How safe are we?	Community safety	Crime	Rates of recorded victimisations per 10,000 population (year to June)
How safe are we?	Community safety	Road safety	Estimated annual social costs of road injury crashes per capita
How healthy are we?	Health	Life expectancy	Life expectancy at birth (from Life Tables estimated using Census data)
How do we feel about our health and wellbeing?	Health	Perceived health	Percentage of people who rate their overall health good, very good or excellent
How well connected are we with our family, neighbourhood and community?	Social connectedness	Social connectedness	Percentage of people who agree or strongly agree that they experience a sense of community with others in their neighbourhood
Are we proud about where we live and our community?	Social connectedness	Community pride	People's reported sense of pride in the way their city/town looks and feels
How much do we participate in sports, leisure and arts?	Leisure and recreation	Physical activity	Percentage of people who say they were physically active on five or more of the past seven days

Key questions	Topic	Indicator	Definition (current as at June 2020)
Do we know and respect other cultures?	Cultural identity	Cultural respect	Level of agreement by survey respondents that New Zealand becoming home for an increasing number of people with different lifestyles and cultures from different countries makes their area a better place to live
Do we recognise and protect our cultural heritage and distinctive identity? How comfortable do we feel about expressing our cultural practices?	Cultural identity	Te Reo Māori speakers	Percentage of Te Reo Māori speakers in the total population
Are we involved in our community? How much do we participate in decision making?	Civic engagement	Voter turnout	Average voter turnout in local council, DHB and regional council elections
Are we satisfied with our opportunity to participate in (council) decision making?	Civic engagement	Community engagement	Percentage of people who agree that the public have 'large' or 'some' influence over the decisions that their local Council makes
How wealthy are we?	Wealth and income	Income	Real median weekly household income
Wealth and income	Wealth and income	Income inequality	Gini coefficient – a measure of the concentration of income within the region
How prosperous is our region? How are we planning for a prosperous future?	Wealth and income	Building activity	Real value of total new building consents issued per annum (year to December)
How many people have a job? How many are unemployed - and how long	Employment	Employment	Employment rate - the proportion of total working age population who are employed
Does our infrastructure cope with current and increasing demand? What services are available?	Infrastructure	Public transport	Public transport volumes per capita – average number of passenger transport boardings per resident per annum
How do we use our natural resources? How much water do we use? How much have we got?	Resource use	Water use	Water allocation as a percent of primary allocable flow – Waikato River mouth during summer months
Environment			
How much do we value or environment? Can we sustain a healthy environment <u>and</u> grow our economy? What do we value most? What are the threats to our environment?	Environmental values	Environmental attitudes	Average regional NEP (New Environmental Paradigm) Scale score

Key questions	Topic	Indicator	Definition (current as at June 2020)
How good is our water quality?	Land and water	River water quality	River water quality for ecological health – percentage of unsatisfactory river water samples for ecological water quality in Waikato rivers and streams (all sites average)
How healthy are our soils? How resilient are we to food production?	Land and water	Soil quality	Percentage of soil monitoring sites meeting five or more soil quality targets - Waikato Region
How much land is sub-divided/paved every year? How much of this is fertile soil?	Land and water	Residential expansion onto versatile land	Area (hectares) of versatile land (Land Use Capability classes 1-4) in urban and rural residential use in the Waikato Region
How clean is our air?	Air and climate	Air quality	Urban air quality – number of exceedances per year of the regional guideline for particulate matter (all monitoring sites total)
Is the climate changing?	Air and climate	Greenhouse gases	Regional annual total greenhouse gas emissions – from the Waikato Region Comprehensive Greenhouse Gas Inventory
How much of our environment is protected? What is the health and condition of our ecosystems?	Biodiversity	Indigenous vegetation	Extent of indigenous vegetation on land
How healthy is our coastal and marine environment? How safe are our beaches for swimming?	Coastal and marine	Coastal ecosystem health	Traits Based Index (TBI) of the biological traits of sediment-dwelling animal communities in three estuaries the southern Firth of Thames, Whaingaroa (Raglan) Harbour, and Tairua Harbour
How much pollution and waste do we produce? What sort of waste do we produce? How much per GDP/product?	Waste	Waste	Estimated tonnage of waste to landfill per annum
How much of our waste do we recycle?	Waste	Recycling	Self-reported prevalence of household recycling

Appendix 2 WPI time series data 2001 to 2019

Key:

Grey cell indicates imputed or extrapolated data

White cell indicates measured data

Note that the trend direction for some of these indicators has a negative interpretation (e.g. crime).

Indicator	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Regional GDP	\$40,873	\$43,062	\$40,310	\$42,064	\$42,755	\$43,647	\$46,982	\$47,382	\$48,450	\$46,012
Life satisfaction	90%	90%	90%	90%	90%	90%	89%	89%	88%	88%
Educational attainment	64.2%	64.2%	64.2%	64.2%	64.2%	64.2%	64.2%	64.2%	64.2%	66.6%
Housing affordability	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	18.6%	20.5%	17.7%
Perceptions of safety	60%	60%	60%	60%	60%	60%	61%	61%	62%	62%
Crime	748.0	750.4	712.7	681.8	626.0	724.1	738.4	693.2	689.8	738.6
Road safety	1,462	1,462	1,462	1,462	1,767	1,554	1,923	1,658	1,454	1,353
Life expectancy	78.5	78.8	79.0	79.3	79.5	79.8	80.0	80.1	80.3	80.5
Perceived health	90%	90%	90%	90%	90%	90%	89%	89%	88%	88%
Social connectedness	63%	63%	63%	63%	63%	63%	63%	63%	64%	64%
Community pride	70%	70%	70%	70%	70%	70%	70%	70%	69%	69%
Physical activity	61%	61%	61%	61%	61%	61%	60%	58%	57%	55%
Cultural respect	51%	51%	51%	51%	51%	51%	50%	49%	49%	48%
Te Reo Māori speakers	6.4%	6.3%	6.2%	6.0%	5.9%	5.8%	5.7%	5.7%	5.6%	5.5%
Voter turnout	37.6%	37.6%	37.6%	37.6%	37.6%	37.6%	37.6%	38.9%	40.2%	41.5%
Community engagement	62%	62%	62%	62%	62%	62%	60%	59%	57%	56%
Income	\$1,164	\$1,214	\$1,241	\$1,193	\$1,312	\$1,359	\$1,400	\$1,431	\$1,405	\$1,325
Income inequality	0.373	0.373	0.373	0.373	0.373	0.373	0.373	0.435	0.340	0.379
Building activity	729	730	1,031	1,177	1,457	1,300	1,384	1,132	883	955
Employment	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	67.1%	66.8%	64.8%	63.7%
Public transport	4.2	4.3	4.5	4.9	5.1	5.5	7.3	9.1	11.1	11.0
Water use	67%	67%	67%	67%	67%	67%	67%	65%	64%	69%
Environmental attitudes	77%	77%	77%	77%	79%	81%	83%	86%	86%	87%
River water quality	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%
Soil quality	85%	85%	85%	84%	84%	84%	86%	86%	80%	84%
Residential expansion onto versatile land	8,613	9,344	10,074	10,805	11,535	12,266	12,997	13,727	14,098	14,470
Air quality	17	17	27	50	38	47	20	28	38	22
Greenhouse gases	13,221,484	13,381,035	13,540,587	13,700,138	13,859,689	14,019,241	14,178,792	14,136,381	14,093,971	14,051,560
Indigenous vegetation	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%
Coastal ecosystem health	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Waste	222,000	222,000	222,000	222,000	222,000	222,000	222,815	223,629	224,444	225,258
Recycling	66.2%	66.2%	66.2%	66.2%	66.2%	66.2%	66.2%	66.2%	68.9%	71.5%

Appendix 2 cont.

Indicator	2011	2012	2013	2014	2015	2016	2017	2018	2019
Regional GDP	\$45,763	\$47,995	\$46,251	\$50,113	\$49,029	\$49,396	\$51,074	\$52,825	\$54,128
Life satisfaction	87%	86%	86%	85%	85%	84%	86%	87%	
Educational attainment	69.3%	72.0%	73.5%	76.0%	77.6%	79.5%	77.5%	77.7%	
Housing affordability	18.3%	20.1%	17.2%	20.3%	18.9%	20.4%	19.9%	20.2%	19.4%
Perceptions of safety	63%	63%	64%	64%	65%	65%	65%	64%	
Crime	716.1	706.2	616.6	623.8	569.4	613.1	630.1	626.9	593.7
Road safety	1,332	1,196	923	1,065	1,273	1,256	1,265	1,265	
Life expectancy	80.6	80.8	81.0	81.0	81.0	81.0	81.0	81.0	
Perceived health	87%	86%	86%	85%	85%	84%	82%	79%	
Social connectedness	64%	64%	64%	65%	65%	65%	64%	62%	
Community pride	69%	69%	69%	68%	68%	68%	65%	62%	
Physical activity	54%	53%	51%	50%	48%	47%	44%	40%	
Cultural respect	47%	46%	45%	45%	44%	43%	42%	41%	
Te Reo Māori speakers	5.4%	5.4%	5.3%	5.4%	5.5%	5.7%	5.8%	5.9%	
Voter turnout	40.9%	40.3%	39.7%	38.8%	37.8%	36.9%	38.1%	39.4%	40.6%
Community engagement	54%	52%	51%	49%	48%	46%	41%	36%	
Income	\$1,258	\$1,329	\$1,342	\$1,284	\$1,397	\$1,560	\$1,546	\$1,706	\$1,728
Income inequality	0.418	0.440	0.371	0.406	0.470	0.413	0.417	0.395	0.419
Building activity	729	819	964	1,058	1,315	1,523	1,672	1,830	2,128
Employment	64.7%	62.7%	63.8%	64.2%	64.3%	65.2%	68.8%	69.8%	67.8%
Public transport	10.9	12.2	11.9	10.1	9.9	9.1	8.7	8.4	8.3
Water use	72%	76%	87%	86%	86%	86%	85%	86%	85%
Environmental attitudes	88%	88%	89%	89%	88%	88%	88%	87%	87%
River water quality	29.0%	29.0%	29.0%	28.0%	27.9%	28.0%	28.0%	29.0%	29.0%
Soil quality	82%	82%	79%	79%	79%	84%	86%	82%	
Residential expansion onto versatile land	14,841	15,213	15,627	16,042	16,457	16,872	17,287	17,287	
Air quality	20	17	12	11	10	5	12	2	5
Greenhouse gases	14,009,150	13,966,739	13,924,329	13,881,918	13,839,508	13,797,097	13,797,097	13,797,097	
Indigenous vegetation	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%	
Coastal ecosystem health	0.40	0.40	0.38	0.38	0.38	0.41	0.40	0.39	
Waste	226,073	226,887	227,499	228,111	228,723	224,732	220,741	220,741	
Recycling	70.9%	70.3%	70.3%	70.3%	70.3%	70.3%	70.3%	70.3%	