GPI
Measuring the region's well-being

WRS | Wellington Regional Strategy

Economic | Environmental | Social | Cultural

Wellington Region Genuine Progress Index (WR-GPI)

2001 to 2013

DRAFT

October 2014

The Wellington Region Genuine Progress Index (WR-GPI) is an initiative of the Wellington Regional Strategy, supported by all the councils in the Wellington region.

CONTENTS

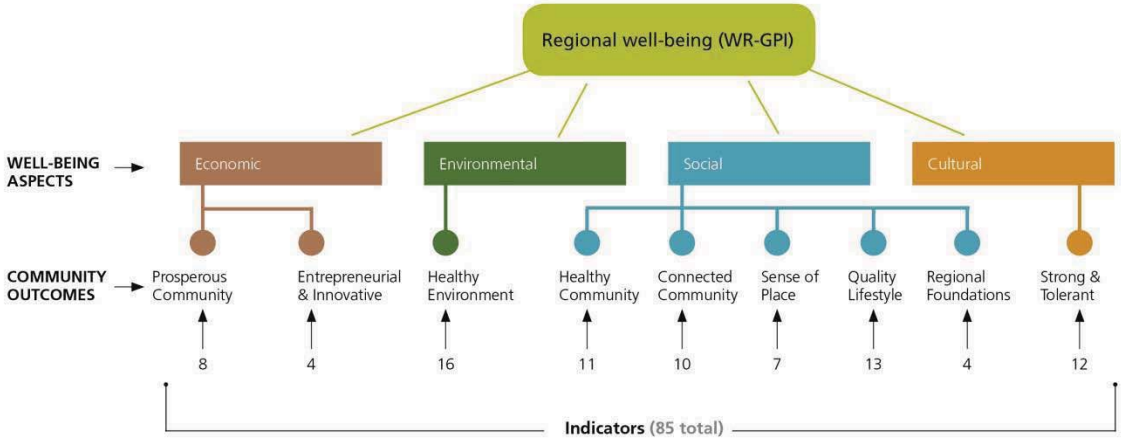
EXECUTIVE SUMMARY

The Wellington Region Genuine Progress Index (WR-GPI) is a holistic monitoring framework designed to measure change occurring amongst four principal aspects of well-being; economic, environmental, social and cultural.

The framework is comprised of 85 indicators, organised into nine community outcomes. The overarching 'WR-GPI' aggregates the entire data series and provides an index score that demonstrates change in well-being in the Wellington region between 2001 and 2013.

Results are also provided at the individual indicator scale, or as composite indices at the community outcome and well-being aspect levels, enabling users to analyse the data, and consider the interrelationships between the differing measures.

The WR-GPI framework and levels are shown below.



The WR-GPI was first published in 2011. This 2014 edition updates the WR-GPI, providing a 2001 to 2013 time series. The project is an initiative of the Wellington Regional Strategy (WRS) and is designed to assist the strategy's stakeholders to support, promote and facilitate sustainable economic growth in the region. [1]

[1] The Wellington Regional Strategy (WRS) is an initiative of the nine local authorities in the Wellington region: Greater Wellington Regional Council, Kapiti Coast District Council, Porirua City Council, Wellington City Council, Hutt City Council, Upper Hutt City Council, Carterton District Council, Masterton District Council and South Wairarapa District Council. The WRS is governed by a committee comprised of the Chair of Greater Wellington Regional Council, a representative of each of the eight local councils and five non-local government representatives who represent established networks within the region. It is chaired by one of the independent members of the Committee.

Genuine Progress Indexes[2] have been developed by research and governance agencies around the world, and are acknowledged as a useful method for assessing economic, environmental, social and cultural progress. Genuine progress indexes count beneficial activities (e.g. school leavers with an NCEA qualification) as positive and detrimental indicators (e.g. the unemployment rate or the prevalence of smoking) as negative, producing a composite index that reflects a balanced picture of progress.

The WR-GPI is not designed to replace or to challenge gross domestic product (GDP). It simply provides an alternative system for examining the effects of policies, behaviours and activities occurring in, or affecting well-being, in the Wellington region. Because GDP has dominated regional, national and international conversations about progress for decades, it is commonly expected to provide a useful and broad interpretation of well-being (including social and environmental well-being). But GDP was never designed to achieve that end.[3] GDP was created as a method for answering questions such as "how fast is the economy growing," "what is the pattern of spending on goods and services," and "what percent of the increase in production is due to inflation" (Costanza, 2009). It is purely an economic metric.[4]

The WR-GPI provides a balanced framework specifically designed to monitor economic, environmental, social and cultural change over time. Considering the WR-GPI and GDP alongside one another will assist individual people, service delivery and governance agencies (such as Councils and District Health Boards), to make more informed decisions about the interrelated activities that enhance or impair well-being in the Wellington region.

[2] National level Genuine Progress Index (GPI) studies have been conducted in Australia, China, India, Japan, Thailand, Vietnam, the USA and New Zealand. Sub-national level studies have been conducted in New Zealand's Waikato and Auckland regions, all regions in England and in numerous cities and provinces across Italy, Canada and the USA (including nine counties in the San Francisco Bay area). The states of Vermont and Maryland in the USA have both formalised the use of GPI into legislation (Posner & Costanza 2001; Talberth et al., 2007 in Ukaga 2010; Wilson & Tymers, 2013).

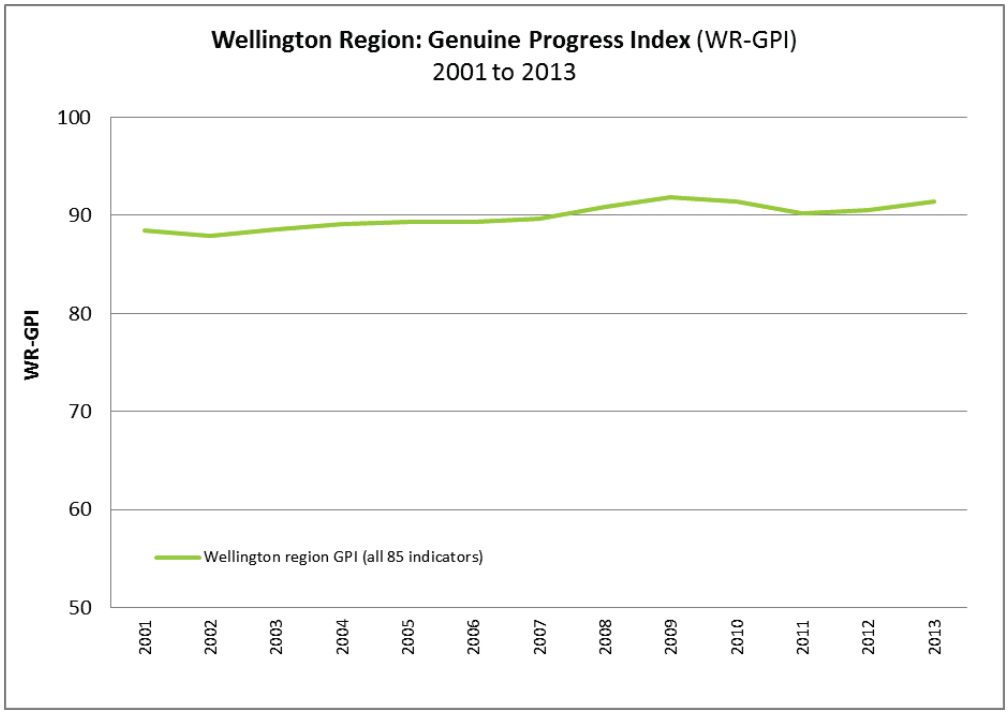
[3] Simon Kuznets, the inventor of GDP, noted in a report to the US Congress in 1934, "...the welfare of a nation [can] scarcely be inferred from a measure of national income …" (Kuznets in Cobb et al., 1995).

GDP mainly measures *market* production, yet it has often been treated as if it were a measure of economic well-being. Conflating the two can lead to misleading indications about how well-off people are and entail the wrong policy decisions (Stiglitz, 2009).

[4] Aspects of everyday life that GDP does not measure include environmental sustainability, health, equity, financial security, educational attainment, community strength, free time and other key dimensions of well-being and quality of life (Pannozzo & Colman 2009:32).

WR-GPI Key findings

The WR-GPI increased by 3.4% between 2001 and 2013[5]. During the 13 year period, there has been a significant degree of variability in the index. The overall increase can be primarily attributed to improvement in the economic and environmental well-being areas. Progress appears to have been constrained by declines amongst many social and most cultural indicators.



Cultural well-being was the only aspect not to demonstrate improvement, declining by 7.6% between 2001 and 2013. The social aspect improved by 0.7% (despite decline amongst many of its indicators), a moderate change compared with the increases in economic and environmental well-being of 11.1 and 11.6% respectively.

Economic Well-being

Economic well-being is made up of indicators from two community outcome areas – *prosperous community and entrepreneurial and innovative community*. Overall, the trend for the economic well-being aspect of the WR-GPI is positive, as it increased by 11.1% between 2001 and 2013.

Economic well-being as measured by the WR-GPI was clearly buffeted by the global financial crisis, but has returned to robust growth in recent years. The economic well-being index demonstrates the important role education and labour force participation plays in providing a degree of resilience in the region's economy.

[5] Years cited are inclusive.

Environmental Well-being

The environmental well-being aspect of the WR-GPI is represented by one community outcome - *healthy environment*. This outcome is founded on the principles of environmental well-being and is focused on high quality water, air and soils, well-functioning ecosystems and sustainable resource use.

The environmental well-being index increased by 11.6% between 2001 and 2013. The index exhibits some fluctuations, exacerbated by indicators such as stream and river health, landfill waste and greenhouse gas (GHG) emissions per capita that, whilst demonstrating improvement when viewed across the entire time series, experienced sharp declines in some years, and notable increases in others. Key improvements in the environmental well-being index relate to the suitability of marine and freshwater sites for recreation, and the per capita water supply (which is a measure of sustainable water consumption). Two indicators that have not shown signs of improvement however are soil quality of dairy farm sites and residents rating of air pollution.

Social Well-being

The social well-being aspect of the WR-GPI is made up of indicators from five community outcome areas – *healthy community, connected community, sense of place, quality lifestyle and regional foundations.*

Social well-being has improved gradually across the 13 year time period, with the index score in 2013 being just 0.7% higher than in 2001. Some indicators have experienced more substantial shifts than others, with measures relating to the connected community outcome area showing particularly robust improvement. Access to the internet, public and active transport use, and positive perceptions of the ease of walking and of travelling by public transport in the region all increased across the time series.

These positive effects are countered by increases amongst a number of indicators with negative associations to well-being. The percentage of the population living in deprivation, traffic congestion and the percentage of people regularly experiencing stress all dragged the index down, and coupled with either sluggish improvement, or very gradual declines amongst a host of other indicators have constrained the growth of the WR-GPI social index. There is demonstrable improvement in the last 3 years of the period.

Cultural Well-being

The cultural well-being aspect of the WR-GPI is made up of indicators from one community outcome – *strong and tolerant community.* Cultural well-being was the only aspect in the WR-GPI not to demonstrate improvement, declining by 7.6% between 2001 and 2013. A major contributor to the negative trend in the strong and tolerant community outcome, was the substantial drop in average voter turnout at local elections, the number of children enrolled in Māori language education, and the percentage of the population who can have an everyday conversation in te reo Māori. The overall decline was partly offset by rising trends across a couple of indicators: the percentage of the population identifying with the Māori, Pacific or Asian ethnic groups (which is a proxy for ethnic diversity), and the total number of registered heritage places in the region. The most significant decline in the cultural well-being index occurred between 2010 and 2012. Signs of improvement were seen in 2013.

Concluding Comment

The WR-GPI is a long term monitoring tool and the interpretation of some indicators (and their contribution to composite outcome areas and well-being aspects) will improve as data over a longer time period becomes available. The framework will be subject to continuous revision, improvement in methodologies, and inclusion of additional variables. It will continue to evolve in form and content with further research, the development of new methods of measurement, and the availability of improved data sources.

WR-GPI: HISTORY and BACKGROUND

2006 to 2011

The WR-GPI was initially developed in 2009 as a well-being monitoring project designed to assist the implementation and evaluation of the Wellington Regional Strategy (WRS). During consultation on the development of the original WRS and its nine community outcomes in 2006 and 2007, the public said that prosperity in the Wellington region meant more than monetary wealth. The public expressed the importance of achieving quality of life for all members of society and noted that economic growth should not be sought at the expense of the community or the environment. The WRS Forum agreed that what was needed for the region was quality of life, and that sustainable economic growth could contribute to achieving this.

As a result of the consultation and guided by the Local Government Act 2002 at the time, the WRS Forum decided to develop a framework that measured progress across all areas of life. In particular, the framework would measure economic, environmental, social and cultural 'performance', as well as the overall well-being of the region. Following adoption of the WRS in 2007, the WRS office took responsibility for the project and with the support of all the other Councils in the Wellington region set up a Genuine Progress Index (GPI) Working Group (which includes representatives from each of the region's Councils and District Health Boards).

After considerable research the Working Group established a GPI framework designed to measure well-being in the region[6], organised according to the nine community outcomes identified in the WRS at that time.

2012 to 2014

The WRS was refreshed in 2012 and the current strategy has a stronger economic development focus, reflecting the need to meet the challenges that arose pot 2007 (namely the global financial crisis and the subsequent contraction of the Wellington region's economy). The WR-GPI was retained as a monitoring tool, as it enables the strategy's stakeholders to understand changes occurring to the region's well-being, and provides insight to the interrelationships between the economic, environmental, social and cultural aspects of life in the Wellington region.

[6] Economic, environmental, social and cultural well-being

When the first WR-GPI was published in 2011 it received significant media attention and was widely recognised as a progressive and collaborative initiative, winning the 2011 GHD Supreme Award and the Joined Up Local Government Category at the 2011 SOLGM Local Government Excellence Awards.

This publication is the second iteration of the WR-GPI and applies the same framework (85 indicators,[7] nine community outcomes and four well-being aspects) used in 2011. The time series is 2001 to 2013. The WRS office had intended to update the WR-GPI in 2012, however the Christchurch earthquake delayed the national Census, and as many indicators are dependent on Census information, the WR-GPI update and publication was postponed until all relevant Census data became available.

Future of the WR-GPI

The WR-GPI will be reviewed in late 2014 and early 2015. Changes to data sources and the interrelationships between indicators will be considered as part of the review. Learnings from the first and second publications, including the capacity for key stakeholders to practically apply the findings to inform policy, programmes and initiatives designed to enhance well-being will also be evaluated, and the framework adjusted accordingly.

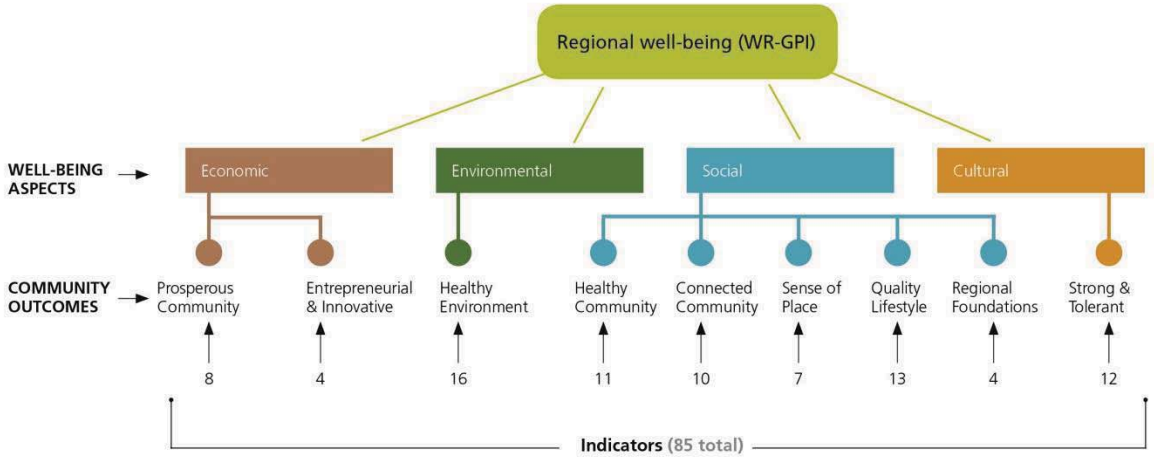
[7] The 2011 WR-GPI indicator framework was comprised of 86 indicators, however as data was not available for one of these indicators, in either the 2011 or 2014 publications, it has been removed entirely from the 2014 framework.

CHAPTER 2

METHODOLOGY

This 2014 WR-GPI is created using the same indicator framework and calculation system used to create the first WR-GPI in 2011.[8] For more detailed information on the methodology please refer to "Approach to the Wellington Region GPI 2001 – 2010" which can be downloaded from www.gpiwellingtonregion.govt.nz

Essentially, 85 indicators[9] are organised into nine community outcome areas, which are then grouped into four well-being aspects. The aggregate of all four aspects provides a regional figure - the WR-GPI. Results are calculated for each year in the time series (2001-2013) enabling a trend to be mapped over time. The framework is pictured below.



Results are interpreted in Chapters 3 to 7, which follow the structure shown above. In each respective chapter, time series graphs are provided for each well-being aspect, community outcome area and individual indicator. The well-being aspects and community outcome areas are composites of the indicators that constitute them. For example

Prosperous community outcome	is a composite of the average index scores of its eight indicators.
Economic well-being aspect	is a composite of the average index scores of the eight indicators in the prosperous community outcome and the four indicators in the entrepreneurial and innovative community outcome.
The WR-GPI	is a composite of the average index scores of the four well being aspects.

[8] Minor methodological changes applied to the 2014 WR-GPI are outlined in the final section of this chapter.

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What is a GPI?

Genuine Progress Indexes[10] have been developed by research and governance agencies around the world, and are acknowledged as a useful method for assessing economic, environmental, social and cultural progress. Genuine progress indexes count beneficial activities (e.g. school leavers with an NCEA qualification) as positive and detrimental indicators (e.g. the unemployment rate or the prevalence of smoking) as negative, producing a composite index that reflects a balanced picture of progress.

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As GDP makes no distinction between economic activities that create benefit and those that cause harm, it can send misleading signals to policy makers when it is used as a measure of progress or societal well-being. As a consequence, disease prevention and health promotion initiatives, including for example, those designed to reduce the current high levels of obesity, frequently may not receive the same policy attention and funding support accorded to economic stimulus measures.

The WR-GPI provides a balanced framework specifically designed to monitor economic, environmental, social and cultural change over time. Considering the WR-GPI and GDP alongside one another will assist individual people, service delivery and governance agencies, such as Councils and District Health Boards, to make more informed decisions about the interrelated activities that enhance or impair well-being in the Wellington region.

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WR-GPI Aspect & Community Outcome definitions and associated indicators

ASPECT: Economic well-being Ensuring people have educational opportunities, employment and a decent income. Supporting businesses and enabling opportunities for innovation and entrepreneurship.		
ECONOMIC - Community Outcomes & Indictors	Prosperous community	All members of our community prosper from a strong and growing economy. A thriving business sector attracts and retains a skilled and productive workforce. **Indicators:** PC001 Labour force participation PC002 Unemployment rate PC003 Employed residents working and living in the same area PC004 P80/P20 ratio of equivalised gross weekly household income PC005 Purchasing power PC006 Value of household and community work PC007 Value of building consents PC008 Proportion of working age population with no educational qualification *Time series data, indicator definitions and source information are provided with the analysis of each individual indicator, located in the relevant well-being aspect chapter.*
	Entrepreneurial & Innovative	Innovation, creativity and new endeavours are welcomed and encouraged. Ideas are exchanged across all sectors, resulting in a creative business culture. We have excellent education and research institutions, and benefit from being the seat of government. **Indicators:** EI001 Percentage of GDP spent on research and development EI002 Business start ups as a percentage of business turnover EI003 Percentage of workforce employed in highly skilled occupations EI004 Proportion of school leavers with NCEA Level 2 or above *Time series data, indicator definitions and source information are provided with the analysis of each individual indicator, located in the relevant well-being aspect chapter.*

Environmental well-being Meeting the needs of today's generation, without reducing the ability of future generations to meet their own needs.		
ENVIRONMENTAL Community Outcome & Indicators	**Healthy environment**	We have clean water, fresh air and healthy soils. Well functioning and diverse ecosystems make up an environment that can support our needs. Resources are used efficiently. There is minimal waste and pollution. **Indicators:** HE001 Air quality HE002 Residents rating of air pollution as a problem HE003 Fresh water suitability for recreation HE004 Coastal / marine water suitability for recreation HE005 Groundwater quality HE006 Stream and river health HE007 Per capita water supply HE008 Soil quality of dairy farm sites HE009 Soil quality of drystock sites HE010 Solid material diverted from landfill per capita HE011 Solid landfill waste per capita HE012 QEII covenanted areas HE013 Erosion prone land under effective management HE014 Total ecological footprint HE015 Total energy consumption per capita HE016 Greenhouse gas emissions per capita *Time series data, indicator definitions and source information are provided with the analysis of each individual indicator, located in the relevant well-being aspect chapter.*

Social well-being: The vitality that communities and individuals enjoy through: connections to their community and having healthy and active lifestyles		
SOCIAL - Community Outcomes	**Healthy community**	Our physical and mental health is protected. Living and working environments are safe, and everyone has access to health care. Every opportunity is taken to recognise and encourage good health. **Indicators:** HC001 Prevalence of overweight/ obesity HC002 Prevalence of hazardous drinking HC003 Physically active HC004 Prevalence of smoking HC005 Road injuries HC006 General health status HC007 Stress HC008 Life expectancy HC009 Access to primary health care HC010 Avoidable hospital admissions HC011 Avoidable deaths *Time series data, indicator definitions and source information are provided with the analysis of each individual indicator, located in the relevant well-being aspect chapter.*
	Connected community	Our connections and access are efficient, quick and easy – locally, nationally and internationally. Our communication networks, air and sea ports, roads and public transport systems are world class and enable us to link with others, both within and outside the region. **Indicators:** CC001 Congestion CC002 Ease of walking CC003 Ease of cycling CC004 Active travel CC005 Public transport boardings per capita CC006 Access to public transport CC007 Ease of making a public transport journey across the region CC008 Access to a motor vehicle CC009 Households with internet access CC010 Broadband internet access *Time series data, indicator definitions and source information are provided with the analysis of each individual indicator, located in the relevant well-being aspect chapter.*

Social well-being aspect continued

SOCIAL - Community Outcomes cont.	**Sense of place**	We have a deep sense of pride in the Wellington region and there is strong community spirit. We value the region's unique characteristics – its rural, urban and harbour landscapes, its climate, its central location, and its capital city. **Indicators:** SP001 Sense of pride in city SP002 Perception of graffiti, vandalism & litter SP003 Region considered a great place to live SP004 Sense of community SP005 Contact with friends & family SP006 Volunteerism SP007 Feelings of isolation *Time series data, indicator definitions and source information are provided with the analysis of each individual indicator, located in the relevant well-being aspect chapter.*
	Quality Lifestyle	Living in the Wellington region is enjoyable, and people feel safe. A variety of healthy and affordable lifestyles can be pursued. Our art, sport, recreation and entertainment scenes are enjoyed by all community members - and attract visitors. **Indicators:** QL001 Population living in deprivation QL002 Percentage of households that spend more than 30% of their disposable income on housing QL003 Percentage of the population living in crowded households QL004 Number of applicants on Housing NZ priority A and B waiting lists QL005 Overall life satisfaction QL006 Self-reported happiness QL007 Job satisfaction QL008 Perceptions of safety and security QL009 Recorded offences for crimes against the person - rate per 10,000 people QL010 Recorded offences for crimes against the property - rate per 10,000 people QL011 Ease of access to local parks or other green spaces QL012 Participation in social activities QL013 Visitor guest nights *Time series data, indicator definitions and source information are provided with the analysis of each individual indicator, located in the relevant well-being aspect chapter.*

Social well-being aspect continued

SOCIAL - Community Outcomes cont.	**Regional foundations**	High quality and secure infrastructure and services meet our everyday needs. These are developed and maintained to support the sustainable growth of the region, now and in the future. **Indicators:** RF001 Sustainable water use RF002 Perception of Council services RF003 Perception of road network reliability RF004 Perception of public transport reliability *Time series data, indicator definitions and source information are provided with the analysis of each individual indicator, located in the relevant well-being aspect chapter.*

Cultural well-being

The vitality that communities and individuals enjoy through:

- participation in civics, arts and cultural activities
- recognising and valuing our history, heritage, culture and diversity.

CULTURAL Community Outcome	**Strong & tolerant community**	People are important. All members of our community are empowered to participate in decision-making and to contribute to society. We celebrate diversity and welcome newcomers, while recognising the special role of tangata whenua. **Indicators:** ST001 Availability of help in times of need ST002 Average voter turnout at local election ST003 Understanding of Council decision making ST004 Perception of influence on Council decision-making ST005 Perception of impact of greater cultural diversity ST006 Speakers of te Reo Maori ST007 Ethnic diversity ST008 Heritage places ST009 National identity ST010 Perception of arts scene ST011 Attendance at arts events ST012 Children enrolled in Maori Language education services *Time series data, indicator definitions and source information are provided with the analysis of each individual indicator, located in the relevant well-being aspect chapter.*

Indicators

Indicators provide specific information on the state or condition of something, with the purpose of measuring change or trends over time. Not all indicators are ideal for use in a monitoring framework as some may not provide sufficient detail for the resultant trends to provide meaning. For the WR-GPI a set of criteria was developed to determine the value or usefulness of potential indicators. The criteria included such things as whether the data came from a reliable or official source, whether it clearly showed change over time and whether it could be easily understood.

Indicators that measure something that is known to improve well-being (e.g. school leavers obtaining the NCEA level 2 qualification) add to the composite index, while indicators measuring things considered detrimental to well-being (e.g. unemployment or the prevalence of smoking) reduce the index score (the index could be the entire WR-GPI, a well being aspect or a community outcome).

The trend for each indicator shows an improvement, no clear progress, or a decline in well-being (the trend may be uncertain where no, or insufficient data is available). The relevant well-being trend is represented by one of the symbols shown in the table below. For example, an upward arrow shows that the change in indicator data over the study period has resulted in an improvement in well-being.

It is possible that the indicator data may show a negative trend over the study period but still be represented by an upward arrow as the indicator itself may have a negative influence on well-being, for example unemployment rates, road injuries, and crime rates.

Indicator Symbol Legend	
The indicator data trend indicates an improvement in well-being	
The indicator data trend indicates no clear well-being progress	
The indicator data trend indicates a decline in well-being	
Uncertain, no or insufficient trend data available to assess well-being progress	?

Well-being Aspects and Community Outcomes

The composite trend over time for each well-being aspect and community outcome demonstrates change, which is represented in the graphs as an improvement, an insignificant change or a decline in well-being conditions.

The change across the entire period (2001 to 2013), in relation to a well-being aspect or community goal, is represented by the symbols shown in the table below. A cross, for example, shows that there has been change with negative implications for well-being.

Aspect and Outcome trend symbols	
The composite trend indicates an improving condition over the study period	
The composite trend indicates no significant trend or insufficient information to assess conditions	
The composite trend indicates a declining condition over the study period	

Key changes between the 2011 and 2014 WR-GPI methodologies

Number of indicators

The 2011 WR-GPI indicator framework was comprised of 86 indicators. However as data was not available for one of these indicators, Power Outages (from the Regional Foundations community outcome) in either the 2011 or 2014 publications, it has been removed entirely from the 2014 framework.

Change to indicators

Due to data continuity issues, the Quality Lifestyle indicator QL007 Job Satisfaction indicator differs from that used in the 2011 Wellington Region Genuine Progress Index (WR-GPI). The 2011 WR-GPI used Quality of Life survey data that measured employed residents satisfaction with their work-life balance (2008 and 2010). The 2014 WR-GPI uses Statistics NZ General Social Survey data.

Financial and Calendar years

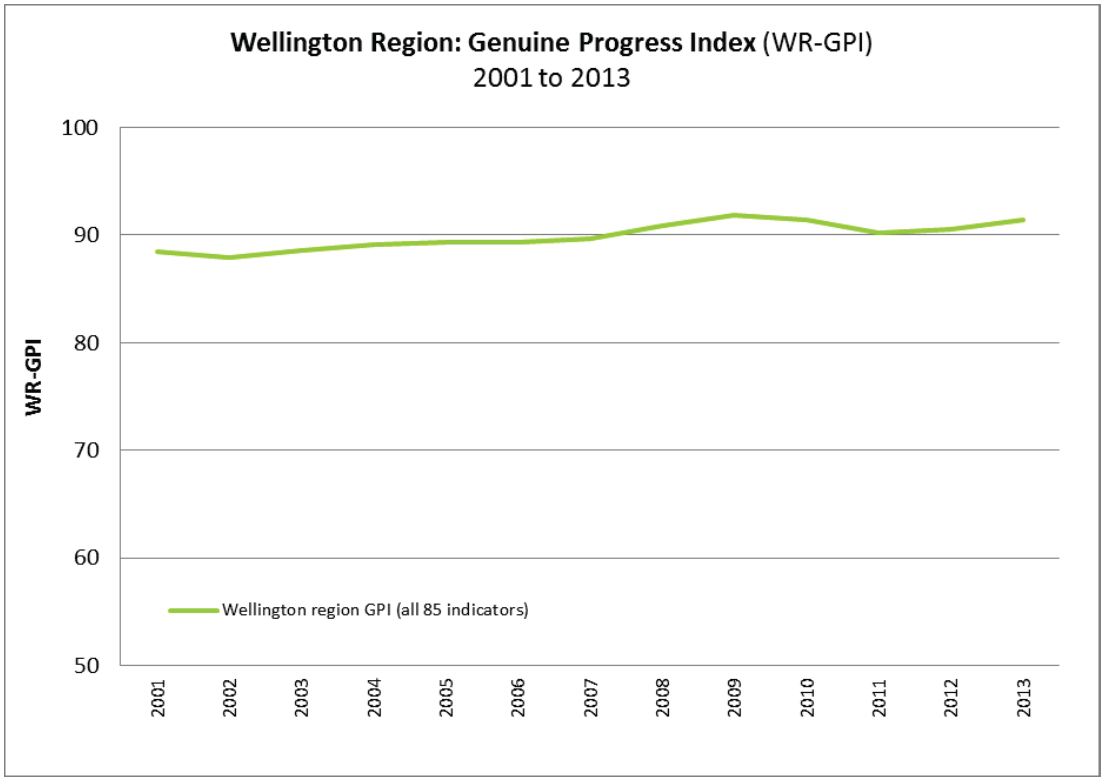
The **Approach to the Wellington Region GPI 2001 – 2010** document does not make clear that where indicator data was only attainable in financial years, these have been converted to calendar years by applying the figure 'to June' as the figure for that calendar year. i.e. data for 1 July 2001 to 30 June 2002 = the 2002 calendar year in the WR-GPI.

Data was obtained in calendar years where feasible.

For all other information on the background and methodology of the WR-GPI please refer to the paper Approach to the Wellington Region GPI 2001 – 2010 which can be downloaded from www.gpiwellingtonregion.govt.nz

WELLINGTON REGION GENUINE PROGRESS INDEX (WR-GPI)

Despite some variability across the 13 year time-series, the WR-GPI demonstrates an overall increase in well-being, as the index was 3.4% higher in 2013 than in 2001.

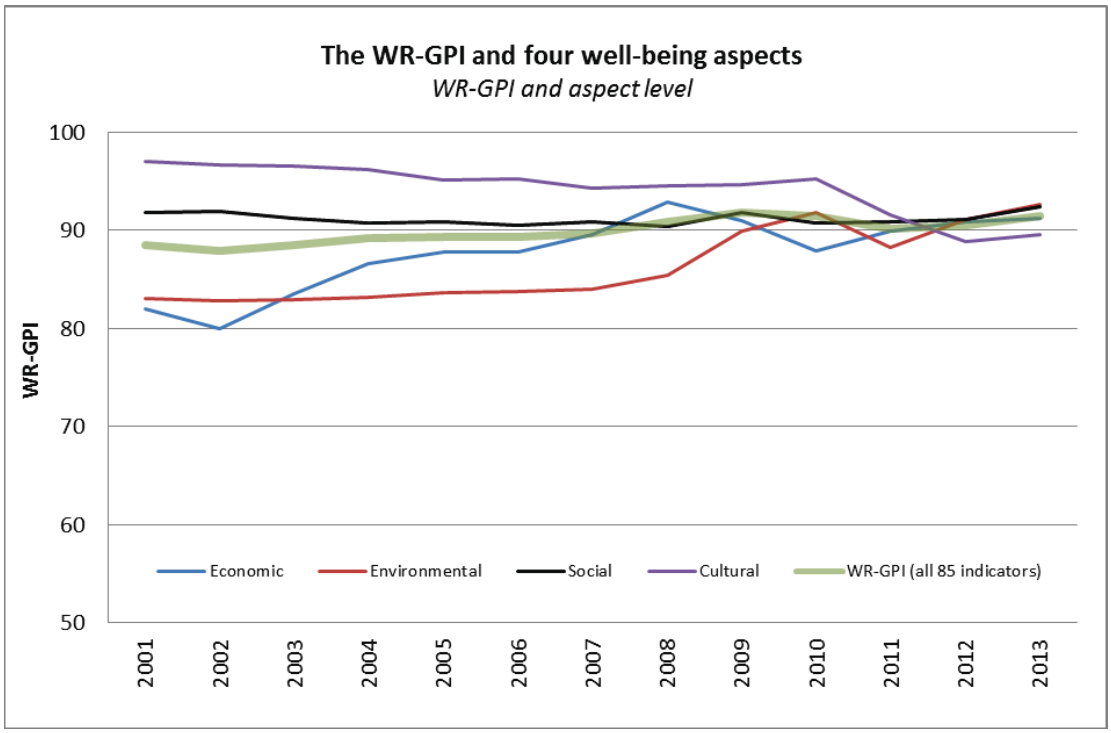


The aggregate WR-GPI[13] reflects the changes that have occurred amongst the four well-being aspects; economic, environmental, social and cultural during the 13 year time series. Despite some variability across the entire period, the WR-GPI demonstrates an overall increase in well-being, as the index was 3.4% higher in 2013 than in 2001. The overall increase can be primarily attributed to improvement in the economic and environmental aspects. Progress appears to have been constrained by declines amongst many social and most cultural indicators.

[13] The composite of the average index scores of the four well-being aspects

Despite the overall increase between 2001 and 2013, the index exhibits a degree of fluctuation when viewed year on year. The WR-GPI declined by 0.67% between 2001 and 2002, then rose with an annual average change of 0.63% before peaking at 2009. The index dropped again (an annual average change of -0.90% across 2010 and 2011) before returning to an upward trajectory at 2011. This upward trend was maintained (with annual average change of 0.71%) during the last two years monitored.

Viewing the trends of all four well-being aspects alongside the overall WR-GPI is useful for interpreting the moderating effect gradual change in the social and cultural aspects has had upon the more dynamic economic and environmental aspects. The graph below presents all four aspects and the WR-GPI together.



As can be seen in the graph above, the environmental, social and cultural aspects exhibit more gradual change than the economic aspect, in the first seven years of the time series. However, significant change begins to manifest in the environmental aspect at 2007, the social aspect at 2008, and in the cultural aspect from 2010, influencing change in the overall WR-GPI and reflecting significant shifts occurring amongst individual indicators and community outcome areas.

Despite the fluctuations noted above, the markedly significant effect of the 2008 global financial crisis (GFC), (particularly evident in the economic well-being aspect described in Chapter 4) was mitigated by the effect of some indicators in the framework bolstering well-being at that time. The region's labour force participation rate and education outcomes (amongst other economic well-being indicators) provided a degree of resiliency to the region's economy during the economic downturn. However, the continuing upward trend in the overall WR-GPI between 2008 and 2009 demonstrates that indicators from other aspects also contributed to the maintenance and/or enhancement of well-being during that period, despite the downward economic pressure.

As can be seen in the graph above, economic well-being demonstrates pronounced growth post 2002 compared to the more gradual rise observed in environmental well-being. Despite the marked differences in growth trajectories, both indices increase between 2002 and 2008, as does the WR-GPI. However as economic well-being declines between 2008 and 2010, environmental well-being improves. Both of these indices then reverse their trends at 2010, with economic well-being improving whilst environmental worsens. However the two indices do not remain disparate, rising together from 2011 onward. In the final two years of the time series economic well-being flattens off and while environmental continues to grow more steadily. As discussed in Chapter 5, some environmental changes tend to manifest slowly, and so a longer time series will enable more detailed interpretation of trends and interdependencies. The WR-GPI is a long term project and therefore a longer time series will develop going forward.

Cultural well-being was the only aspect not to demonstrate improvement across the entire time series, declining by 7.6% between 2001 and 2013. The social aspect improved by 0.7%, a moderate change compared with the increases in economic and environmental well-being of 11.1 and 11.6% respectively.

Clearly growth in the WR-GPI across the 13 year time series has been constrained by the decline in the cultural aspect and the marginal improvement within the social sphere. Readers are encouraged to explore the aspects, outcome areas and individual indicator trends presented in the following chapters to learn more about the dynamics influencing change in the WR-GPI.

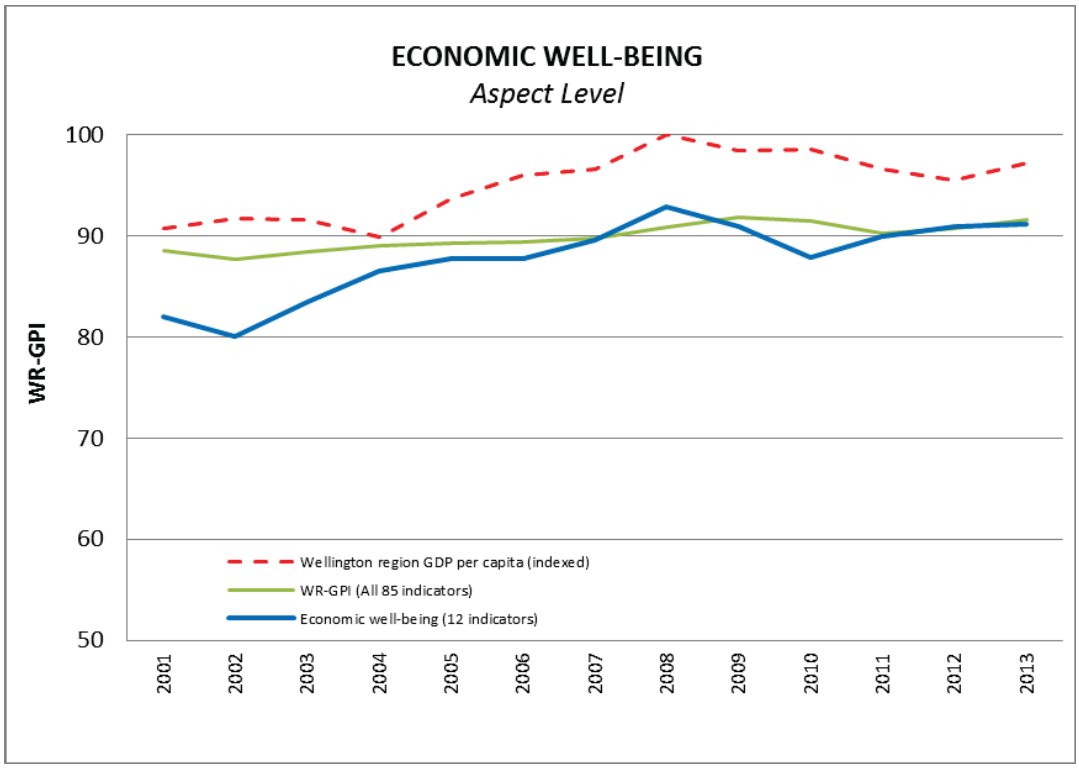
ECONOMIC WELL-BEING

IMPROVED

Economic well-being is defined as: Ensuring that people have educational opportunities, employment and a decent income; supporting businesses and enabling opportunities for innovation and entrepreneurship.

2001 to 2013 outcome: This aspect of the WR-GPI index demonstrates there has been an overall increase of 11.1% in the region's economic well-being between 2001 and 2013.

The economic well-being aspect of the WR-GPI contains two community outcomes and 12 indicators that are used to measure change occurring within them. In the graph below the composite of all the economic well-being indicators is plotted across the 2001 to 2013 time series. The composite of the entire WR-GPI (all 85 indicators) and regional GDP per capita are provided for reference. Findings relating to each individual indicator are provided from page X onwards.



Economic well-being findings

Despite fluctuations, particularly evident around the time of the Global Financial Crisis, both of the community outcomes that make up the economic well-being aspect of the WR-GPI *(prosperous community, and innovative and entrepreneurial community*) exhibited improvement between 2001 and 2013. Economic well-being was lowest in 2002 and peaked in 2008. The low point in 2002 followed a sharp decline from 2001, but was followed by six years of growth leading up to the 2008 peak. The trend portrayed by the economic well-being index broadly reflects the dynamics observed in regional GDP per capita, which also rose to a peak in 2008, albeit from a seemingly later starting point of 2004. Both the economic well-being index of the WR-GPI and the regional GDP per capita declined rapidly following the onset of the (GFC) of 2007-08. The Wellington region returned to strong growth following the GFC. The economic well-being index exhibits an earlier recovery than GDP per capita, rising slowly from 2010 onward whilst GDP per capita did not make an upward turn until 2012.

The subdued but positive growth observed in the economic well-being index of the WR-GPI since 2001 can be attributed primarily to improvements in the value of household and community work, and the proportion of school leavers with educational qualifications of NCEA level 2 and higher.[14] The other indicators that make up this aspect of the WR-GPI also retained a positive trend throughout the majority of the 2001-13 period, weathering the storm of the GFC and possibly providing a degree of resilience that contributed to the recovery observed at both the regional and national scales.

The labour force participation rate increased across the 13 year time series, despite declining in the first five years of the study period and being buffeted around the time of the GFC. The percentage of GDP spent on Research and Development (R&D) has also fluctuated across the time series but did not decline significantly following the GFC, nor drop below the level recorded in 2001 at any point. The percentage of the working age population with no educational qualifications has consistently decreased, and the percentage of the workforce employed in highly skilled occupations increased.[15]

The unemployment rate has not fallen in step with the recovery observed amongst other economic indicators. Both regional and national unemployment rates have risen sharply since 2008 with the regional rate sitting at 7.1% in 2013, significantly higher than the 2008 low of 3.6% and the 2001 rate of 4.4%.

Purchasing power in the Wellington region has followed a trajectory somewhat akin to that of GDP per capita, fluctuating in the first seven years of the period monitored, providing most value at 2008, suffering the impact of the GFC and then recovering between 2011 and 2013. Building consents are indicative of a strong property and active construction sector. Following a sharp drop between 2001 and 2002, they show a pronounced pattern rising steadily between 2002 and 2005, fluctuating up until 2008 and then suffering a significant and sustained decline up until 2012. Signs of recovery appear in 2013.

The economic aspect of the WR-GPI and GDP per capita tend to exhibit broadly similar trends over time. However, the economic well-being aspect of the WR-GPI appears to have recovered quicker from the GFC than GDP per capita. Understanding these dynamics and promoting economic resilience is a key objective of the WR-GPI initiative.

[14] The value of unpaid household and community work in the Wellington region is estimated to have increased by 43.0% ($4.12 billion to $5.89 billion) between 2001 and 2013. The percentage of school leavers in the Wellington region with NCEA level 2 or above increased from 54% in 2003 to 80% in 2013.

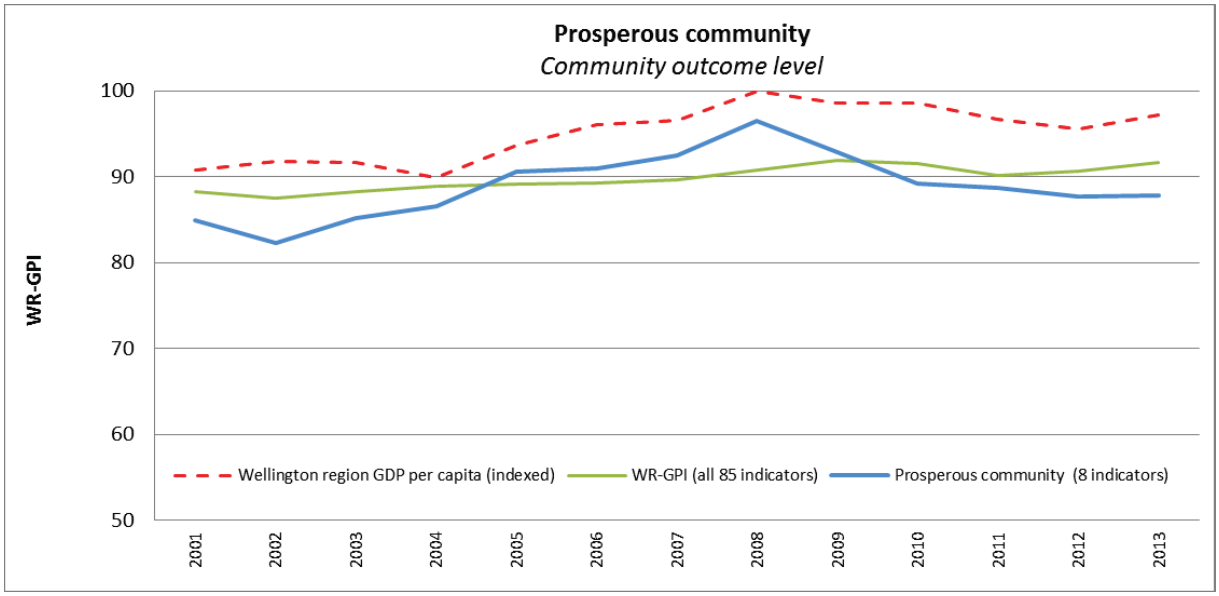
[15] The percentage of the workforce employed in highly skilled occupations in the Wellington region declined between 2001 and 2003 from 10.1 % to 8.9%, then rose steadily over the following years before fluctuating slightly in 2010 (down from 10.6% in 2009 to 10.4%) and then continued to increase to 11.5% in 2013. The national pattern was more varied, but also demonstrates growth when viewed across the entire 2001-2013 period.

Prosperous Community

IMPROVED

Outcome goal: All members of our community prosper from a strong and growing economy. A thriving business sector attracts and retains a skilled and productive workforce.

2001 to 2013 outcome: When viewed across the entire time series (2001 to 2013), the prosperous community index demonstrates improvement, despite being buffeted by a sharp decline in 2002 and the Global Financial Crisis post 2008.



Indicators		Well-being trend 2001 - 2013
PC001	Labour force participation	
PC002	Unemployment rate	
PC003	Employed people working and living in the same area	
PC004	P80/P20 ratio of equivalised gross weekly household income	
PC005	Purchasing power	
PC006	Value of household and community work	
PC007	Real value of residential & commercial building consents (including construction)	
PC008	Proportion of working age population with no educational qualifications	

Indicator symbol legend is provided in chapter 2, page 15

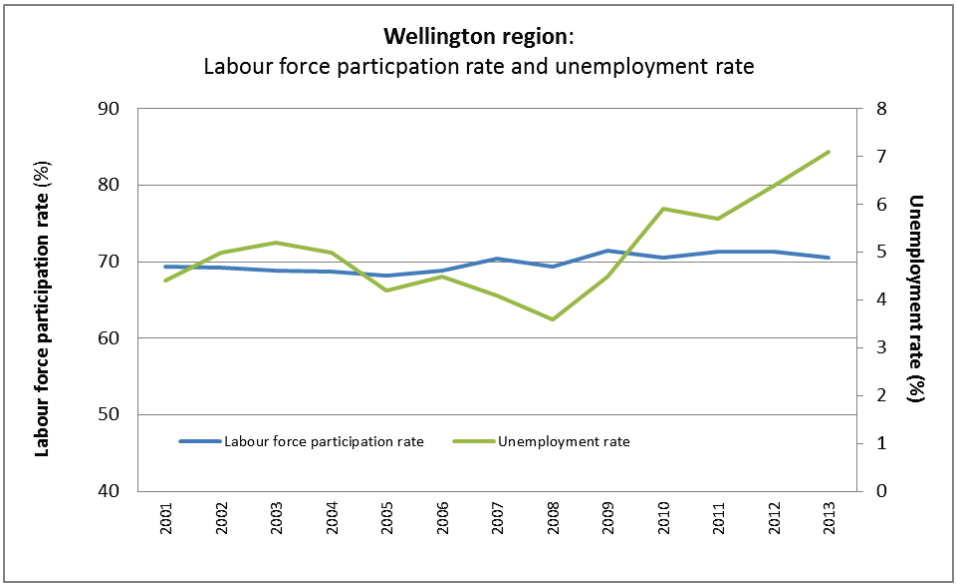
Prosperous community findings

As can be seen in the graph above, the prosperous community index of the WR-GPI rose steadily between 2002 and 2008. However, the economic impacts associated with the GFC created a sharp reversal of the positive trend at 2008, and the index was negatively affected for the following four years. Signs of recovery appeared in 2013, resulting in a net change between 2001 and 2013 of 3.32%. These dynamics are most strongly reflected in the trends in the value of building consents (see page x) and the unemployment rate.

Labour market

Of the eight indicators that constitute the prosperous community outcome, the unemployment rate had the most negative impact across the 2001 to 2013 time series. Despite the region's unemployment rate reaching a long-term low of 3.6% in 2008, it increased to 7.1% in 2013. This is significantly higher than the 2001 rate of 4.4% and slightly higher than the 2013 national rate of 6.7%. Unemployment represents an underutilisation of labour resources, and has the potential to constrain growth and restrict prosperity for all.

It is useful to examine the unemployment rate in conjunction with the labour force participation rate (which measures the percentage of the working age population that is employed or actively seeking employment). When viewed across the entire 2001 to 2013 time series, it is evident the region's labour supply has increased, despite fluctuations attributable to the GFC.[16] However, in the years following the GFC, an increasing amount of people have been unable to find work.[17] This presents a troubling trend, as it signals either a mismatch between the region's skill supply and labour demand, or indicates the number of available jobs has not kept pace with the moderate increase in the percentage of people willing and able to work during that period.



[16] The average annual change in the labour force participation rate (between 2001 and 2013) is 0.39%. Particular years have exhibited fluctuations, with the most influential changes occurring around the time of the GFC. The rate increased in 2007 by 2.33% (on 2006, equivalent to approximately 13,400 more people), then reduced by 1.42% in 2008 (approximately 12,600 less people; the greatest annual reduction in the time series). The rate increased again the following year by 3.03% (approximately 19,500 more people). In the years following 2009, annual change pivots around 1%, which is notably different to the first six years in the time series where annual change ranges between 0.29% and 0.88%.

[17] Note the unemployment rate decreased by 3.39% between 2010 and 2011, but continued to rise again in subsequent years.

Any economy requires skilled people, and the Wellington region appears to be performing well in regards to ensuring students obtain a satisfactory education before completing high school. The proportion of the region's working age population with no qualifications has decreased, and the percentage of school leavers completing their schooling with NCEA level 2 or higher has increased. Some of this success is likely to manifest within the region's labour market as it is reasonable to expect school leavers will eventually seek work within the region (tertiary education considered). When viewed across the 13 year time series, it is evident that the percentage of the labour force in highly skilled occupations has also increased.[18]

Education outcomes in the Wellington region have been steadily improving over time. However, the disconnect between labour force participation and unemployment emphasises the need for ongoing labour market research that enables better understanding of workforce dynamics. Moreover, labour market programmes should be focused on ensuring skills training and attraction initiatives are appropriate to the current and future needs of the region's economy.

Income and purchasing power

Income is crucial to people's quality of life as most basic needs, such as food, housing, energy (e.g. electricity), transport, health care and many forms of recreation have to be purchased. The affordability of these goods or services governs the quality, quantity and continuity available to people, families and households. Household 'purchasing power' (see page x) provides a useful measure of a household's capacity to purchase these necessities with available income.

The purchasing power of households in the Wellington region has fluctuated between 2001 and 2013. However the overall trend has been upwards, with purchasing power strengthening by 10.9% over the past 13 years. On average, households in the Wellington region have a higher purchasing power than New Zealand households overall.

Inequality

There is a growing body of evidence that indicates that not only income, and its related purchasing power, but also the distribution of income – the gap between rich and poor and the extent of income inequality – has a direct affect upon people's well-being. Income inequality in the Wellington region is more accentuated than for New Zealand overall. The P80/P20 ratio of equivalised gross weekly household income for the region[19] is consistently higher than that for New Zealand (when viewed across the entire study period). The degree of income inequality in the region has also increased during the time monitored. This high and increasing level of income inequality is expected to have implications on the overall well-being of people living in the region.

Household and community work

The valuable services resulting from unpaid household and community work (such as childcare) contribute directly to the community's well-being and prosperity, but tend to be excluded in conventional economic statistics. Yet the value of household and community work made the biggest contribution to the increase in the prosperous community outcome area in the 13 year period monitored. The value at 2013 for the Wellington region is estimated at $5.9 billion, a 43% increase on the 2001 estimate of 4.1 billion.

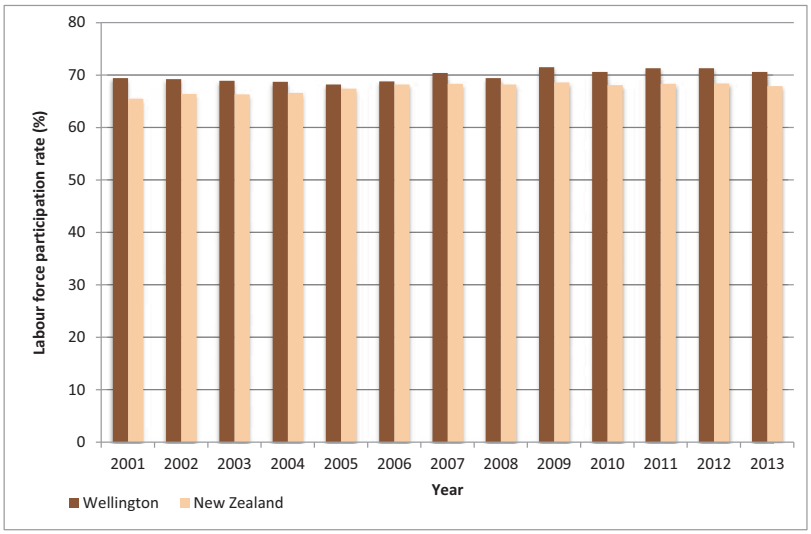
[18] Percentage of school leavers with NCEA level 2 or higher and percentage of the labour force in highly skilled occupations are both Entrepreneurial and Innovative Community indicators, see the next section for more detail.
[19] The P80/P20 ratio is calculated as the ratio of the household income at the 80th percentile (i.e. 20% below the wealthiest household) to the household income at the 20th percentile (i.e. 20% above the lowest income household).

PC001: Labour force participation

The labour force participation rate has fluctuated, but exhibits an overall increase when viewed across the entire time series (2001 to 2013).

The labour force participation rate is the percentage of the working age population which is employed or actively seeking employment. The participation rate indicates how people's willingness and ability to participate in the job market changes over time, relative to changes in the size of the working age population. The size of the labour force impacts the region's and New Zealand's capacity to produce goods and provide services. Short-term changes in the participation rate are often linked to job market conditions. A job market in which employment is growing often encourages more people to participate.

Labour force participation



Source: Statistics New Zealand Household Labour Force Survey

Findings

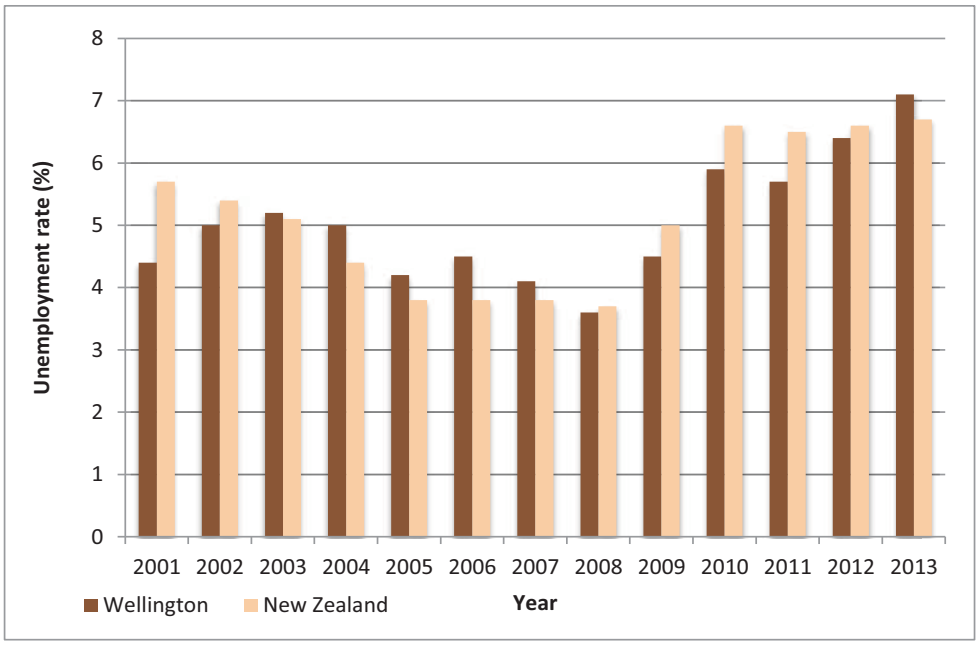
- The Wellington region labour force participation rate was 70.6% in 2013.
- When viewed across the entire 2001 to 2013 time series, the average annual change is 0.39%.
- In the years following 2009, annual change pivots around 1%, which is notably different to the first six years in the time series where annual change ranges between 0.29% and 0.88%.
- Particular years have exhibited fluctuations, with the most influential changes occurring around the time of the GFC. The rate increased in 2007 by 2.33% (on 2006, equivalent to approximately 13,400 more people), then reduced by 1.42% in 2008 (approximately 12,600 less people; the greatest annual reduction in the time series). The rate increased again the following year by 3.03% (approximately 19,500 more people).
- The Wellington region labour force participation rate was consistently higher than the national average rate between 2001 and 2013. However, over this period the New Zealand participation rate increased by 3.7% compared to only a 1.7% increase in the Wellington region. In 2013, the Wellington region labour force participation rate was 2.7% higher than the participation rate for New Zealand overall.

PC002: Unemployment rate

The 2013 annual unemployment rate has increased compared to 2001

Unemployment represents an underutilisation of labour resources, and has the potential to constrain growth and restrict prosperity. At an individual and family level, unemployment is associated with financial insecurity, stress, poor health outcomes, and a wide range of social problems. These issues can worsen if a person remains unemployed for a sustained period.

Unemployment rate



Source: Statistics New Zealand Household Labour Force Survey

Findings

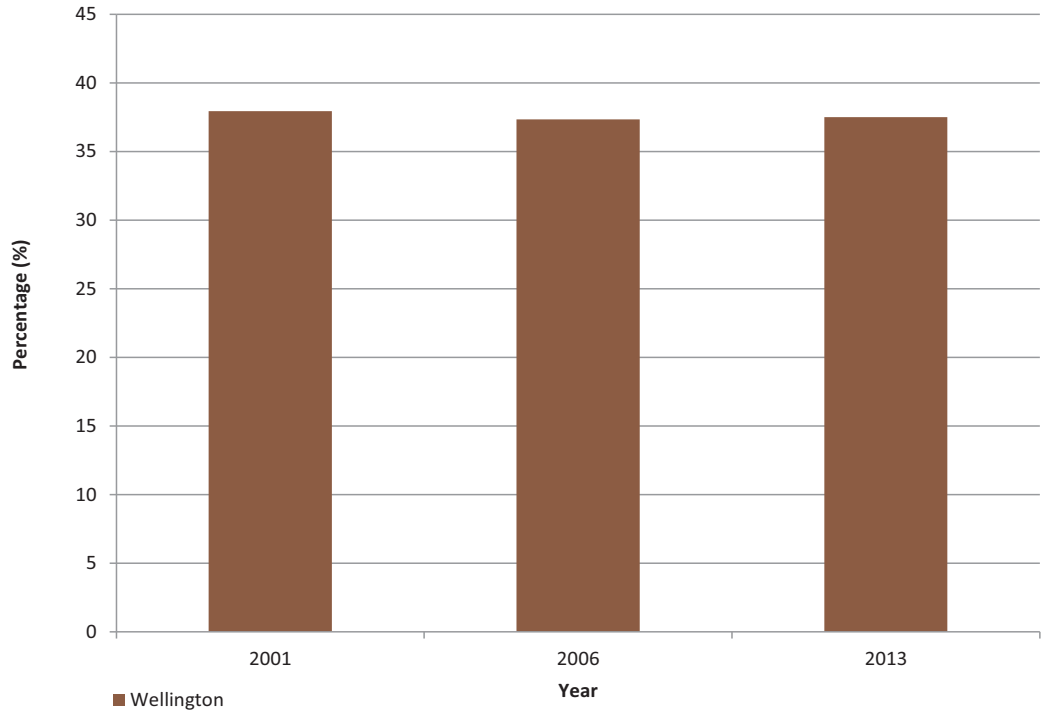
- In 2013, the unemployment rate in the Wellington region was 7.1%.
- The unemployment rate in the Wellington region increased from 2001 to 2003, and then decreased to its lowest level over the 2001-2013 period in 2008. However, since the unemployment rate has increased.
- Similar changes in the unemployment rate have been observed for New Zealand as a whole, but have plateaued since 2010.
- In 2013, the unemployment rate in the Wellington region jumped above the overall New Zealand rate.

PC003: Employed people working and living in the same area

There has been little change in the percentage of residents living and working in the same area between 2001 and 2013

People whose home and workplace are located in the same area are more likely to shop locally and be more engaged in the local community, contributing to community resilience and increasing social connectedness. Local employment provides numerous co-benefits, for example shorter commute distances result in lower fuel costs and a reduction in transport-related greenhouse gas emissions and can improve health outcomes through increased commuter walking and cycling.

Prevalence of employed people working and living in the same area



Source: Statistics New Zealand Census

Findings

- In 2013, 37.5% of employed Wellington region residents lived in the same area in which they worked.
- The percentage of employed residents living and working in the same area has remained relatively unchanged between 2001 and 2013 (38.0% to 37.5%).

Technical notes

Data points available only for 2001, 2006 and 2013.

Area refers to sectors which are larger than suburbs but smaller than Territorial Authority boundaries. For example: Wellington CBD, Wellington East, Lower Hutt North and Paraparaumu.

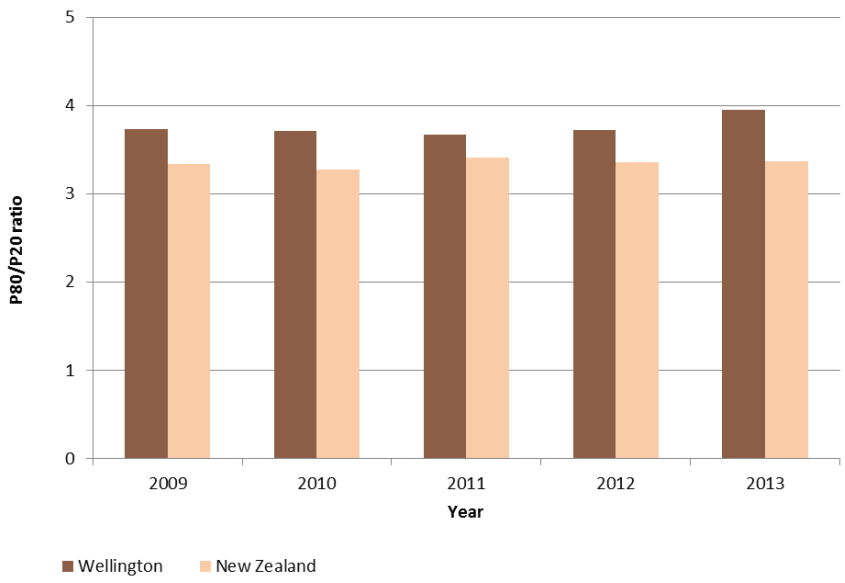
PC004: P80/P20 ratio of equivalised gross weekly household income

Income inequality increased slightly between 2009 and 2013

Income equality is often regarded as a measure of the fairness of the society in which we live. A high level of income inequality may be detrimental to the level of social connectedness across society and research has suggested a negative relationship between income inequality and other factors with an influence on well-being such as trust, social mobility, health outcomes, and the rate of imprisonment.

The P80/P20 ratio is calculated as the ratio of the household income at the 80th percentile (i.e. 20% below the wealthiest household) to the household income at the 20th percentile (i.e. 20% above the lowest income household) (Perry, 2005). Overall, as household income inequality increases, the P80/P20 ratio also increases, and therefore the more unequal society is.

P80/P20 ratio of equivalised gross weekly household income



Source: Statistics New Zealand Household Economic Survey

Findings

- In the year ending June 2013, the P80/P20 ratio of equivalised gross weekly household income in the Wellington region was 3.95, up from 3.72 in the previous year.
- Between 2009 and 2012 there was very little change in the ratio for the Wellington region. The most significant change occurred between 2012 and 2013.
- The ratio has been consistently higher in the Wellington region than for New Zealand overall. The ratio for New Zealand at 2013 was 3.37. The national ratio has been relatively consistent across the period shown.

Technical notes

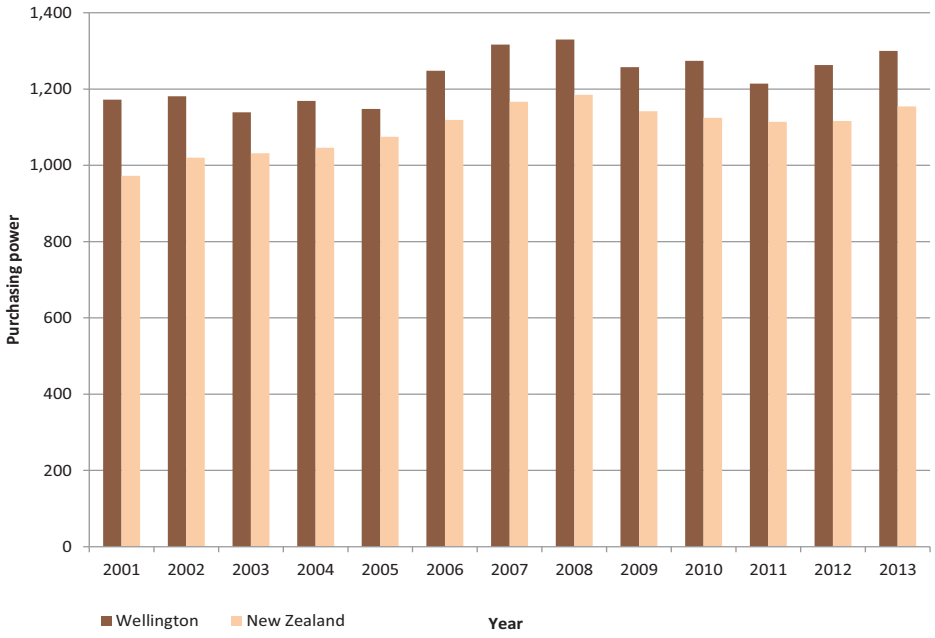
Data points available only from 2009. Dates are for the year ending June.

PC005: Purchasing power

Household purchasing power was greater in 2013 compared to 2001

Purchasing power is measured as the amount of goods or services that can be purchased with a unit of currency. If household income stays the same but the price of goods and services increases, the purchasing power of household income falls. Households with lower purchasing power can suffer adverse health effects from not having decent living conditions or adequate access to resources, such as health care, nutritious food, and housing, which in turn affects overall well-being.

Purchasing power



Source: Statistics New Zealand Household Economic Survey

Findings

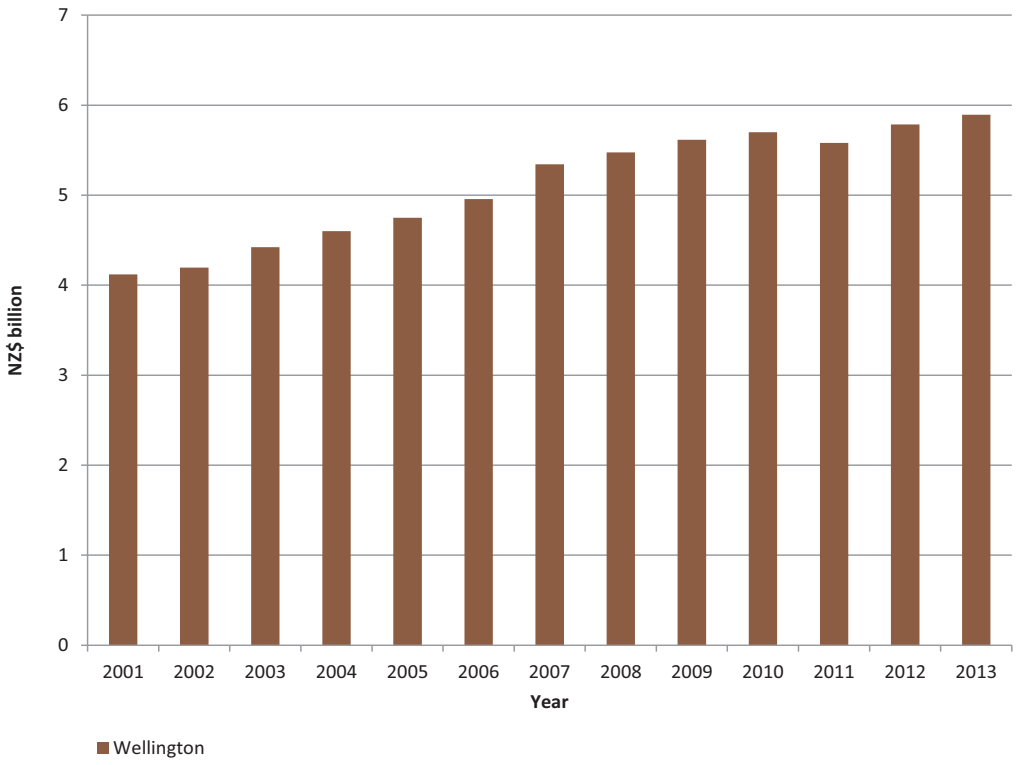
- In 2013, the CPI-adjusted median weekly household income in the Wellington region was $1,300.
- The purchasing power of households in the Wellington region has fluctuated between 2001 and 2013. The trend has been upwards, increasing from $1,172 to $1,300, indicating that households had 10.9% more purchasing power in 2013 compared to 2001.
- From 2001 to 2013, the purchasing power of households in the Wellington region was consistently above the national median.

PC006: Value of household and community work

The value of household and community work has increased between 2001 and 2013

The valuable services resulting from unpaid household and community work contribute directly to our well-being and prosperity, but tend to be excluded in conventional economic statistics. As well as the economic value of these unpaid services, it has been argued that the work performed in households is more essential to basic survival and quality of life than much of the work done in the market place. Also a society's commitment to community work is a measure of the strength of its social networks and social cohesion.

Value of household and community work



Source: Statistics New Zealand Time Use Survey

Findings

- In 2013 the value of unpaid household and community work in the Wellington region was estimated to be $5.89 billion .
- The value of unpaid household and community work in the Wellington region is estimated to have increased by 43.0% ($4.1 billion to $5.9 billion) between 2001 and 2013.

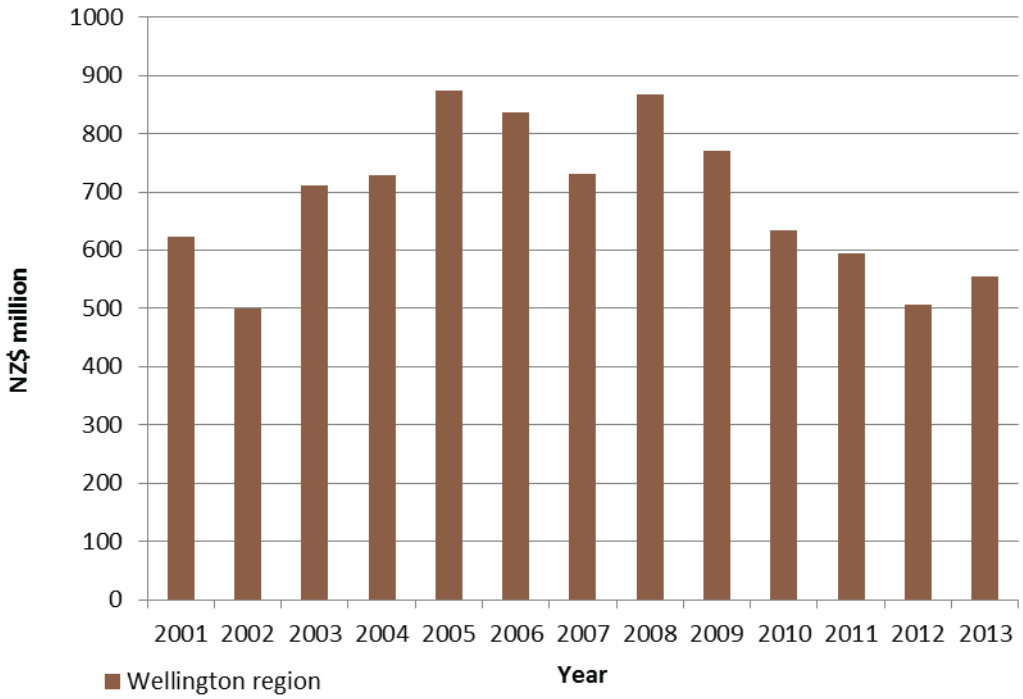
PC007: Real value of residential and commercial building consents

(including construction)

The value of building consents was lower in 2013 than 2001

The value of building consents are considered to align with business confidence in the regional economy. If a business or individual is willing to invest in the fixed capital expenditure of property development they must be confident that conditions within the economy will maintain current levels or have the potential to improve.

Real value of building consents



Source: Statistics New Zealand building consents

Findings

- In 2013, the real value of building consents in the Wellington region was $553 million.
- Between 2001 and 2013, the real value of building consents in the Wellington region fluctuated. However, it was 11.2% lower in 2013 at $553 million compared to $623 million in 2001.

Technical notes

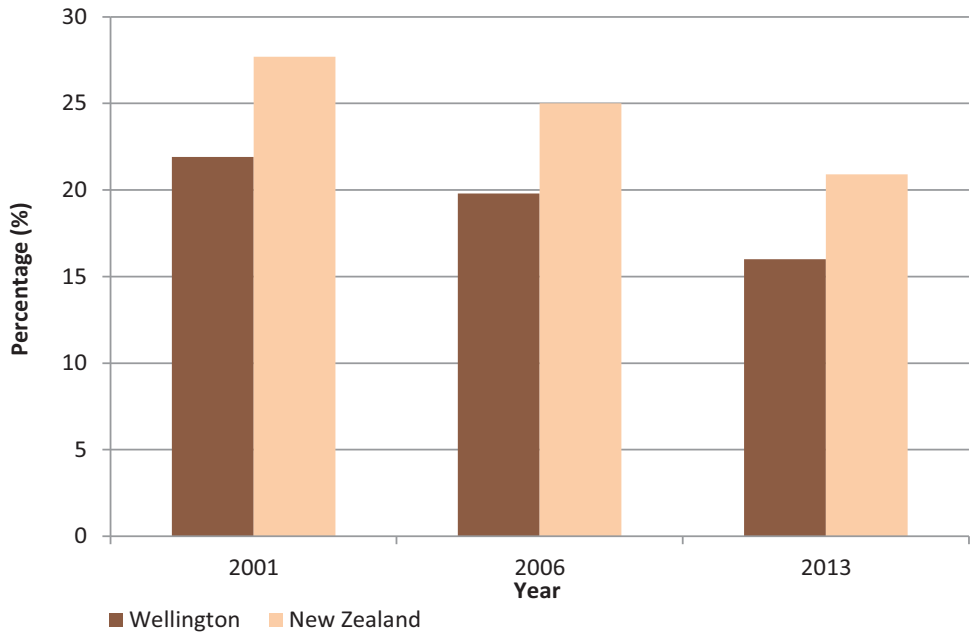
Real value figure is the sum of 'Total building and construction' and 'Apartments'. Figure only includes construction work that requires a building consent. Some civil engineering works, such as roads, require resource consents but not building consents, so are not included. Figures have been adjusted to real value using the Consumer Price Index (CPI) for the corresponding year.

PC008: Percentage of the working age population with no educational qualification

The percentage of the working age population with no educational qualifications decreased significantly between 2001 and 2013

The educational attainment of the adult population is an indicator of the skills available to the economy. The level of formal educational qualifications is a commonly used proxy for human capital. A higher level of human capital can improve economic efficiency by providing organisations and individuals with knowledge and skills. Educational attainment is also important for participation in society and personal satisfaction.

Percentage of the working age population with no educational qualifications



Source: Statistics New Zealand Census

Findings

- The percentage of the working age population in the Wellington region with no educational qualifications was 16.0% in 2013, a significant decrease from 2001 (21.9%).
- The percentage of the working age population in the Wellington region with no educational qualifications was substantially below the national rate throughout the 2001-2013 period. The national rate also decreased between 2001 and 2013 (27.7% to 20.9%).

Technical notes

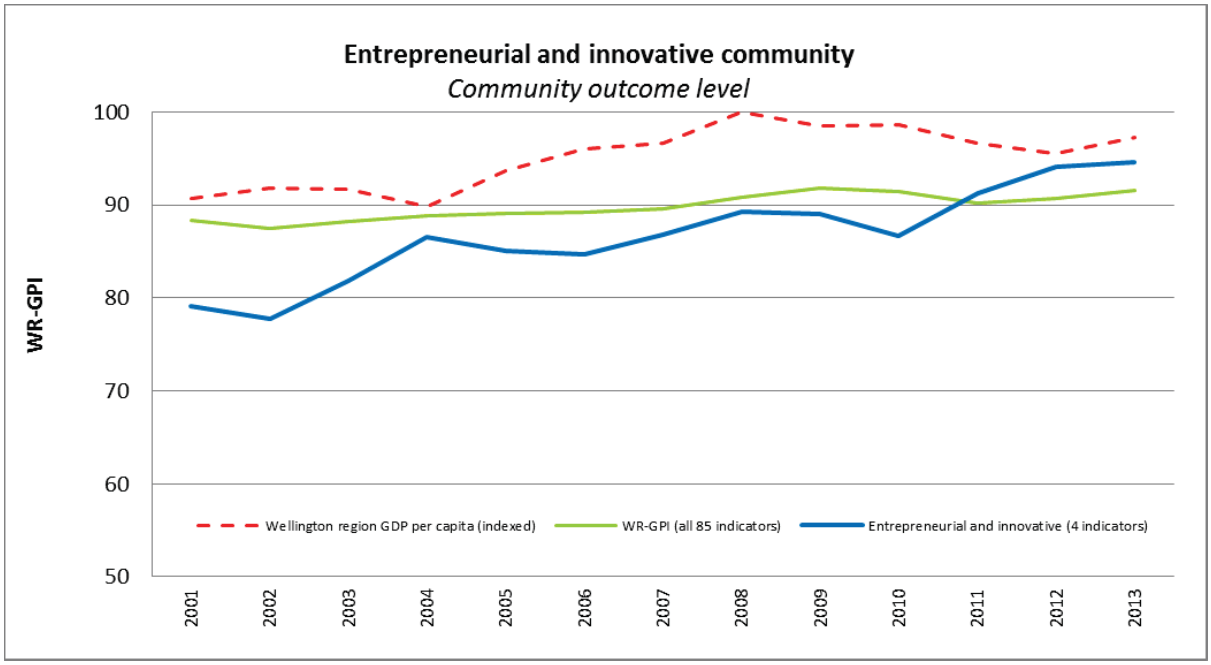
Data points available only for 2001, 2006 and 2013.

Entrepreneurial and innovative community

IMPROVED

Outcome goal: Innovation, creativity and new endeavours are welcomed and encouraged. Ideas are exchanged across all sectors, resulting in a creative business culture. We have excellent education and research institutions, and benefit from being the seat of government.

2001 to 2013 outcome: The entrepreneurial and innovative community outcome index has improved across the 2001 to 2013 period.



Indicators		Well-being trend 2001 - 2013
EI001	Percentage of GDP spent on research and development	↑
EI002	Business start-ups as a percentage of business turnover	→
EI003	Percentage of workforce employed in highly skilled occupations	↑
EI004	Proportion of school leavers with NCEA Level 2 or above	↑
	Indicator symbol legend is provided in chapter 2, page 15	

Entrepreneurial and innovative community outcome findings

There is evidence of substantial gains in the index that represents the entrepreneurial and innovative community outcome, as three out of four indicators exhibit improvement when viewed across the entire period.[20] Alongside the positive influence of the education related indicators (discussed in the previous section), the proportion of GDP spent on R&D also increased significantly.

The increase in expenditure on R&D (as a percentage of GDP) is particularly evident in the last two years for which data is available (2010 to 2012). This surge follows a relatively flat period between 2004 and 2010 and solidifies the upward trend across the time series, demonstrating a commitment to R&D in the region. R&D is considered fundamental to developing a dynamic economy capable of competing successfully on the international stage.

The strength attributed to the positive trends amongst many of the economic indicators discussed above (chiefly those related to education and R&D), does not appear to be manifesting in robust business growth. The 'business start-ups as a share of business turnover' indicator is considered a reliable measure of business activity and confidence (see page x). The greater the level of business confidence the more likely people are to enter into entrepreneurial activities. The number of new businesses starting up gives an indication of the vitality of entrepreneurship in the region, and business start-ups as a share of business turnover provides an indication of business activity as a whole.

Significant improvements were evident between 2001 and 2004, but that growth period was followed by a downturn which lasted to 2010. Subsequently the rate increased, however the levels attained in the last three years of the time series are similar to those achieved in the first two, with the result for 2013 being just 1% higher that in 2001.

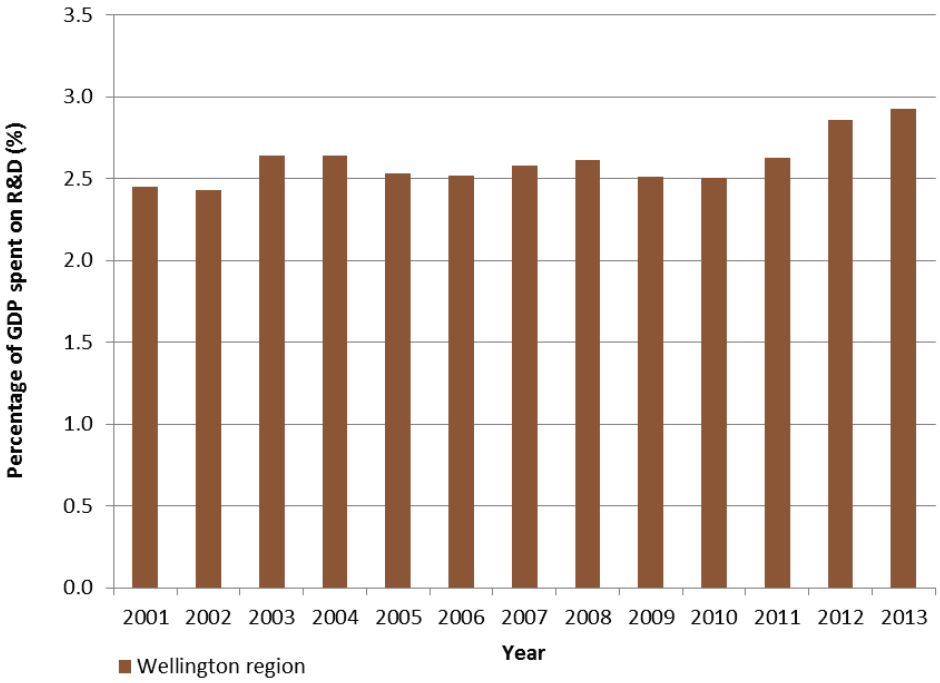
[20] Between 2001 and 2013, the Entrepreneurial and Innovative community outcome has been on a clear upward trend, despite notable dips in 2002 (to the lowest points of the series), 2005–2006 and 2009–2010. There was a strong rise between 2002 and 2004, a relatively minor dip for a couple of years, and then a return to less rapid growth. The late 2000s saw a slowdown in this index, but the trend upwards returned with strong growth between 2010 and 2012, before flattening off in 2013. Over the full period from 2001 to 2013 the entrepreneurial and innovative community GPI increased by 19.53%.

EI001: Percentage of GDP spent on research and development

The percentage of GDP spent on research and development has increased since 2001

Research and development (R&D) is important for economic growth and for sustaining a dynamic economy capable of competing successfully on the international stage. R&D generates new knowledge which in turn leads to innovation and positive change that can also improve well-being.

Percentage of GDP spent on research and development



Source: BERL

Findings

- In 2013, 2.93% of GDP in the Wellington region was spent on R&D.
- The percentage of GDP spent on R&D in the Wellington region increased by 19.4% between 2001 and 2013

Technical notes

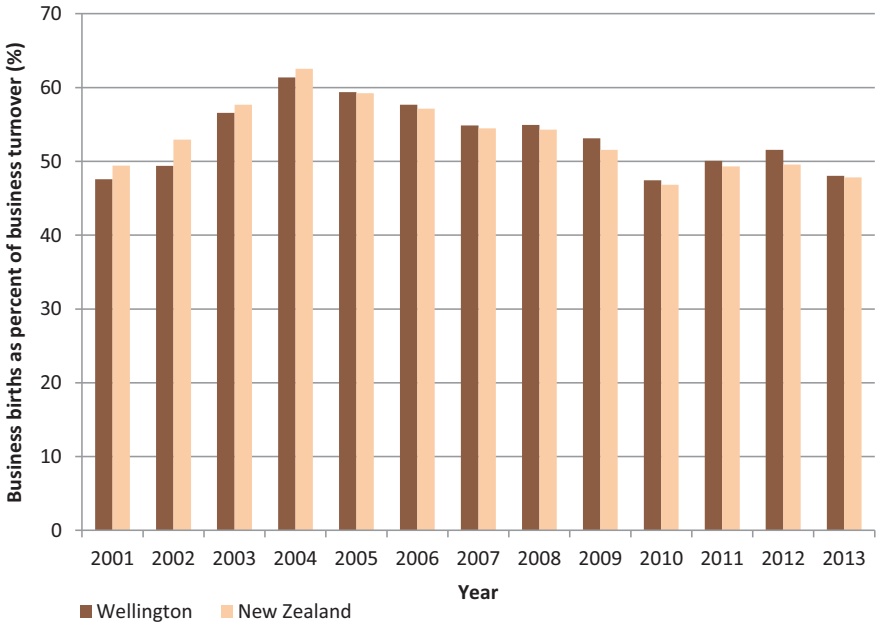
The methodology used to determine the percentage of GDP spent on R&D in the Wellington region is derived from the Statistics NZ Research & Development survey (and has been modified since the 2011 WR-GPI was published). The spend proportions of relevant sectors are allocated uniformly across the time series. Comparison between the Wellington region and New Zealand is not appropriate as the assumptions made for the Wellington region are context specific and differ to those applied at a national level.

EI002: Business start-ups as a share of business turnover

There was a very small net increase (0.46%) in business start-ups relative to business turnover between 2001 and 2013.

This indicator is considered a reliable measure of business activity. Business turnover is defined as the sum of business start-ups and closures. Business start-ups as a share of business turnover is used as a proxy measure for gauging the level of entrepreneurial activity in the economy.

Business start-ups as a share of business turnover (start-ups and closures)



Source: Statistics New Zealand

Findings

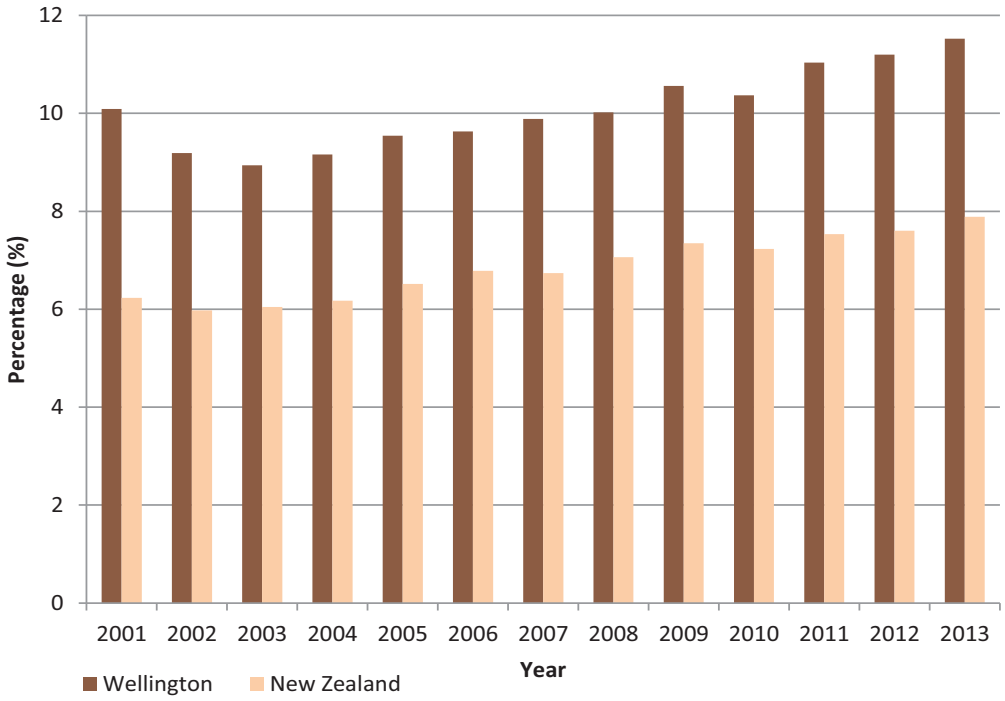
- In 2013, business start-ups made up 48% of business turnover in the Wellington region, indicating that the number of business start-ups was slightly less than the number of business closures.
- Since Statistics New Zealand improved its data collection methods in 2004, data has shown that the number of business start-ups has been higher than the number of closures in all years except 2010 and 2013. However, the number of start-ups has gradually decreased since 2004 and levelled off since 2010 at around 50%.
- A similar profile is also observed for New Zealand as a whole over this time.

EI003: Percentage of workforce employed in highly skilled occupations

The percentage of the workforce employed in highly skilled occupations has increased slightly since 2001

The skills available within a region impact the region's capacity to support particular industries and consequently its economic outlook. Areas where the requisite skills base and knowledge capacity are in place are more likely to attract particular industries, which will lead to more dynamic economic outcomes. For this indicator, these industries include professional, scientific and technical services occupations.

Percentage of workforce employed in highly skilled occupations



Source: Statistics New Zealand Business Frame

Findings

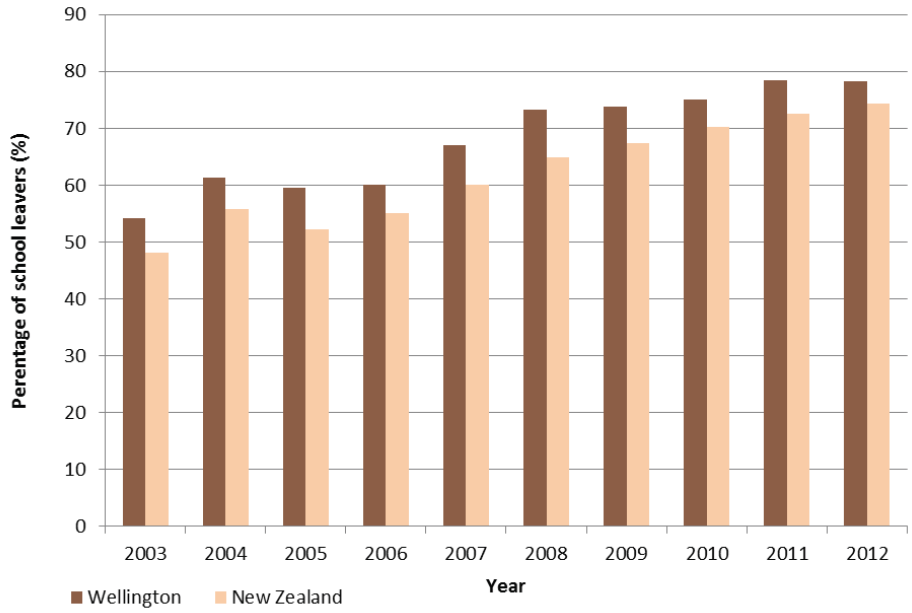
- In 2013, 11.5% of the Wellington region workforce was employed in professional, scientific or technical services occupations.
- The percentage of the workforce employed in these occupations has increased slightly, from 10.1% in 2001 to 11.5% in 2013.
- The percentage of the workforce employed in highly skilled occupations in the Wellington region was consistently substantially higher than the national rate between 2001 and 2013, which was 6.2% in 2001 and reached 7.9% in 2013.
- Definition of highly skilled occupations differs to that used in the 2011 WR-GPI publication.

EI004: Percentage of school leavers with NCEA level 2 or above

The percentage of school leavers with NCEA level 2 or above has increased since 2003

Upper secondary school qualifications, currently NCEA level 2, serves as the foundation for higher (post-secondary) learning and training opportunities as well as the preparation for direct entry into the labour market. Those that leave education early with few qualifications are at much greater risk of unemployment or vulnerability in the labour force, and are more likely to have lower incomes, and fewer employment opportunities than those with higher qualifications.

Percentage of school leavers with NCEA level 2 or above



Source: Ministry of Education

Findings

- In 2013, 80% of school leavers in the Wellington region left school with a qualification at NCEA level 2 or above.
- The percentage of school leavers in the Wellington region with NCEA level 2 or above increased from 54% in 2003 to 80% in 2013.
- A similar trend was observed for New Zealand overall, however the percentage of school leavers in the Wellington region with NCEA level 2 or above was consistently above the national rate from 2003 to 2012.

Technical notes

Data points available only for years shown. Due to changes in the qualification structure, it is not possible to compare exactly the attainment of upper secondary school students who left before 2003 with those who left in 2003 or later.

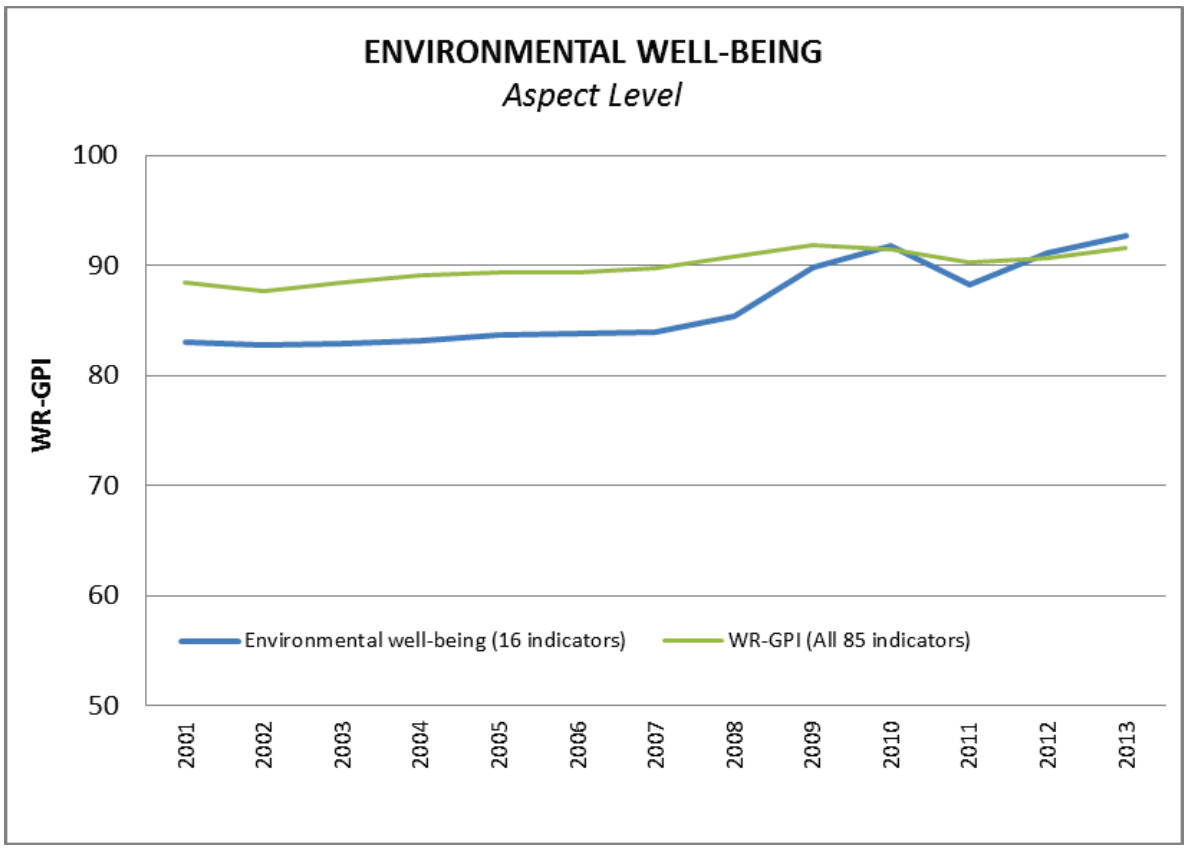
ENVIRONMENTAL WELL-BEING

IMPROVED

Environmental well-being is defined as: Meeting the needs of today's generation, without reducing the ability of future generations to meet their own needs.

2001 to 2013 outcome: Environmental wellbeing increased by 11.6% between 2001 and 2013.

The environmental well-being aspect of the WR-GPI contains one community outcome and 16 indicators are used to measure change occurring within them. In the graph below the composite of all the environmental indicators is plotted across the 2001 to 2013 time series. The composite of the entire WR-GPI (all 85 indicators) is provided for reference.



Healthy environment

Healthy environment outcome goal: We have clean water, fresh air and healthy soils. Well functioning and diverse ecosystems make up an environment that can support our needs. Resources are used efficiently. There is minimal waste and pollution.

Indicators		**Well-being trend** 2001 - 2013
HE001	Air quality	↑
HE002	Residents rating of air pollution as a problem	↓
HE003	Fresh water suitability for recreation	↑
HE004	Coastal / marine water suitability for recreation	↑
HE005	Groundwater quality	↑
HE006	Stream and river health	→
HE007	Per capita water supply	↑
HE008	Soil quality of dairy farm sites	↓
HE009	Soil quality of drystock sites	↓
HE010	Solid material diverted from landfill per capita	→
HE011	Solid landfill waste per capita	↑
HE012	QEII covenanted areas	↑
HE013	Erosion prone land under effective management	↑
HE014	Total ecological footprint	?
HE015	Total energy consumption per capita	↑
HE016	Greenhouse gas emissions per capita	↑

Indicator symbol legend is provided in chapter 2, page 15

Because there is only one community outcome,
the results are plotted at the aspect level on the previous page.

Healthy environment findings

The Healthy Environment community outcome of the WR-GPI exhibits a flat trend between 2001 and 2008 then lifts significantly between 2008 and 2010. The trend then declines sharply between 2010 and 2011, but improves again over the next two years to provide the best result of the time series in 2013. Overall the data demonstrates an 11.6% increase in the region's environmental well-being between 2001 and 2013.

Environmental issues are complex and it is not possible to monitor the entire region comprehensively. Therefore, it is likely that some environmental concerns have not been captured within the WR-GPI indicators. The WR-GPI is subject to regular reviews and inclusion of other data sets will be considered where satisfactory data becomes available. Nonetheless, the environmental indicators included in the WR-GPI provide an overarching picture and demonstrate the change occurring amongst a number of environmental variables, including resource management activities (e.g covenanted land and waste diverted from landfill).

The flat, but slowly rising trend between 2001 and 2008 can be explained by a number of indicators which exhibit a gradual improvement across the entire time series. Many environmental changes tend to occur slowly, and so trends of this type are not unusual.

The steep rise in the trend exhibited between 2008 and 2013 is attributable to improvements in the fresh and coastal recreational water indicators, along with a dramatic decrease in the amount of green-house gas (GHG) emissions per capita and waste sent to landfill. The area of land under protective covenants also improved greatly around this time. The sharp fluctuations in the trend visible in the latter part of the time series (2008 to 2013) are to some degree exacerbated by specific indicators only providing data in those particular years. This affect is expected to lessen as the WR-GPI develops a longer time series.

The sharp drop between 2010 and 2011 can be attributed to a perfect storm where a number of indicators exhibit sudden detrimental change. These include indicators that actually demonstrate improvement when viewed across the entire time series such as; stream and river health, landfill waste and GHG emissions per capita. Two indicators associated with the sharp 2010-11 decline that have not shown signs of improvement however are soil quality of dairy farm sites and residents rating of air pollution. Interestingly the air quality indicator, despite fluctuating throughout the time series, has in fact improved across the 2001 to 2013 period.

All indicators relating to water quality exhibit positive trends. Coastal/marine water and freshwater suitability for recreation improved over the entire time series. Stream and river health remained constant.[21] Per capita water supply (a measure of sustainable water consumption) improved demonstrating greater efficiency in distribution and consumption.

[21] Water quality has a direct impact on the ecological health of rivers and streams. The 'healthiest' rivers and streams in the Wellington region are located in catchments dominated by indigenous forest cover and where human influences are minimal.

Soil quality indicators (measured at drystock and dairy farm sites) have both declined. Soil quality changes very slowly and so a longer time series will be required to demonstrate the true impact of activity occurring in these locations.

Landfill diversion per capita decreased, although the change exhibited is marginal. In contrast, the amount of waste actually interred in landfills reduced dramatically. When viewed together, this may indicate that the region is producing less waste.

Covenanted land increased across the time series as did the amount of erosion prone land under effective management.

Energy consumption has decreased across the time series, as has GHG emissions (though this has fluctuated more).

The project from which the region's ecological footprint[22] was calculated in 2004 has been discontinued and so no updated data is available.

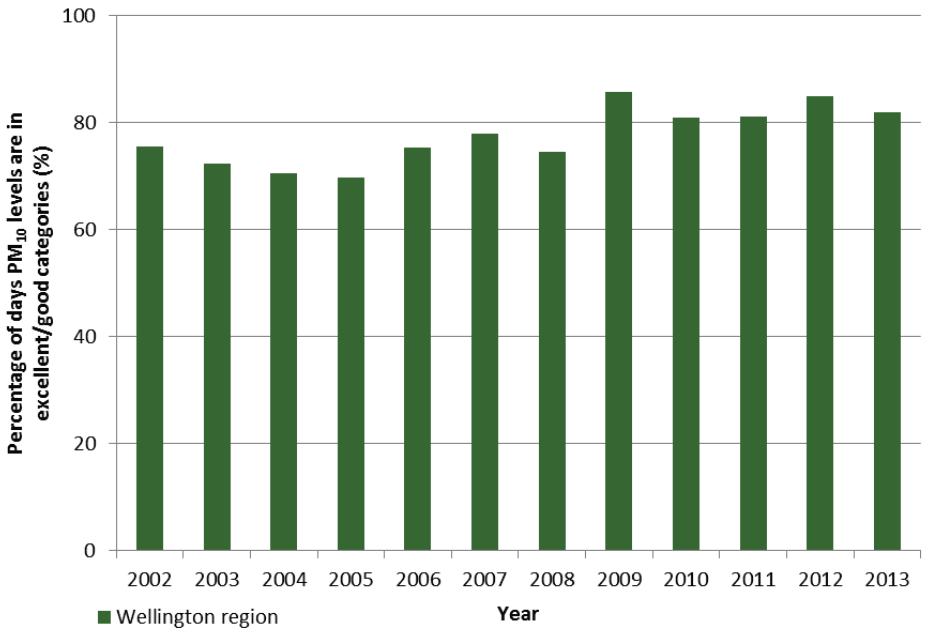
[22] The 2004 project which provided a calculation for the Wellington region's ecological footprint was a collaboration between the then Auckland Regional Council, Greater Wellington and Ministry for the Environment. The ecological footprint of a place is an estimate of the amount of biologically productive land and sea area needed to regenerate (if possible) the resources a human population consumes and to absorb and render harmless the corresponding waste. The Wellington region's ecological footprint (as measured at 2004) is below the New Zealand average. The main factor that seems to contribute to the relatively low per capita footprint is the efficiency achieved through the concentration of the urban population in the Wellington region. However, even with this relatively low ecological footprint, the Wellington region does have an ecological deficit, that is, it uses more land in domestic consumption than there is available land.

HE001: Air quality

Air quality is within acceptable limits most of the time, and has improved slightly over the last decade

Without clean air, we can expect ongoing damage to our health, our ecosystems and our economy. Long-term exposure to suspended particles (PM_{10}) is linked to adverse health effects in the population. Air quality varies from year-to-year and from place to place due to the effect of weather and topography on the dispersion of air pollutants.

Air quality



Greater Wellington Regional Council

Findings

- Air quality in the region is within acceptable limits in most places, most of the time.
- In 2013, PM_{10} concentrations at monitored sites in the Wellington region were at good/excellent levels on 82% of days.
- Even though the number of monitoring sites has changed over the study period, long-term trends show a slight improvement in the region's air quality.

Technical notes

Data points available only for 2002 to 2013.

Only selected sites around the region are monitored, and the number of sites monitored has changed over the study period.

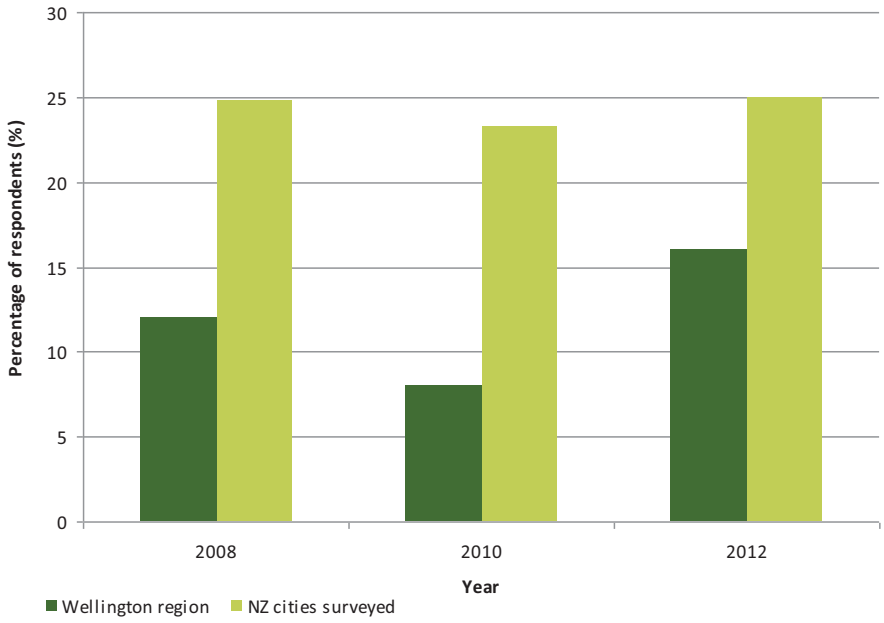
More information is available at www.gw.govt.nz/Annual-monitoring-reports/

HE002: Rating of air pollution

The proportion of residents that perceived air pollution to have been a problem in the last 12 months increased between 2008 and 2012

Good air quality is fundamental not only to people's health and well-being but also to the quality of the natural and physical environment. Air pollution can reduce our level of enjoyment of a place and affect the overall perception of our region.

Rating of air pollution



Source: Quality of Life Survey

Findings

- In 2012, 16% of the Wellington region respondents perceived air pollution to have been a problem within the last 12 months.
- The percentage of Wellington region respondents that thought that air pollution had been a problem within the last 12 months doubled between 2010 and 2012 from 8% to 16% and was also higher than the 2008 rate of 12%.
- Compared to respondents in the NZ cities surveyed, a lower percentage of Wellington region respondents perceived air pollution to have been a problem within the last 12 months, an observation that is consistent in each survey year.

Technical notes

Data points available only for 2008, 2010 and 2012.

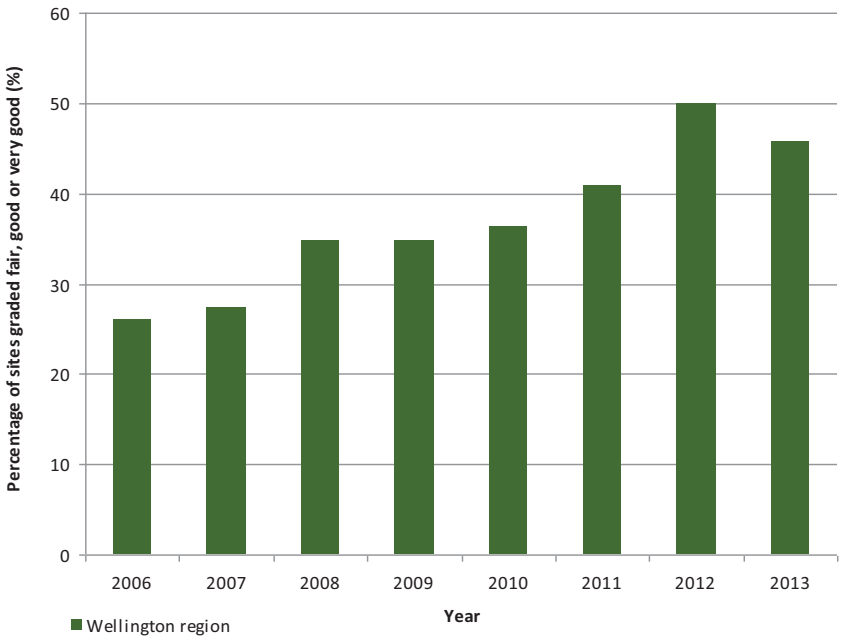
New Zealand cities surveyed: Auckland, Christchurch, Dunedin, Wellington, Porirua and Hutt.

HE003: Fresh water suitability for recreation

Recreational freshwater sites attaining grades of fair, good or very good increased between 2006 and 2013

Clean water for recreational purposes is fundamental to ensuring people are not exposed to health risks. Clean freshwater is also important for tourism and fishing activities.

Fresh water suitability for recreation



Source: Greater Wellington Regional Council

Findings

- In 2013, 46% of monitored fresh water recreation sites were given suitability for recreation grades of fair, good or very good over the summer bathing months, down from 50% in 2012.
- Even though the number of monitoring sites has changed slightly over the study period, long-term trends show an increase in the number of freshwater sites with a suitability for recreation grades of fair or better.

Technical notes

Data points available only for 2006 to 2013.

Only selected sites around the region are monitored, and the number of sites monitored has changed over the study period. Measurements are only taken over the summer bathing months.

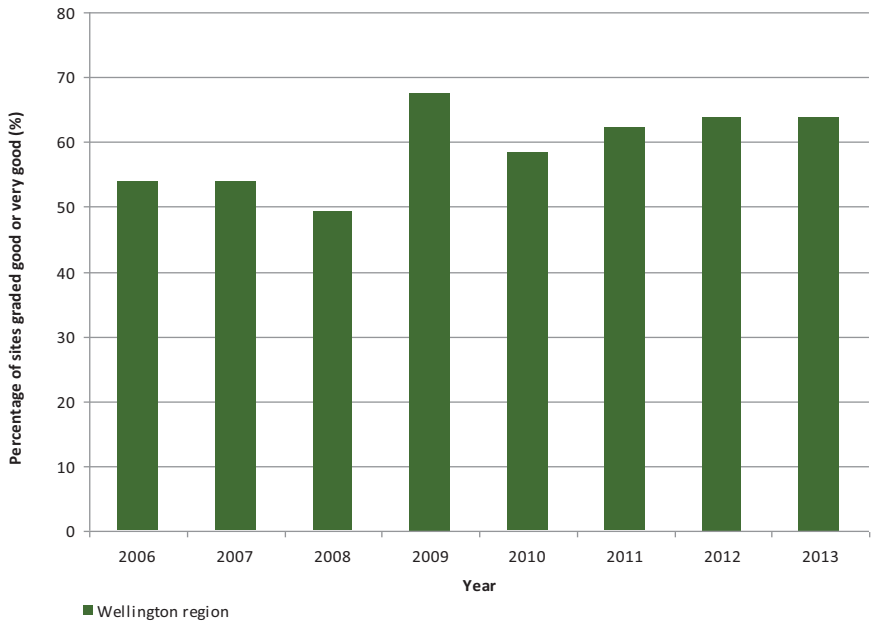
More information is available at www.gw.govt.nz/Annual-monitoring-reports/

HE004: Coastal/marine water suitability for recreation

Long-term trends indicate a gradual increase in coastal/marine water sites with suitability for recreation grades of good or very good

The region's coasts are widely used for a range of recreational activities such as swimming, sailing, surfing, water skiing and underwater diving. Clean coastal water is important for tourism and is fundamental to many New Zealanders' quality of life. Maintaining and protecting coastal water quality is therefore an important economic, public health and resource management issue.

Coastal/marine water suitability for recreation



Source: Greater Wellington Regional Council

Findings

- Coastal/marine recreation sites exhibit better suitability for recreation grades than freshwater sites (see previous indicator).
- In 2013, 64% of monitored coastal/marine recreation sites were given suitability for recreation grades of good or very good over the summer bathing months.
- Long-term trends indicate a slight increase in the percentage of coastal/marine recreation sites with suitability for recreation grading of good or very good.

Technical notes

Data points available only for 2006 to 2013.

Only selected sites around the region are monitored, and the number of sites monitored has changed over the study period. Measurements are only taken over the summer bathing months.

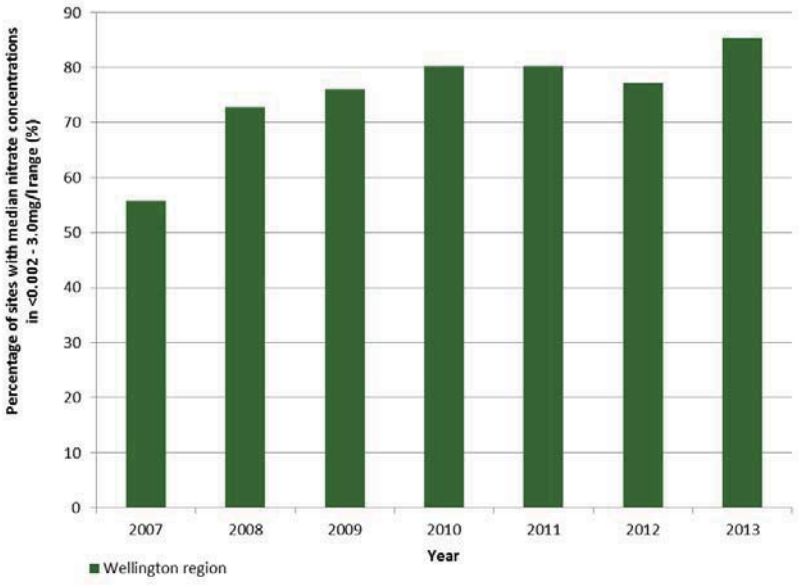
More information is available at www.gw.govt.nz/Annual-monitoring-reports/

HE005: Groundwater quality

Ground water quality has improved over the study period

Nitrate is a commonly measured indicator of groundwater quality. Compliance with the national drinking water standard should ensure that it is safe for the water to be used for human (and stock) consumption. Elevated nitrate concentrations may indicate a health risk as well as a risk of adverse impacts on freshwater ecosystems. Greater Wellington Regional Council uses a threshold of less than 3mg/L of nitrate (measured as nitrate nitrogen) as an indicator of good water quality.

Groundwater quality



Source: Greater Wellington Regional Council

Findings

- In 2013, median nitrate concentrations were low (<3mg/L) in 85% of monitored bores.
- Groundwater quality has improved over the study period. The highest percentage of sites with low median nitrate concentrations was in 2013.

Technical notes

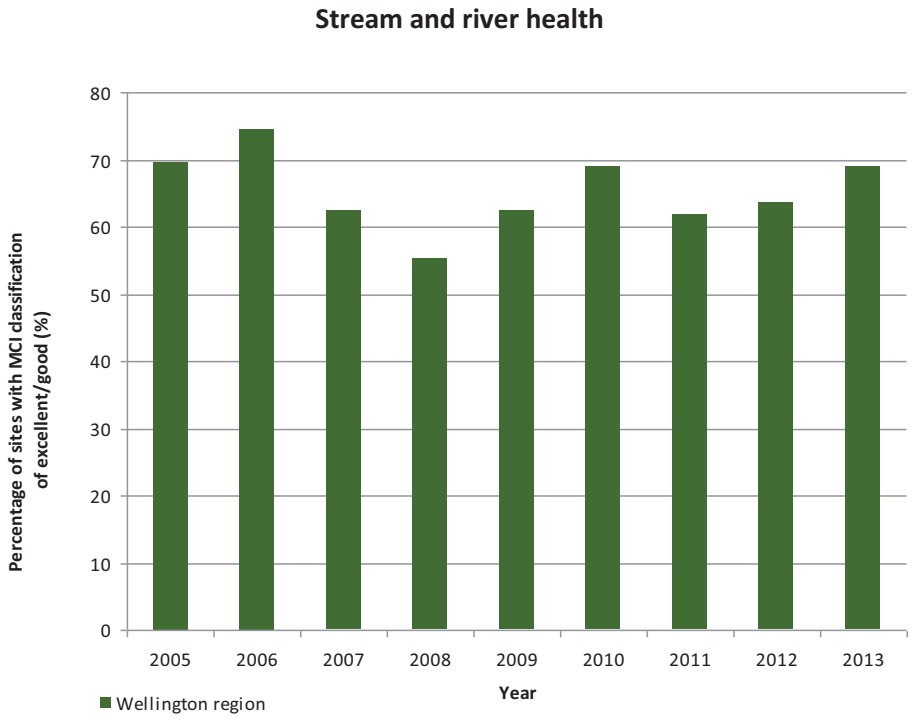
Data points available only for 2007 to 2013.

Only selected sites around the region are monitored, and the number of sites monitored has changed over the study period. Groundwater quality, particularly in shallow aquifers, is also strongly influenced by rainfall and river flows. More information is available at www.gw.govt.nz/Annual-monitoring-reports/

HE006: Stream and river health

The proportion of sites with a macroinvertebrate community index class of good or excellent has fluctuated, with the proportion in 2013 similar to 2005

Macroinvertebrates (e.g. mayflies, caddisflies, dragonflies, snails) are good indicators of the life-supporting capacity and ecological health of streams and rivers. The condition of stream and river systems also reflects the nature and intensity of land use activities in the vicinity. Stream and river health is therefore an effective indicator of wider catchment health and the sustainability of land uses. Safeguarding freshwater systems is essential for human health and recreation and for protecting biodiversity.



Source: Greater Wellington Regional Council

Findings

- In 2013, 69% of monitored sites had a macroinvertebrate community index (MCI) classification of good or excellent.
- The majority of sites in the excellent MCI class are located in catchments dominated by indigenous forest cover.
- The percentage of sites with an MCI of good or excellent has fluctuated over the monitoring period, with the percentage in 2013 similar to that recorded in 2005.

Technical notes

Data points available only for 2005 to 2013.

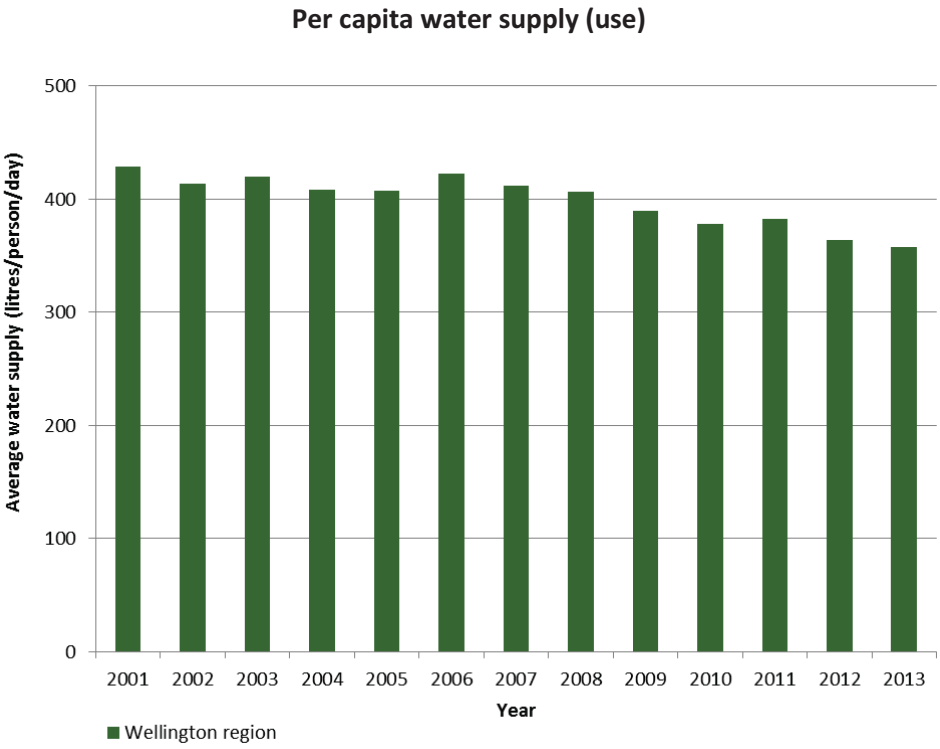
Only selected sites around the region are monitored, and the number of sites monitored has changed over the study period.

More information is available at www.gw.govt.nz/Annual-monitoring-reports/

HE007: Per capita water supply (use)

The average daily water supply (use) per person has been falling since 2006

Water is crucial to people's welfare and fundamental to a thriving economy. Effective management of water resources is essential to ecosystem function, biodiversity protection and individual and community well-being. The per capita water supply indicator used here represents actual water use per person in the Wellington region.



Source: Greater Wellington Regional Council, Kapiti Coast District Council, Masterton District Council, South Wairarapa District Council and Carterton District Council

Findings

- In 2013, average daily water supply (use) in the Wellington region was 358 litres/person.
- The per capita water supply (use) trend has decreased over the period monitored.

Technical notes

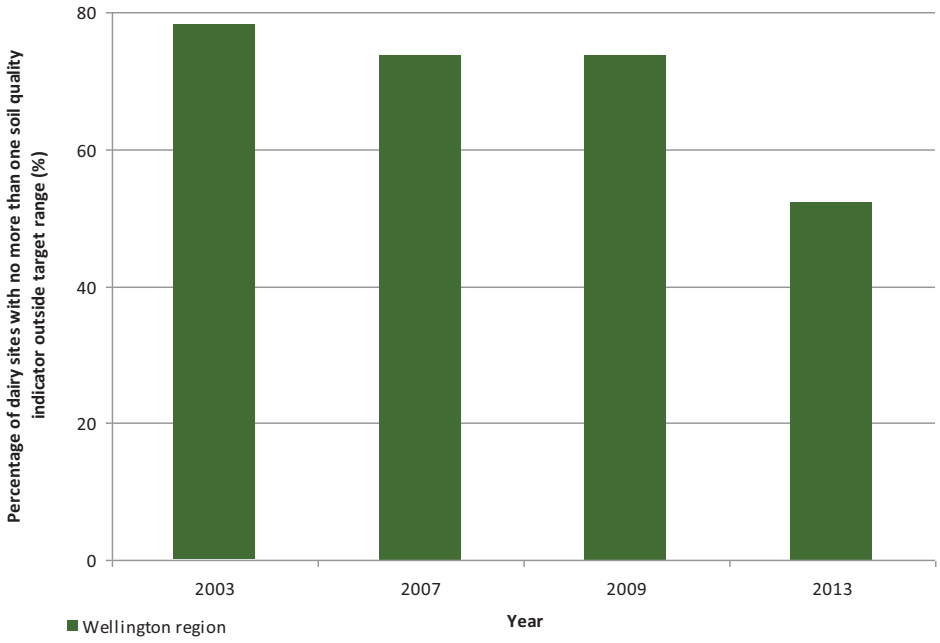
Water supply from Kapiti Coast District Council only includes Paraparaumu and Waikanae.
Water supply from Carterton District Council only includes residential town supply, CBD and Waingawa.
Water supply (use) includes leaks

HE008: Soil quality of dairy farm sites

The percentage of dairy farm sites with no more than one soil quality indicator outside the target range decreased between 2003 and 2013

The health of the region's high quality soils is integral to primary land uses such as dairying, cropping and horticulture. Soil health can be affected by loss of organic matter, a breakdown of soil structure, erosion by wind and water or chemical contamination. If more than one of the core physical or chemical soil quality indicators is outside the target range for a particular land use, soil quality may be compromised for that land use with potential adverse effects on ground or surface water quality. Dairy farming is one of the most intensive land uses so it is deemed important to monitor the soil at these sites.

Soil quality of dairy farm sites



Source: Greater Wellington Regional Council

Findings

- In 2013, 52% of dairy farm sites had no more than one soil quality indicator outside the target range.
- The percentage of dairy farm sites with no more than one soil quality indicator outside the target range has decreased dramatically over the study period from 78% in 2003 (indicating soil quality has decreased).

Technical notes

Data points available only for years shown.

Only selected sites around the region are monitored, and the number of sites monitored has changed over the study period.

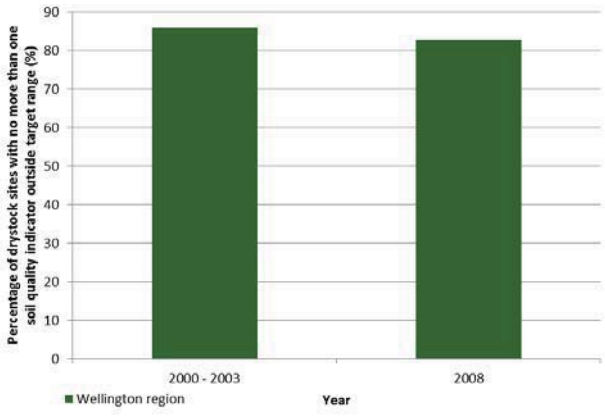
More information is available at www.gw.govt.nz/Annual-monitoring-reports/

HE009: Soil quality of drystock sites

The percentage of dairy farm sites with no more than one soil quality indicator outside the target range decreased between 2003 and 2013

Drystock farming consists predominantly of pasture grazing beef cattle, sheep, and deer for meat, wool, and velvet production. Drystock farms can cover large areas of hill-country grassland that may be steep and prone to erosion. Increasing the number of animals per hectare to maximise production may have detrimental effects on soil structure, drainage, and productivity, especially when soils are prone to flooding and erosion around waterways, which increases runoff of sediment and associated nutrients. The type of fertilisers used and the grasses and crops grown will also influence overall productivity and environmental impacts. Drystock sites cover the greatest land area across the Wellington region.

Soil quality of drystock sites



Source: Greater Wellington Regional Council

Findings

- In 2008, 83% of drystock sites had no more than one soil quality indicator outside the target range.
- The percentage of drystock sites with no more than one soil quality indicator outside the target range increased between 2003 and 2008. However with only two data points available this trend should be treated with caution.

Technical notes

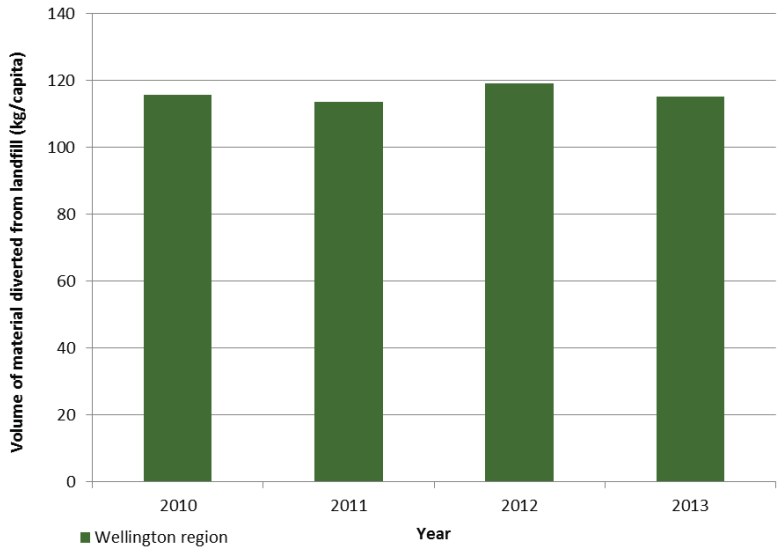
Data available only for years shown. Changes in soil quality at drystock sites manifest slowly. As of 2008, all drystock sites are sampled in the same year, every seventh year.
In order to provide optimal comparability in this indicator, the samples taken between 2000 and 2003 are aggregated.
As only two data points are available, the trend should be interpreted with caution. Only selected sites around the region are monitored, and the number of sites monitored has changed over the time series presented. More information is available at www.gw.govt.nz/Annual-monitoring-reports/

HE010: Volume of material diverted from landfill per capita

The volume of material diverted from landfill (per person) has been relatively consistent.

Material diverted from landfill is a measure of recycling, and is indicative of the community's commitment to waste minimisation. Recycling reduces waste disposal, which is expensive and may cause environmental problems. It also saves landfill space and reduces the demand for raw materials and energy used to make the product in the first place.

Volume diverted from landfill per capita



Source: Territorial authority waste data

Findings

- The volume of material diverted from landfill on a per capita basis has been relatively consistent across the period in which comparable data is available.
- The largest amount diverted was 119.2 kg per capita in 2012.
- Kg waste diverted per capita decreased by 0.51% between 2010 and 2013, from 115.8 to 115.2 kg per capita.

Technical notes

Comparable data is only available for the years shown.

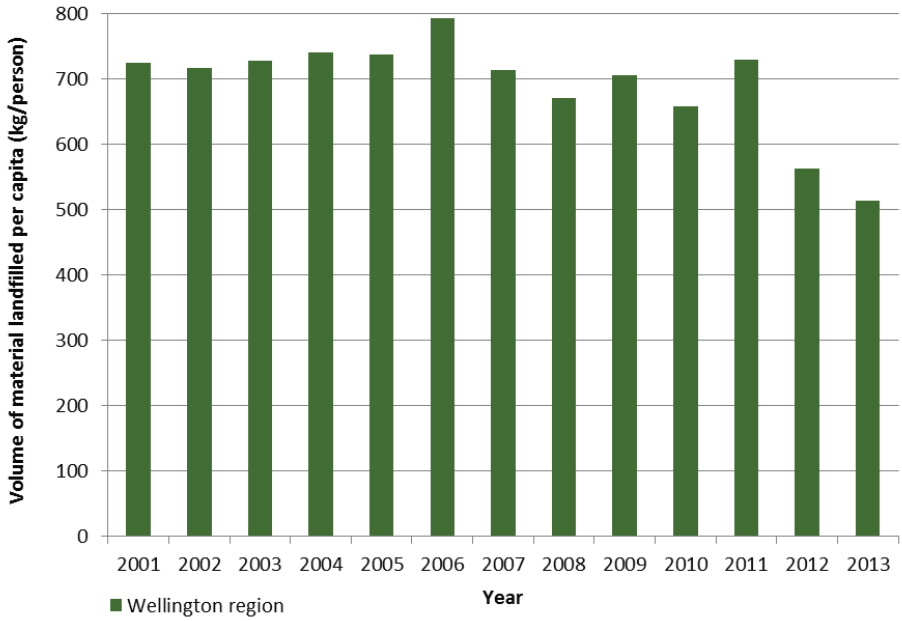
This indicator reports the gross tonnage of waste diverted from landfill that can be measured by the region's territorial authorities. It includes where possible: data from kerbside collections, transfer stations and landfill sites (including greenwaste, and material diverted from the tipface) as well as material collected via some council recycling centres. Cleanfill and contaminated soil are not included. Recycling data for Wairarapa only encompasses the entire Wairarapa area from 2011 onward, the composting component (estimated for all years in the time series presented) applies to Masterton only. It is not possible to obtain data relating to every diversion initiative in the region, as some are delivered by private contractors, and amongst others, adequate measurement systems have not been put in place.

HE011: Landfill waste per capita

The amount of material landfilled per person has decreased since 2001

Landfilled waste represents a loss of resources, both in the form of material and energy. The treatment and disposal of waste may cause environmental pollution and expose people to harmful substances and bacteria that affect human health. Landfill waste is an indicator of the volume of resources being consumed. Waste to landfill generates offensive odours, greenhouse gases, and may cause pollution.

Landfill waste per capita



Source: URS 2014 Greenhouse Gas Inventory for the Wellington Region

Findings

- In 2013, around 253,288 tonnes of material was landfilled, meaning 514.3kg of material was landfilled per person.
- Despite the total amount of material landfilled per person fluctuating across the time series, the trend has been towards decreasing volumes per capita, with the figure for 2013 significantly lower than that for 2001.

Technical notes

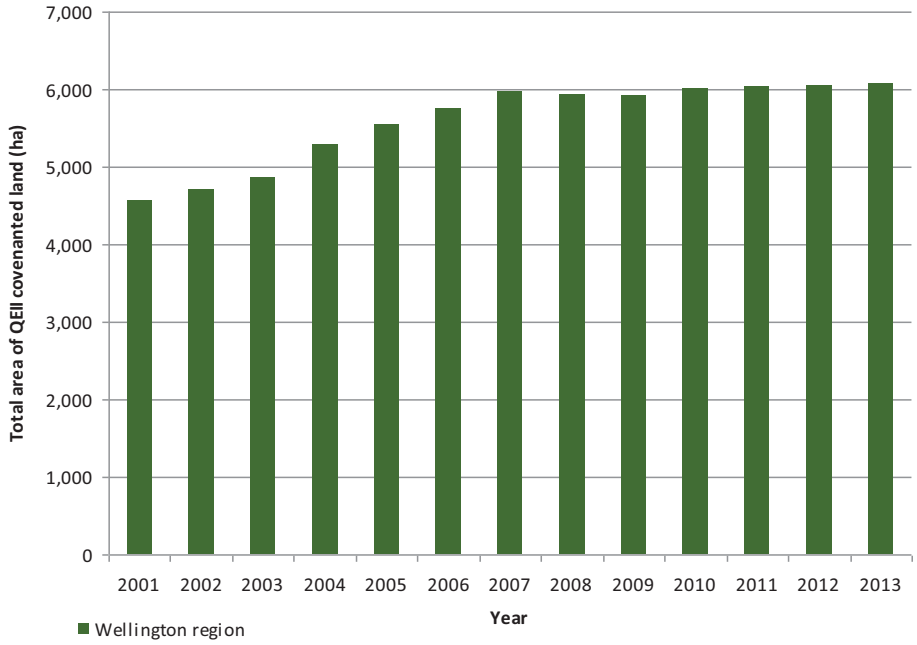
This indicator measures solid waste originating in the Wellington region using available data. 6% of the total was consigned to landfills outside the Wellington region (Levin and Bonny Glen).

HE012: QEII covenanted land

Land under QEII covenant increased from 2001 to 2007 and remained relatively unchanged since that time

The loss of natural habitats and the declining diversity of our indigenous flora and fauna are regarded as one of our biggest environmental problems. A number of indigenous species are already extinct and many others are under threat. Open space covenants help to protect New Zealand's unique natural and cultural heritage. This heritage helps to define our sense of national identity and contributes to our enjoyment and appreciation of New Zealand.

QEII covenanted land



Source: QEII Trust

Findings

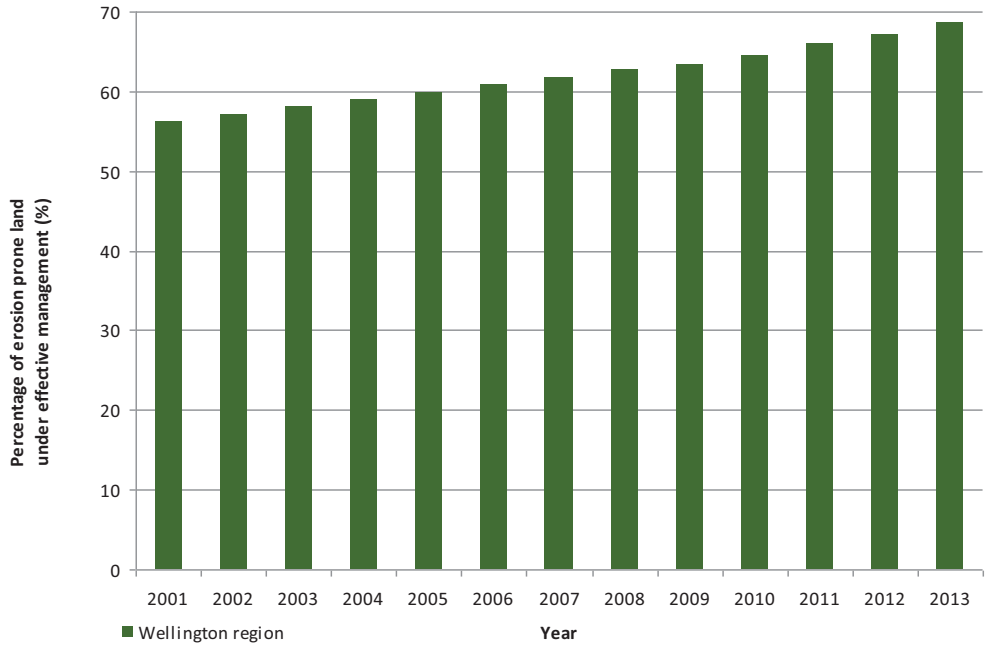
- In 2013, 6,071 hectares of land in the Wellington region was registered under QEII covenant.
- The area of land registered under QEII covenant in the Wellington region increased between 2001 and 2007 and has since changed very little.

HE013: Erosion-prone land under effective management

The area of erosion-prone land under effective management has increased from 2001 to 2013

Actively managing erosion-prone hill country helps protect both rural and urban livelihoods, communities and infrastructure. Heavy rain and other adverse weather events can increase the risk of erosion in the hill country. Erosion can exacerbate the impact of flood events, which in turn can devastate farm production and cause adverse environmental effects in other locations.

Erosion-prone land under effective management



Source: Greater Wellington Regional Council

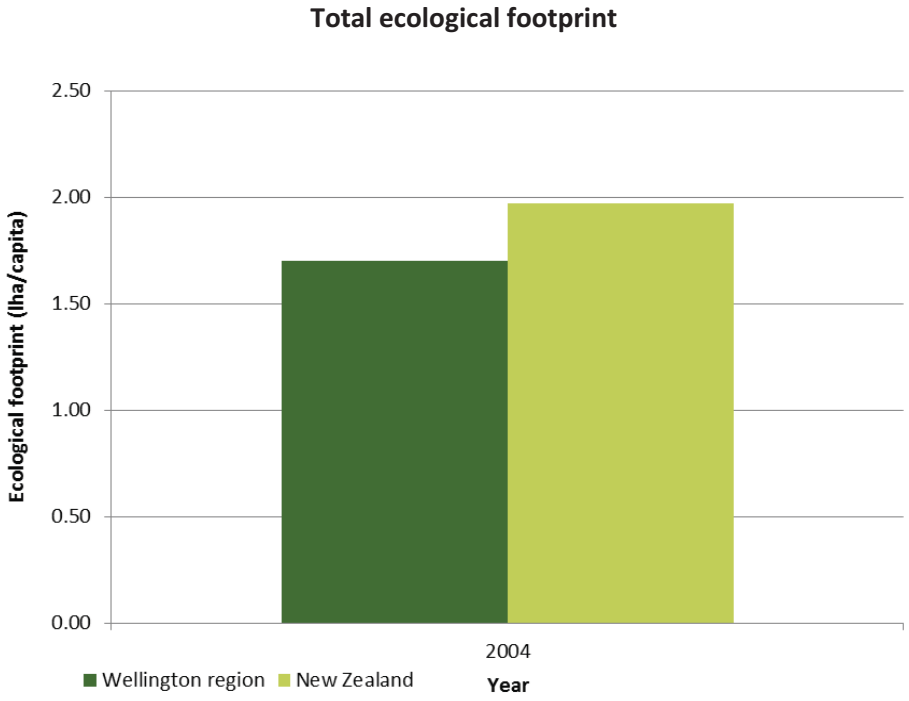
Findings

- In 2013, 68.6% of erosion-prone land in the Wellington region was under effective management.
- The area of erosion-prone land under effective management has increased from 2001 to 2013.

HE014: Total ecological footprint

? **No trend data are currently available**

Ecological footprinting is widely used as an indicator of environmental sustainability. It is an estimate of the amount of biologically productive land and sea area required to produce the goods a human population consumes and to dispose of waste. Understanding our ecological footprint increases awareness of the sustainability of our consumption patterns. Ecological footprinting is a way of comparing what we consume with what we actually have.



Source: Ministry for the Environment

Findings

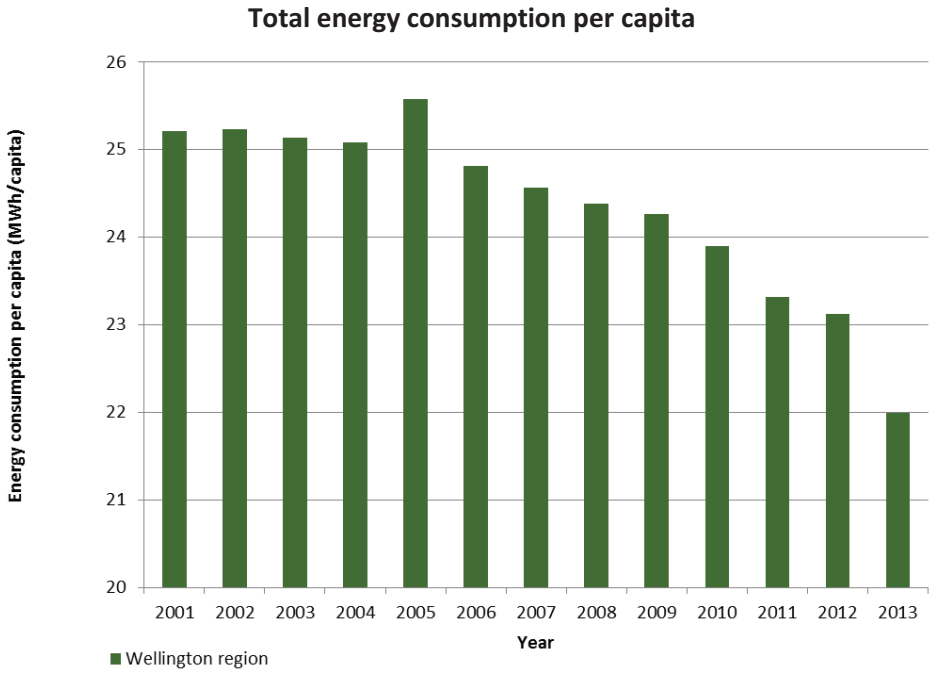
- The Wellington region had an ecological footprint of 1.70 lha/capita in 2004. This is below the New Zealand average of 1.97 lha/capital.

Technical notes
2004 is the only data point available

HE015: Total energy consumption per capita

Total energy consumption per capita has decreased

Inefficient use of energy, especially energy obtained from fossil fuels, carries environmental, social, and economic costs. Current energy production and consumption patterns have been linked to global climate change, energy cost and resilience issues, local health effects, and regional impacts such as air and water pollution, damage to marine terrestrial and freshwater ecosystems, resource depletion, and soil contamination.



Source: Derived from URS 2014 Greenhouse Gas Inventory for the Wellington Region

Findings

- Per capita energy consumption (per year) in the Wellington region has decreased from 25 MWh per person in 2001 to 22 MWh in 2013, a decrease of 13%.
- The decrease has been relatively consistent since 2005.

Technical notes

Energy consumption data is an aggregate of multiple energy types equivalised to MWh and then normalised across the Wellington region population.

Energy types include: stationary (electricity, natural gas, coal, biofuel, and LPG) and mobile (petrol, diesel, rail diesel, jet kerosene, aviation gas, marine diesel, light fuel oil and LPG).

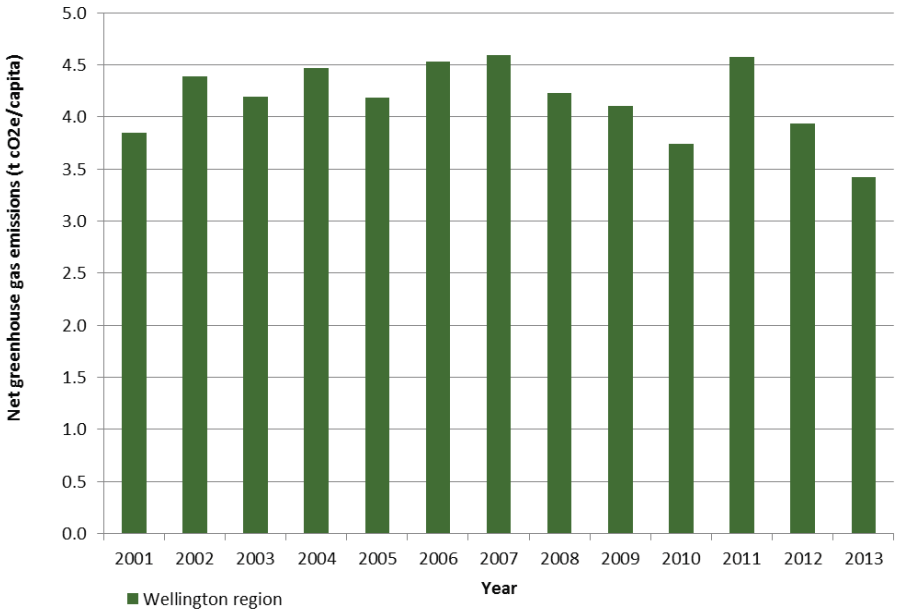
Population figures applied are Statistics NZ Estimated Resident Population for Regional Council Areas, at 30 June (1996+) (Annual-Jun).

HE016: Greenhouse gas emissions per capita

Greenhouse gas emissions per capita fell in 2013 to the lowest level since 2001

Greenhouse gases (GHGs) such as carbon dioxide, methane, and nitrous oxide are emitted through a variety of human activities. Air travel, driving petrol and diesel powered vehicles, using non-renewable electricity from the national grid, harvesting trees and farming animals are some of the activities that generate GHG emissions in the Wellington region. GHG emissions drive climate change and are considered a proxy for resource depletion. Climate change is now widely acknowledged as the most serious environmental challenge of our time and, without stringent and widespread emission reductions, is expected to generate serious economic and social consequences.

Greenhouse gas emissions (t $CO2_e$) per capita



Source: URS 2014 Greenhouse Gas Inventory for the Wellington Region

Findings

- In 2013, in the Wellington region the greenhouse gas emissions per capita were measured at 3.42 tonnes per capita.
- The rate of emissions has fluctuated since 2001, peaking at 4.59 tonnes per capita in 2007 and reaching the same level in 2011 before a sharp fall to the 2013 level.
- In Wellington City, Porirua City, Hutt City, Upper Hutt City and the Kāpiti Coast district, most emissions come from stationary energy and transport, compared to the Wairarapa where most come from agriculture. The main factors in reducing greenhouse gas emissions in the Wellington region are:
    - more electricity being generated from renewable sources (wind and geothermal),
    - a decline in electricity consumption

- relatively stable overall consumption of road transport fuels (petrol use has declined while diesel has gone up)
- landfill gas recovery systems being installed
- more waste being diverted from landfills
- waste water treatment changing from oxidation ponds and septic tanks to sludge treatment processes in Kāpiti Coast district
- a decline in animal stock rates in Wairarapa.

Technical notes

This indicator is derived from the URS 2014 Greenhouse Gas Inventory for the Wellington Region. The inventory measures regional greenhouse gas (GHG) emissions from the following sectors: stationary energy (such as electricity and gas), transport (including domestic aviation), industrial processes (such as gases used in refrigerators and air conditioning systems), agriculture, waste and forestry.

The emissions are expressed as 'net' because the inventory takes into account all forests planted for timber production and native forests managed for conservation values.[23] Both the emissions generated when trees are harvested, and the carbon sequestered while trees are growing is taken into account. For more detail, refer to the URS GHG Inventory.

A national comparison is not included because the methodology used to calculate the regional inventory[24] differs from that used to create the national inventory[25]. Both methodologies follow guidelines specified by the Intergovernmental Panel on Climate Change (IPCC), but because they measure emissions at differing scales, differing methodologies are applied.

[23] Only emissions from 'managed lands' are included. Due to limited data availability only emissions from forest land and grassland with woody biomass were included (incorporates carbon sequestered in above ground biomass, below ground biomass, dead organic matter and litter). It was assumed that there are no significant changes in the carbon pools of cropland, wetlands, settlements and other land uses.

[24] Global Protocol for Community-Scale Greenhouse Gas Emissions (GPC)

[25] Intergovernmental Panel on Climate Change (**IPCC) Guidelines for National Greenhouse Gas Inventories**

SOCIAL WELL-BEING

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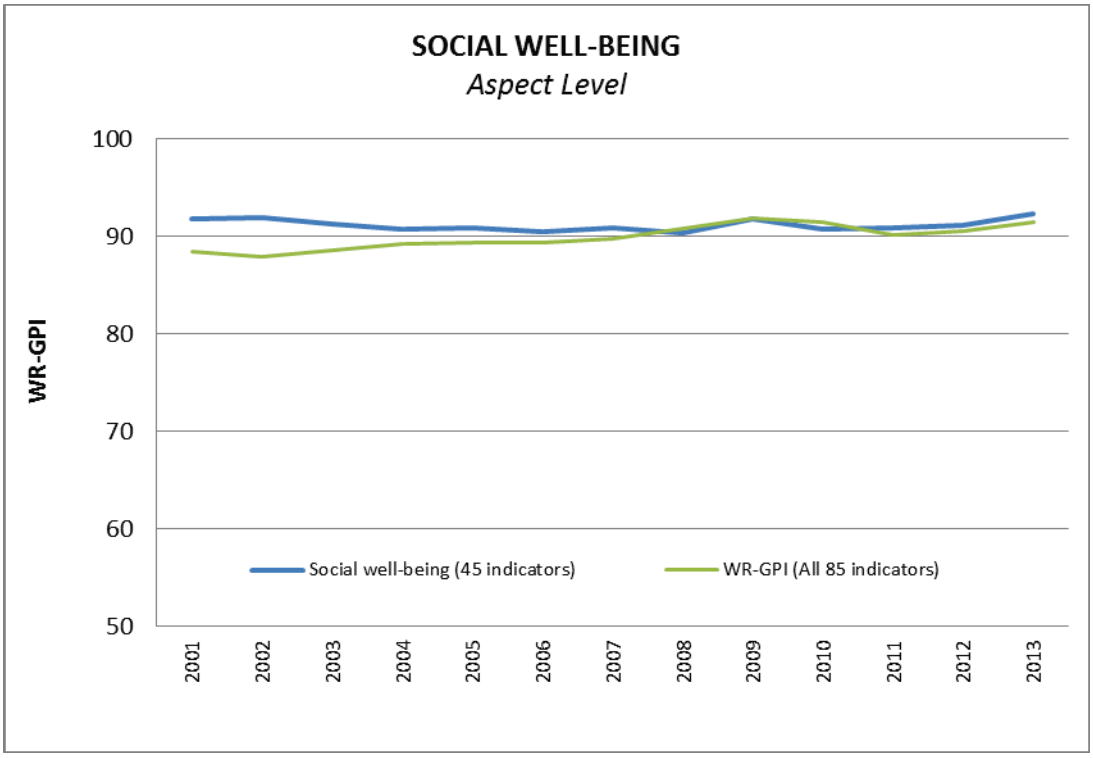
Social well-being is defined as: Vitality that communities and individuals enjoy through connections to their community and having healthy and active lifestyles.

2001 to 2013 outcome: Changes in the social well-being aspect of the WR-GPI have been relatively modest having increased by 0.7% between 2001 and 2013.

The social well-being aspect of the WR-GPI contains five community outcomes and 45 indicators are used to measure change occurring within them. [26] In the graph below the composite of all the Social well-being indicators is plotted across the 2011 to 2013 time series. The composite of the entire WR-GPI (all 85 indicators) is provided for reference.



[26] For some indicators, data is not available for the whole 2001 to 2013 period. See *The Approach to the Wellington Region Genuine Progress Index* for more detail. http://gpiwellingtonregion.govt.nz/assets/Uploads

Social well-being findings

Changes in the social well-being aspect of the WR-GPI have been relatively modest, with an overall change between 2001 and 2013 of 0.7%. The index rose slightly in the first year, then declined gradually before reaching its lowest point in 2005. It then remained fairly stable up until 2008 at which time it rose to a peak at 2009, before declining again to 2011. The index rose again during the last two years of the time series.

While the index has not changed significantly over the study period, some of the individual indicators that make up the social well-being aspect of the WR-GPI have experienced more substantial shifts than others. The sharp positive trends that have occurred within some indicators have been offset by significant negative trends occurring in others, resulting in a fairly stable pattern across the composite index.

It is interesting to note that six of the top ten positive indicator trends are in the connected community area, with a particularly large increase in the proportion of households with access to the internet, and access to broadband in particular. There were also significant increases in public and active transport use, and in positive perceptions of the ease of walking and of travelling by public transport in the region.

Two of the quality lifestyle indicators have also trended positively (reported crimes against property, and commercial visitor guest nights), as have two indicators in the healthy community outcome area (number of avoidable deaths and reported road injuries).

The ten indicators exhibiting the greatest negative trends span all five social well-being community outcome areas. Peak AM/PM congestion rates worsened and the percentage of people who rated getting around the Wellington region by cycling as 'good' (from the connected community area) decreased. Perception of public transport network reliability (regional foundations area) also declined.

In the healthy community area, the indicators relating to the number of fulltime equivalent General Practitioners per 100,000 people, the prevalence of adults participating in regular physical activity, the prevalence of obesity and the percentage of people regularly experiencing stress all worsened (healthy community area). The percentage of households that spend more than 30% of their disposable income on housing, and the number of households on Housing New Zealand waiting lists both increased (quality lifestyle area). The indicator tracking perceptions that graffiti, vandalism and litter is a problem also increased (sense of place area).

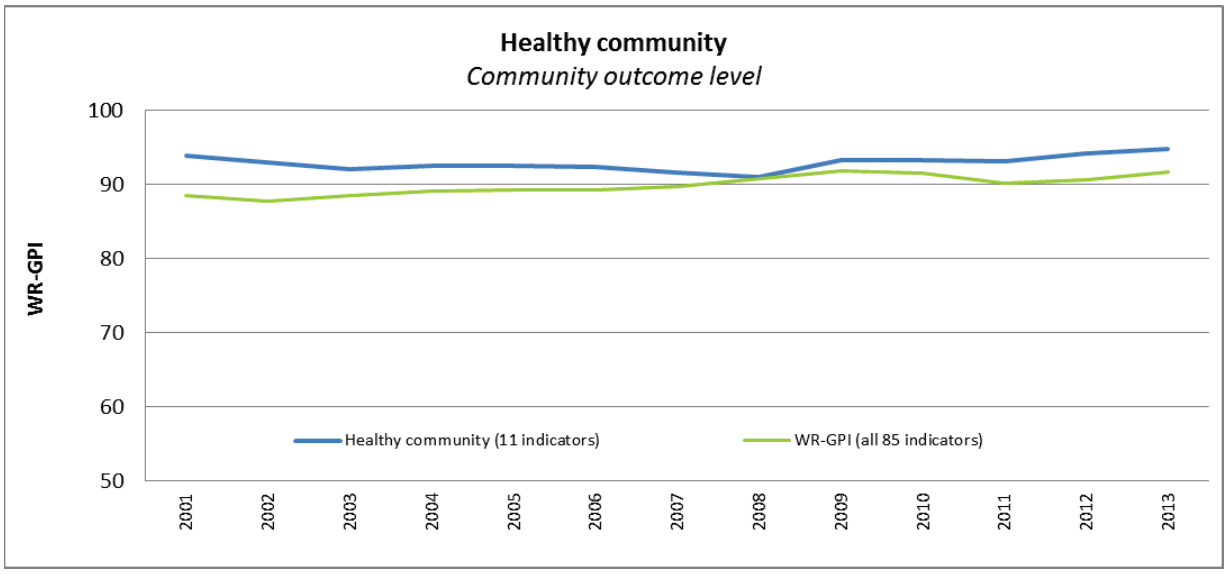
Community Outcomes and Individual indicators are provided on the following pages:

Healthy Community

Outcome goal: People's physical and mental health is protected. Living and working environments are safe, and everyone has access to health care. Every opportunity is taken to recognise and encourage good health.

IMPROVED

Overall outcome: Despite declining during across most of the first eight years of the time series, the level the healthy community index eventually reached in 2013 was 0.94% higher than that of 2001.



Indicators		Well-being trend 2001 - 2013
HC001	Prevalence of obesity and being overweight	
HC002	Prevalence of hazardous drinking	
HC003	Physical activity	
HC004	Prevalence of smoking	
HC005	Road injuries	
HC006	General health status	
HC007	Stress	
HC008	Life expectancy	
HC009	Full time equivalent General Practitioners	
HC010	Avoidable hospital admissions	
HC011	Avoidable deaths	

Indicator symbol legend is provided in chapter 2, page 15

Healthy community findings: Over the 2001 to 2013 period, the healthy community index of the WR-GPI trended slowly downwards until 2008, before rising to its highest point in 2013. The healthy community GPI was about 2% higher in 2013 than in 2001.

Between 2001 and 2008, the slight fall in the healthy community index was caused mainly by an increase in the number of reported road injuries, and a falling rate of physical activity among adults. However, the negative impact of these trends on the healthy community GPI was largely offset by the positive impact due to a reduction in the amenable mortality rate (deaths that could have been avoided through health care interventions).

Over the entire study period (2001-2013), the greatest positive shifts were reductions in the amenable mortality rate and in the number of reported road injuries respectively. The most significant negative trends were a reduction in the proportion of adults participating in regular physical activity and an increase in the proportion of people regularly experiencing stress.

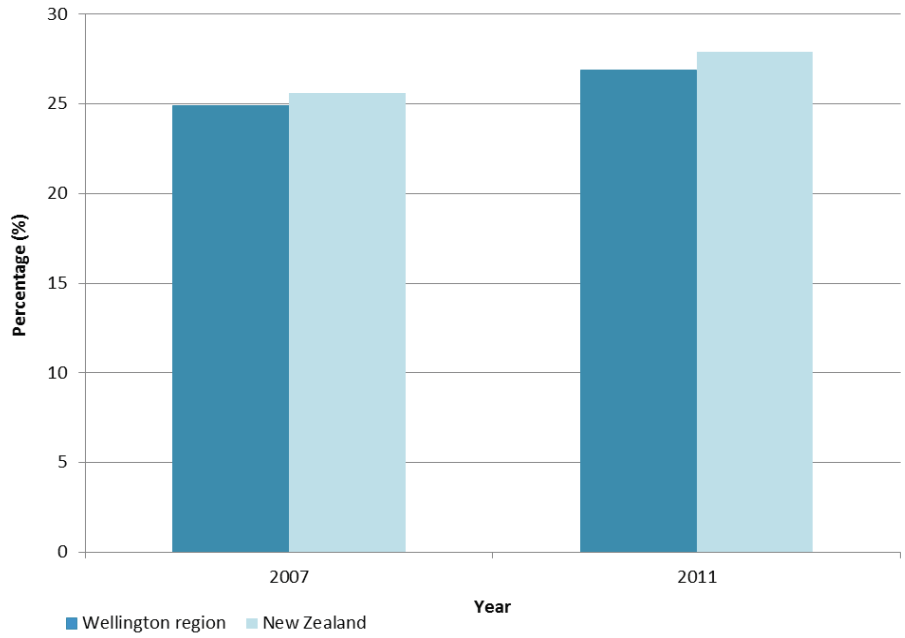
Between 2001 and 2013 four indicators improved, four declined, and three exhibited no real change. With all eleven indicators amalgamated to form the healthy community index, the overall trend suggests that the health of the region's population has improved since 2001 after an initial period of decline. However, when considering trends related to individual lifestyle choices, it should be noted that while there has been a fall in the prevalence of hazardous drinking, there have been no positive shifts overall in regard to participation in regular physical activity or rates of smoking.

HC001: Prevalence of obesity and being overweight

The prevalence of overweight or obese adults in the Wellington region increased between 2007 and 2011

Obesity is a global pandemic with significant implications for public health. Obesity is associated with a long list of health conditions, including heart disease, high blood pressure, stroke, diabetes, asthma, sleep apnea, gallstones, kidney stones, infertility, and as many as 11 types of cancers, including leukemia, breast, and colon cancer. There are also a range of adverse social and emotional effects associated with obesity, including discrimination, lower wages, lower quality of life, and susceptibility to depression.

Prevalence of obesity and being overweight



Source: Ministry of Health New Zealand Health Survey[27]

Findings

- In 2011, 26.9% of the Wellington region adult population were classified as overweight or obese.
- The percentage of the Wellington region adults who are overweight or obese increased from 24.9% in 2007 to 26.9% in 2011.
- An increase in the prevalence of overweight and obese adults was also observed for New Zealand adults overall, and this increase was slightly larger than what was observed in the Wellington region.

Technical notes

Data points available only for 2007 and 2011.

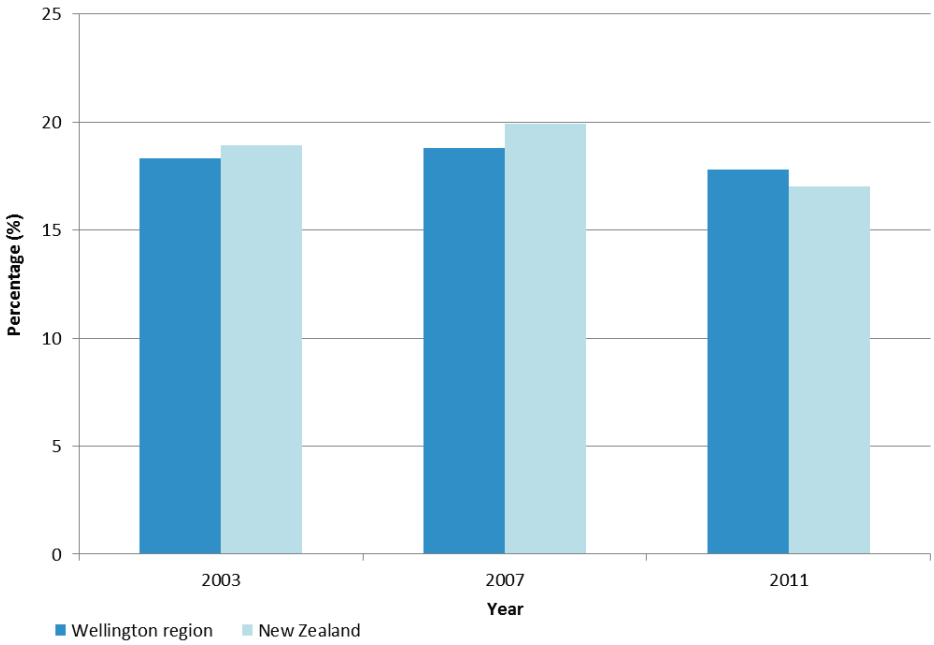
[27] Rates are age-standardised.

HC002: Prevalence of hazardous drinking

The prevalence of hazardous drinking has declined between 2003 and 2011

Regular excessive consumption of alcohol places people at increased risk of chronic ill health and premature death. Episodes of heavy drinking can place the person and others at a higher risk of injury or death. In the short-term, intoxication and acute alcohol-related problems, include violence, risky behaviour, road trauma and injury. The significant psychosocial and economic consequences that arise from such patterns of drinking also often have long term impacts, not only for the individuals concerned, but also their families and the wider community.

Prevalence of hazardous drinking



Source: Ministry of Health New Zealand Health Survey[28]

Findings

- In 2011, 17.8% of adult drinkers in the Wellington region had a potentially hazardous drinking pattern. This is a reduction from 18.8% in 2007 and 18.3% in 2003.
- The prevalence of New Zealand adult drinkers with a potentially hazardous drinking pattern decreased slightly more from a high of 19.9% in 2007 to 17.0% in 2011.
- The prevalence of adult drinkers with a potentially hazardous drinking pattern was slightly higher in the Wellington region than New Zealand overall in 2011, having been lower in previous years.

Technical notes

Data points available only for 2003, 2007 and 2011.

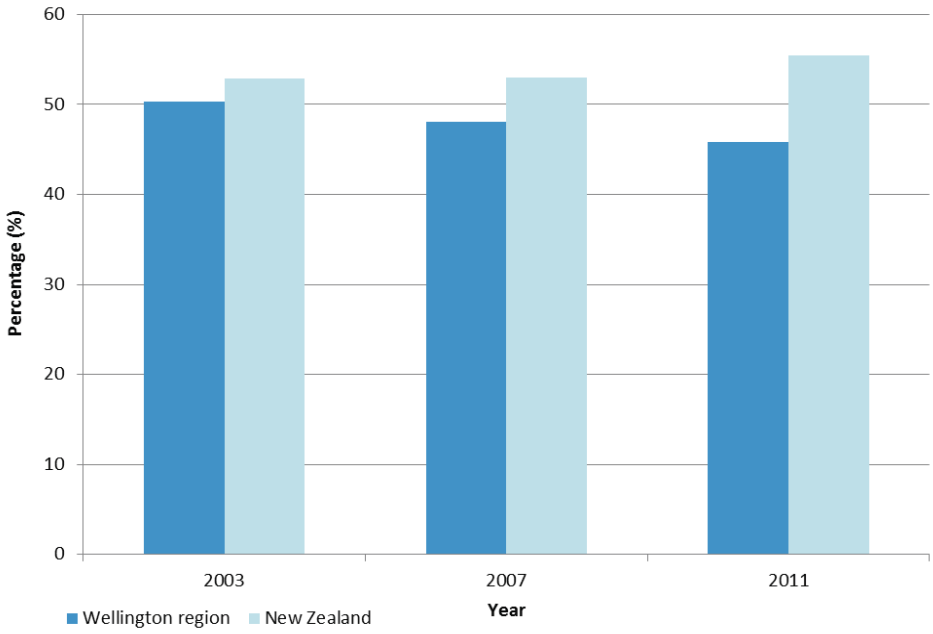
[28] Rates are age-standardised.

HC003: Physical activity

The prevalence of adults participating in regular physical activity decreased between 2003 and 2011

Participation in physical activity has recognised benefits for people's physical and mental health. Regular physical activity has been shown to reduce the risk of heart attack, lower blood cholesterol levels, lower the risk of type 2 diabetes and some cancers, lower blood pressure, build stronger bones, muscles and joints and lower the risk of osteoporosis. Engagement in sporting activities also provides an opportunity for interaction with the wider community, building social cohesion and connectedness, and thereby reducing isolation, a recognised social determinant of ill-health.

Prevalence of adults participating in regular physical activity



Source: Ministry of Health New Zealand Health Survey[29]

Findings

- In 2011, 45.8% of the Wellington region adult population participated in regular physical activity, a decrease from 50.3% in 2003.
- The percentage of New Zealand adults participating in regular physical activity has been higher than Wellington region adults from 2003 to 2011.
- By contrast to the Wellington population, New Zealand adults as a whole have been increasing their regular physical activity over this time.

Technical notes

Data points available only for 2003, 2007 and 2011.

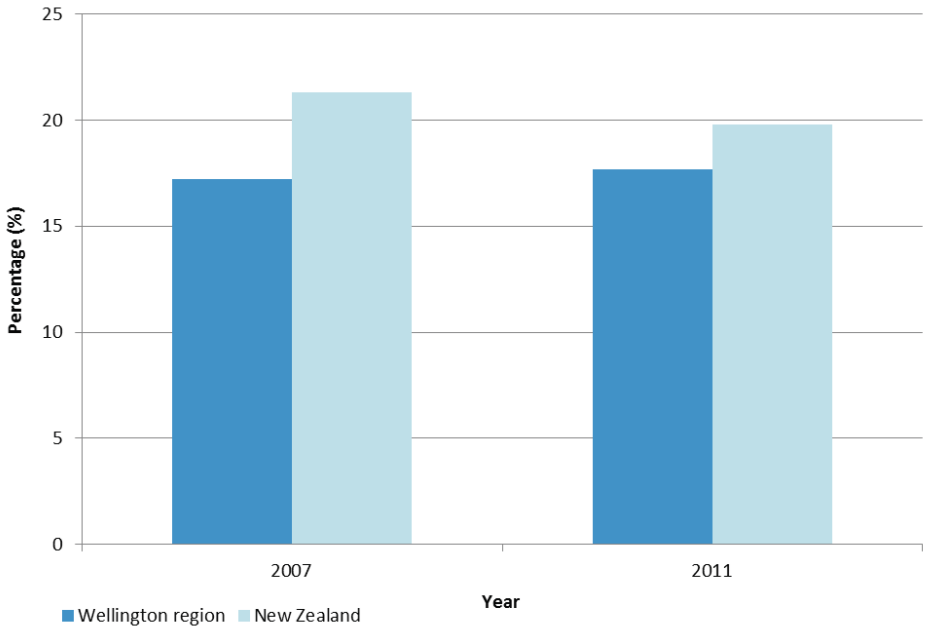
[29] Rates are age-standardised.

HC004: Prevalence of smoking

The prevalence of smoking has increased between 2007 and 2011

Tobacco smoking is a well-recognised risk factor for many cancers and for respiratory and cardiovascular diseases. Smoking is a leading cause of preventable morbidity and mortality in New Zealand and is also linked to socio-economic disadvantage.

Prevalence of smoking



Source: Ministry of Health New Zealand Health Survey[30]

Findings

- In 2011, 17.7% of the Wellington region population were smokers, compared to 17.2% in 2007.
- In New Zealand overall, the prevalence of smoking declined from 21.3% in 2007 to 19.3% in 2011.
- The prevalence of smoking in the Wellington region has risen marginally since 2007, which is in contrast to the trend for the country as a whole.

Technical notes

Data points available only for 2007 and 2011.

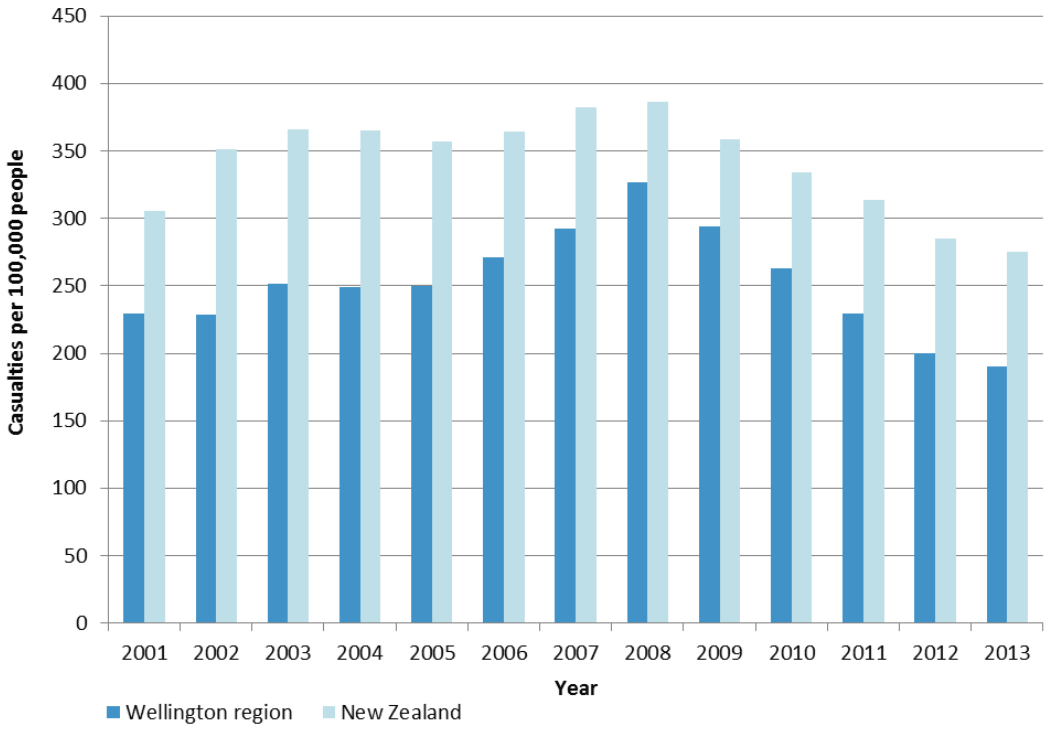
[30] Rates are age-standardised.

HC005: Road injuries

The number of reported road injuries per 100,000 people has decreased over the 2001 to 2013 period

The number of deaths and injuries on our roads is a direct reflection of road safety and security. This includes driver behaviour as well as road maintenance and design. Motor vehicle crashes are a major cause of premature death, especially among younger age groups. Death, injury and disability resulting from motor vehicle crashes inflict pain and suffering on individuals, families and communities, and can also result in significant financial hardship. Major motor vehicle crashes also impact on other road users, emergency service providers, health workers and others.

Number of reported road injuries per 100,000 population



Source: New Zealand Transport Agency Crash Analysis System

Findings

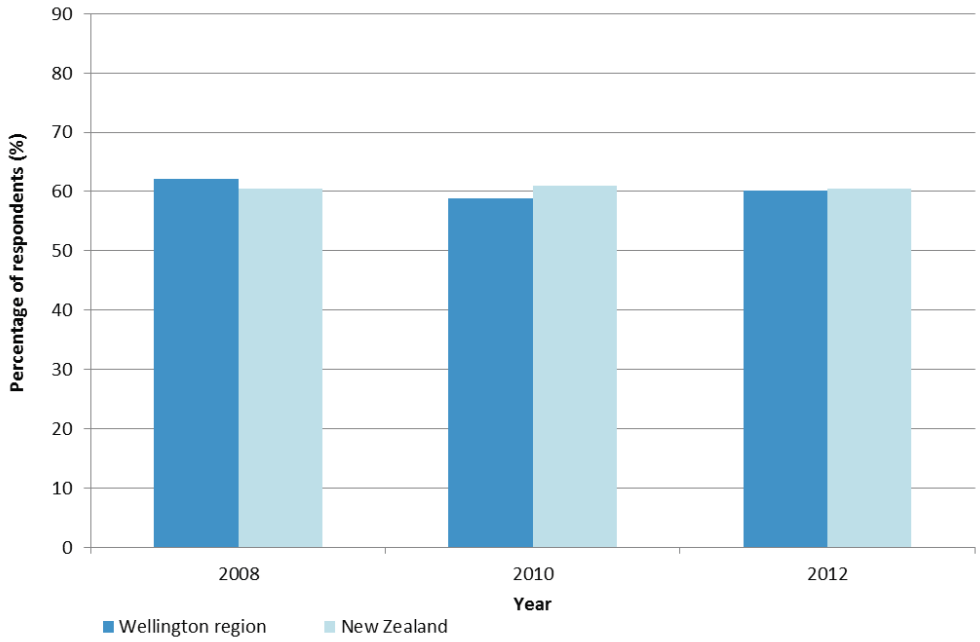
- A total of 936 people were killed or injured on the Wellington region roads in 2013; a rate of 190 per 100,000 people compared to a rate of 276 per 100,000 for New Zealand.
- The number of reported road injuries in the Wellington region between 2001 and 2013 peaked in 2008, and has since declined.
- The number of reported road injuries per 100,000 people in New Zealand has consistently been higher than in the Wellington region, but a similar trend over the 2001 to 2013 period was observed.

HC006: General health status

Respondents' perception of their health remained virtually unchanged from 2008 to 2012

Self-reported poor health has been found to be a powerful predictor of future health problems, health care use and mortality, independent of other medical, behavioural or psychosocial factors.

Percentage of people rating their health as very good or excellent



Source: New Zealand General Social Survey

Findings

- In 2012, 60.2% of respondents from the Wellington region rated their health as very good or excellent. This is not significantly different to the 62.1% in 2008 (a 3.1% decrease).
- Respondents in the Wellington region rating their health as very good or excellent is similar to that of the respondents from all of New Zealand, particularly in 2012.
- The percentage of respondents from New Zealand overall rating their health as very good or excellent was 60.4% in 2008 and 2012, and rose to 61% in 2010.

Technical notes

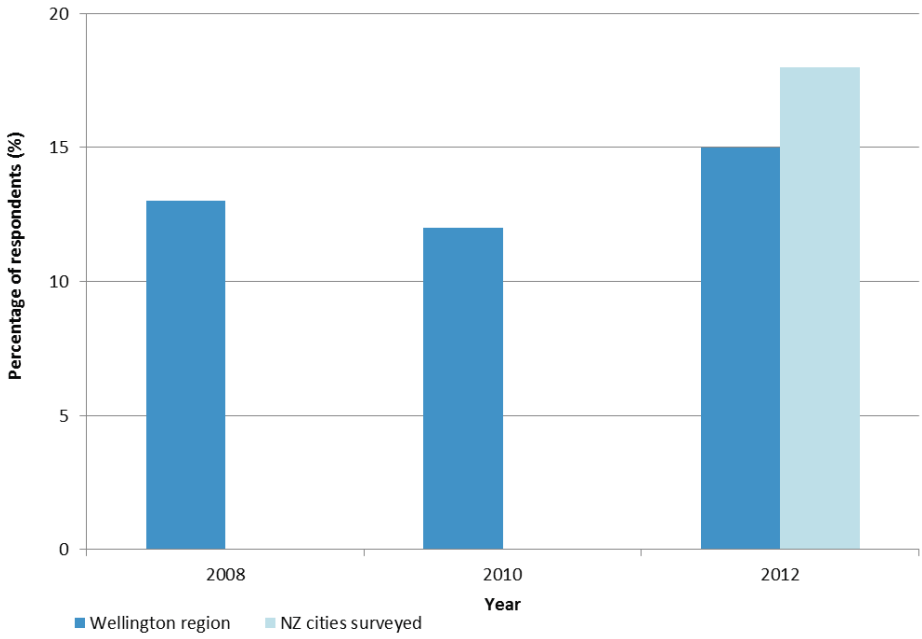
Data points available only for 2008, 2010 and 2012.

HC007: Stress

Respondents regularly experiencing stress increased from 2008 to 2012

Stress is both an outcome of other health determinants and a key influence on mental and physical health in its own right. Research has identified several biological mechanisms by which stress has an impact on health, including several chronic illnesses. Good mental health is fundamental to the well-being of individuals, their families and the population as a whole.

Respondents regularly experiencing stress



Source: Quality of Life Survey

Findings

- In 2012, 15% of Wellington region respondents indicated that they had regularly experienced stress in the last 12 months; this has increased from 13% in 2008 and follows a drop to 12% in 2010.
- The percentage of Wellington region respondents regularly experiencing stress was lower than the 18% of respondents from the NZ cities surveyed in 2012.

Technical notes

Data points for Wellington region available only for 2008, 2010 and 2012, and NZ cities surveyed only for 2012.

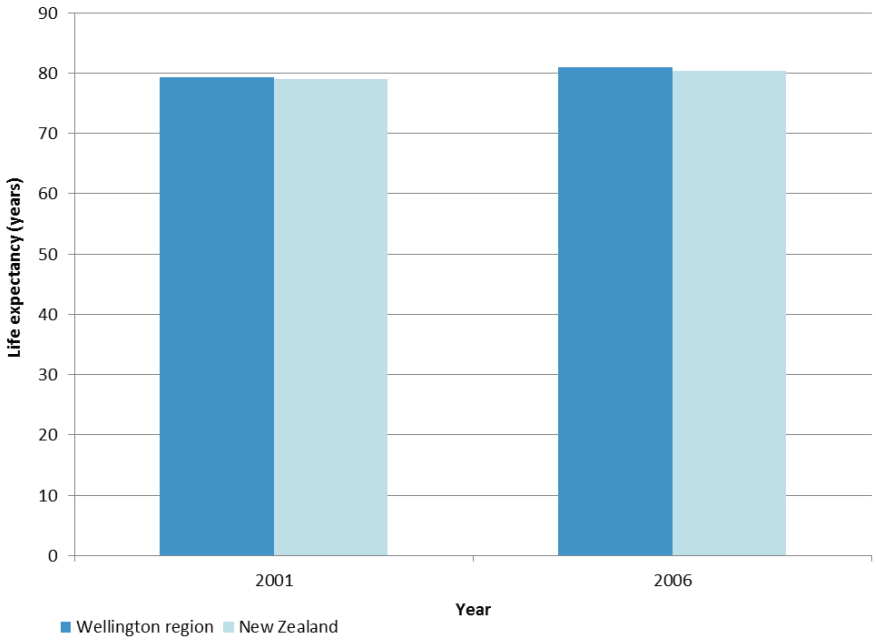
New Zealand cities surveyed: Auckland, Christchurch, Dunedin, Wellington, Porirua and Hutt.

HC008: Life expectancy

Expected years of life from birth increased between 2001 and 2006

Life expectancy at birth is a key indicator of the survival experience of the population. Improvements in life expectancy reflect changes in social, environmental and economic conditions as well as medical advances, better access to health services and improvements in people's lifestyles.

Expected years of life from birth



Source: Statistics New Zealand

Findings

- In 2006, the average life expectancy at birth in the Wellington region was 81.0 years compared with 80.3 years for New Zealand.
- Average life expectancy at birth increased in the Wellington region from 79.3 years in 2001 to 81.0 years in 2006.

Technical notes

Data points available only for 2001 and 2006.

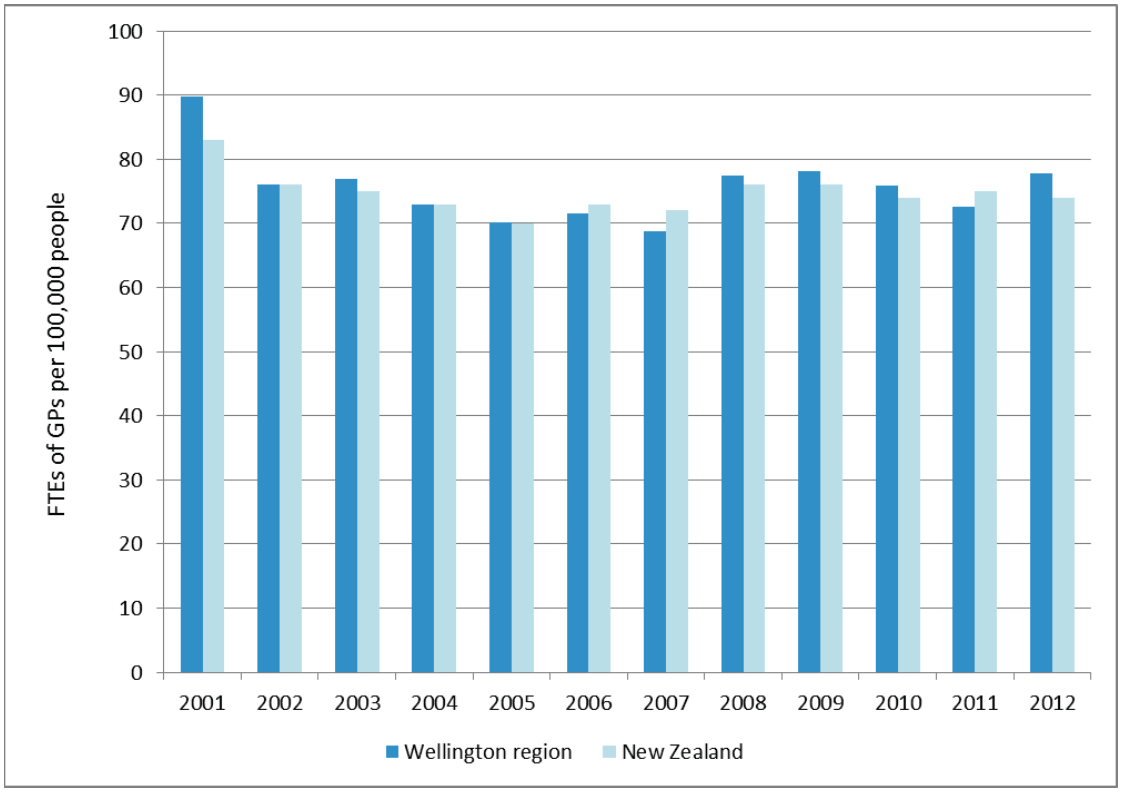
Data derived from 2013 Census not available until 2016.

HC009: Full time equivalent (FTE) General Practitioners (GPs)

The rate of GPs per 100,000 people has increased since the mid-2000s, returning to rates similar to those observed in 2001

General Practitioners (GPs) are part of the front line of primary health care provision. Accessibility to a GP is important in both treatment and prevention of poor health, and in reducing the rate of hospitalisation. The definition of FTE (full time equivalent) is the number of working hours that represents one full-time employee during a fixed time period, such as a year. One FTE is equivalent to one employee working full-time.

Full time equivalent (FTE) General Practitioners per 100,000 people



Source: Medical Council of New Zealand Workforce Survey

Findings

- In 2012, there were 382 full time equivalent (FTE) GPs in the Wellington region, a rate of 77.9 per 100,000 people. This compares to 74.0 for New Zealand.
- Over the last few years the number of GPs in the Wellington region per 100,000 people has increased but remains below the high rate of 89.7 observed in 2001.

Technical notes

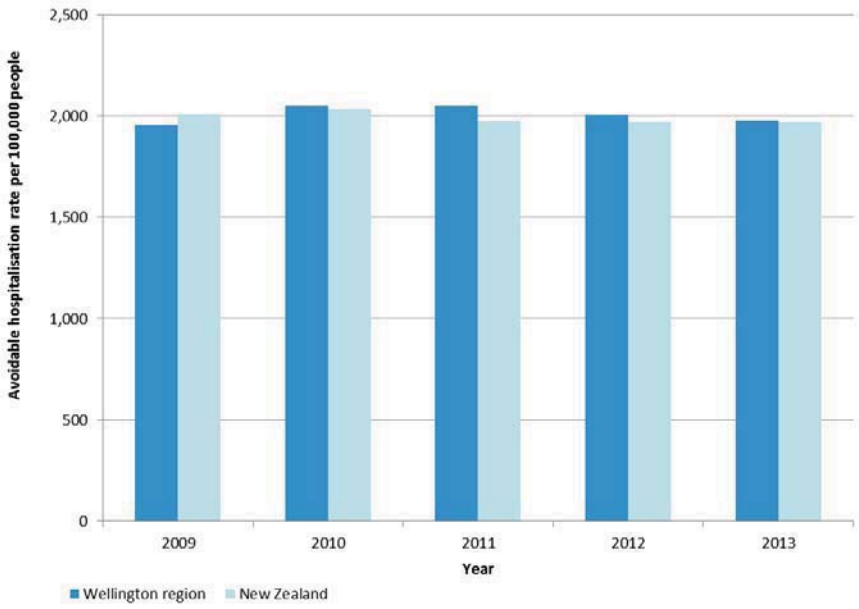
Data points available only to 2012.

HC010: Avoidable hospital admissions

The avoidable hospitalisation rate has been relatively steady since 2001

Every year people are admitted to hospital with conditions that could have been treated in a community setting. Avoidable hospital admissions are a proxy for people's access to, and the effectiveness of, primary health care services. The rate of avoidable hospital admissions is affected by socioeconomic conditions such as housing quality and income, personal variables such as age and ethnicity, and geographic factors such as location and access to affordable health care in the community. Avoidable admissions are also influenced by the quality of primary health care and links between GPs and hospitals.

Avoidable hospital admissions rate



Source: Ministry of Health[31, 32]

Findings

- The avoidable hospitalisation rate in the Wellington region was 1,979 per 100,000 people in 2013, similar to the New Zealand rate of 1,971 per 100,000 people.
- The avoidable hospitalisation rate in the Wellington region and in New Zealand overall has been relatively stable over the study period, with minor fluctuations.

Technical notes

Data points available only for 2009 to 2013.

[31] The data provided on avoidable hospitalisations will undercount as the programme the Ministry of Health used to calculate rates did not include avoidable hospital admissions for conditions which are exclusively 'population preventable' including HIV/AIDS, oral and lung cancers, nutrition, and alcohol related diseases.

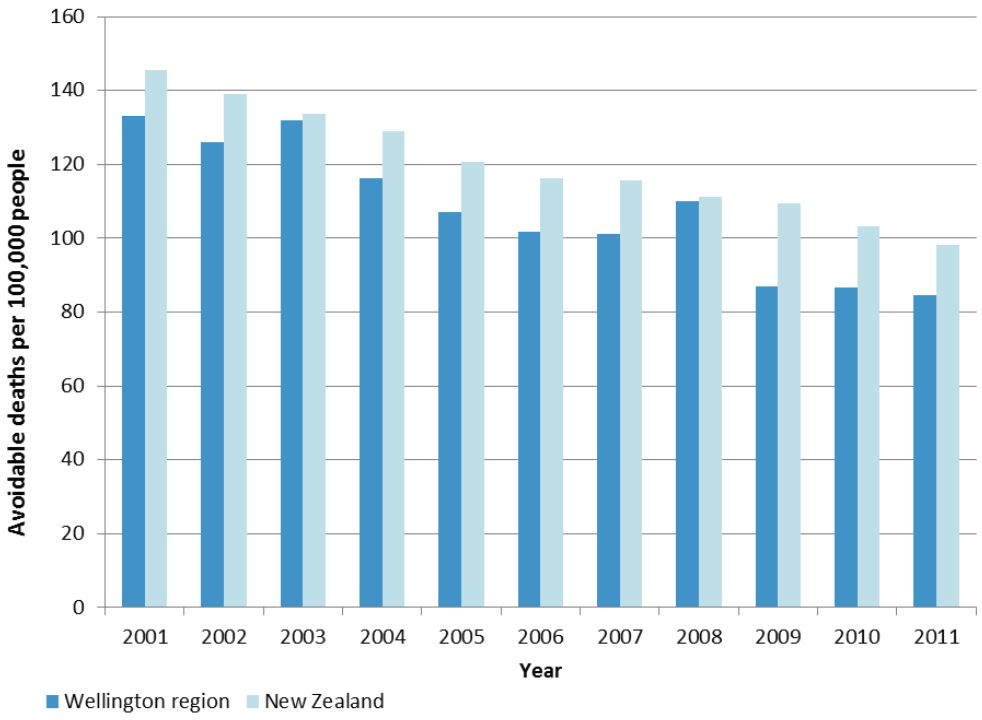
[32] Rates are age-standardised.

HC011: Avoidable deaths

The mortality rate from causes amenable to intervention in the Wellington region decreased between 2001 and 2011

The mortality rate from causes which can be prevented by (are 'amenable to') health care intervention is measured as the number of deaths potentially avoidable through medical treatment. It is a proxy measure for the effectiveness of the health system. These mortality rates are affected by socioeconomic conditions and personal variables.

Mortality rate from amenable causes



Source: Ministry of Health[33]

Findings

- In 2011, the Wellington region had a mortality rate from causes amenable to intervention of 84 per 100,000 people. This is lower than the New Zealand rate of 98 per 100,000 people.
- The mortality rate from causes amenable to intervention in the Wellington region has been consistently below the New Zealand rate since 2001, and both have trended down.

Technical notes

Data points available only to 2011.

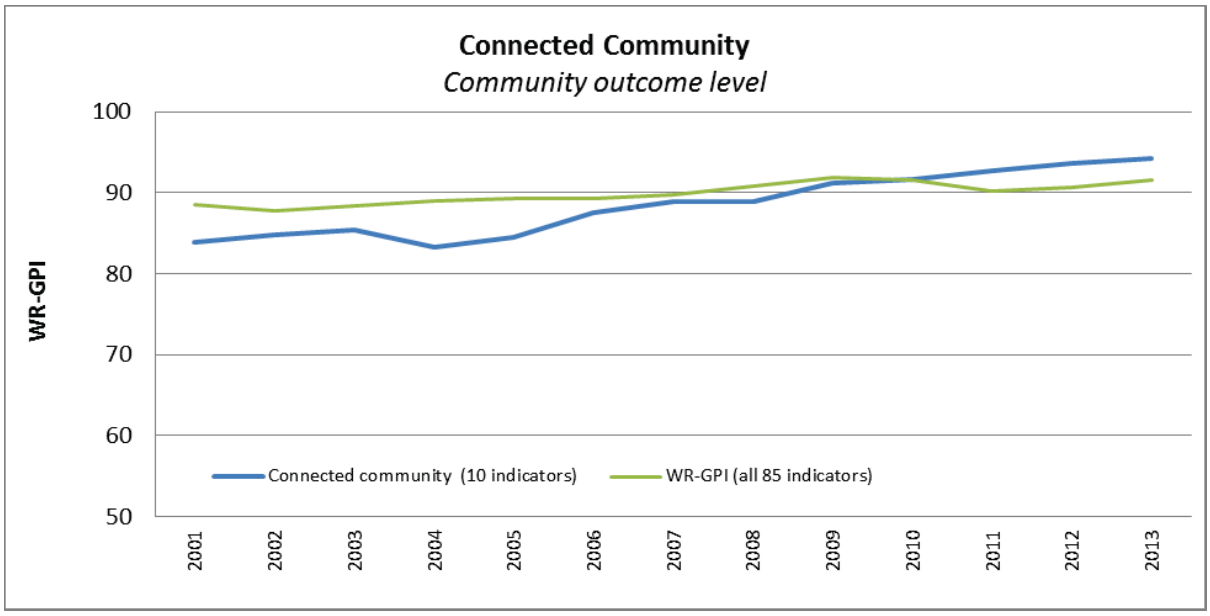
[33] Rates are age-standardised.

Connected Community

Outcome goal: Our local, national and international connections (including our access to them) are efficient, quick and easy. Our communication networks, air and sea ports, roads and public transport systems are world class and enable us to link with others, both within and outside the region.

IMPROVED

Overall outcome: The connected community index was lowest in 2004 but rose steadily after that to reach its highest point in 2013. Overall the index increased by 12.3% between 2001 and 2013.



Indicators		Well-being trend 2001 - 2013
CC001	Peak AM/PM congestion rates	
CC002	Ease of walking around the region	
CC003	Ease of cycling around the region	
CC004	Active mode share of total household travel	
CC005	Public transport boardings per capita	
CC006	Access to public transport	
CC007	Ease of making a public transport journey across the region	
CC008	Access to a motor vehicle	
CC009	Households with internet access	
CC010	Broadband Internet access	

Indicator symbol legend is provided in chapter 2, page 15

Connected community findings

The majority of connected community indicators have trended positively over the study period. There were improvements across six indicators, very small changes in two indicators, and declines in two indicators.

The percentage of households with access to broadband made by far the biggest contribution to the overall increase in the index between 2001 and 2013, and there was also a strong increase in the percentage of households with access to the internet in general.

Active mode share of total household travel increased, as did the perception of the ease of walking. Several public transport indicators also trended positively. Public transport boardings per capita rose as did positive perceptions about the ease of making public transport journeys in the region. The most significant negative trend across the ten indicators was for perceived ease of cycling around the region. There was also an increase in peak time congestion rates. Access to a motor vehicle was marginally higher in 2013 than 2001 and the percentage of people living close to a public transport stop was marginally lower.

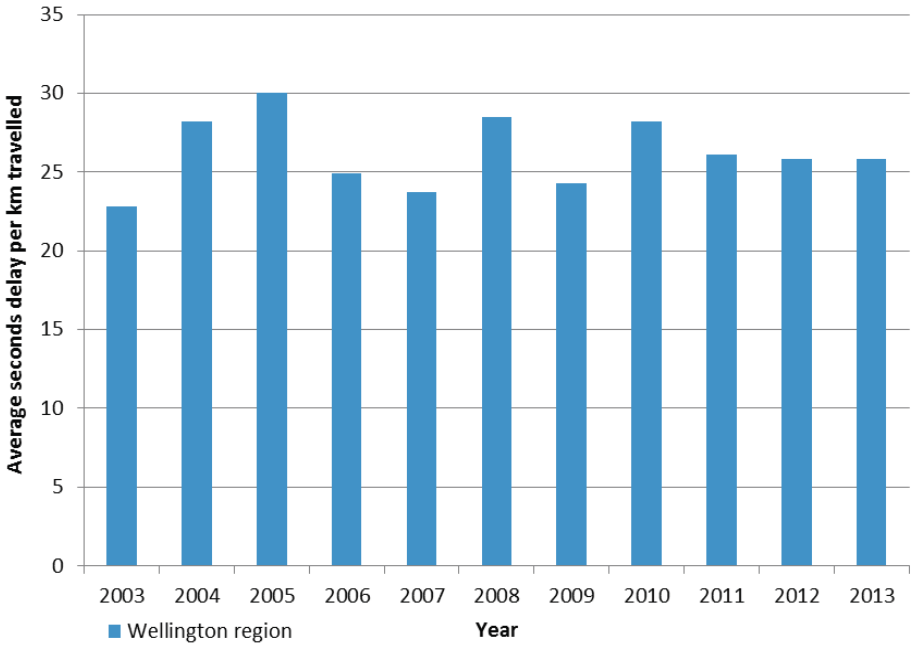
The patterns of movement among the indicators in this outcome area, and the overall picture for the connected community index suggest that the region has experienced an improvement in connectivity since 2001.

CC001: Peak AM/PM congestion rates

Peak AM/PM congestion rates have fluctuated over the study period, but were higher in 2013 than 2003

Congestion increases travel time, stress, air pollution and fuel consumption, and impacts people's quality of life. Ease of movement along Wellington's strategic road network is central to the efficient transportation of people and goods and to generating economic activity. The average amount of time taken to travel around the region is an indicator of the efficiency of using the road network.

Peak AM/PM congestion rates



Source: New Zealand Transport Agency

Findings

- In 2013, the peak AM/PM congestion rate of selected Wellington region roads was 25.8 seconds delay per kilometre travelled.
- Congestion rates have fluctuated over the study period and are slightly higher in 2013 than 2003.

Technical notes

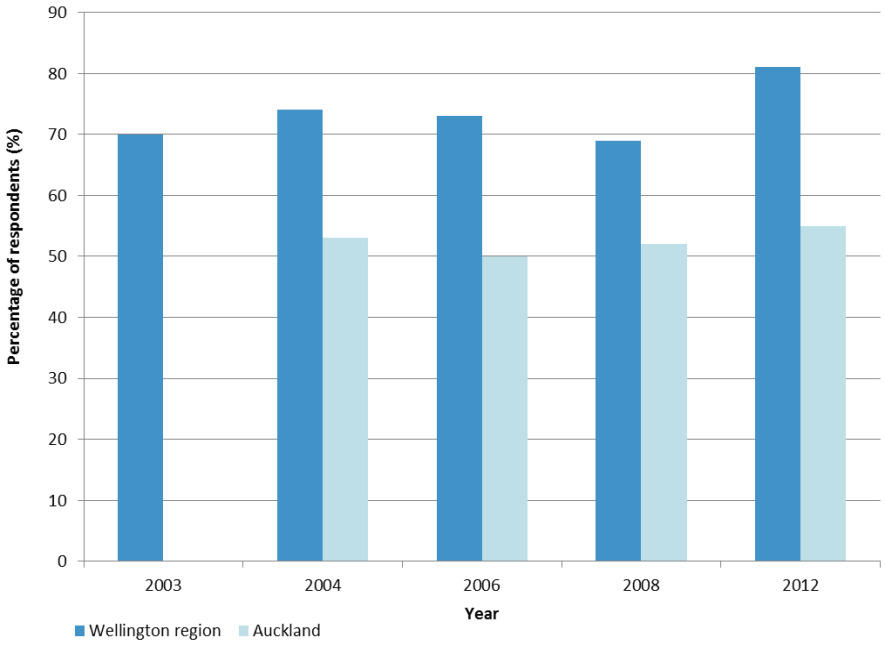
Data points available only from 2003.

CC002: Ease of walking around the region

There was an improvement in people's perceptions of the ease of walking around the region between 2008 and 2012

An increase in the proportion of people walking helps contribute to important transport outcomes such as reducing congestion and associated air pollution, as well as greenhouse gas emissions and vehicle costs. Walking is also known to provide many health benefits. Perceptions of the ease of various forms of transport for getting around the region can impact on people's travel opportunities and choices.

Respondents that rate the ease of walking around their region as 'good'



Source: GWRC and ARC Transport Perceptions Survey

Findings

- In 2012, 81% of respondents rated getting around the Wellington region by walking as 'good'.
- Respondents in the Wellington region are significantly more likely to think walking around the region is 'good' compared to Auckland region respondents, where the percentage was just 55% in 2012.
- Since 2008 an increasing proportion of respondents' in both Wellington and Auckland rated the ease of walking around their region as 'good', though the increase in Wellington has been significantly greater than in Auckland.

Technical notes

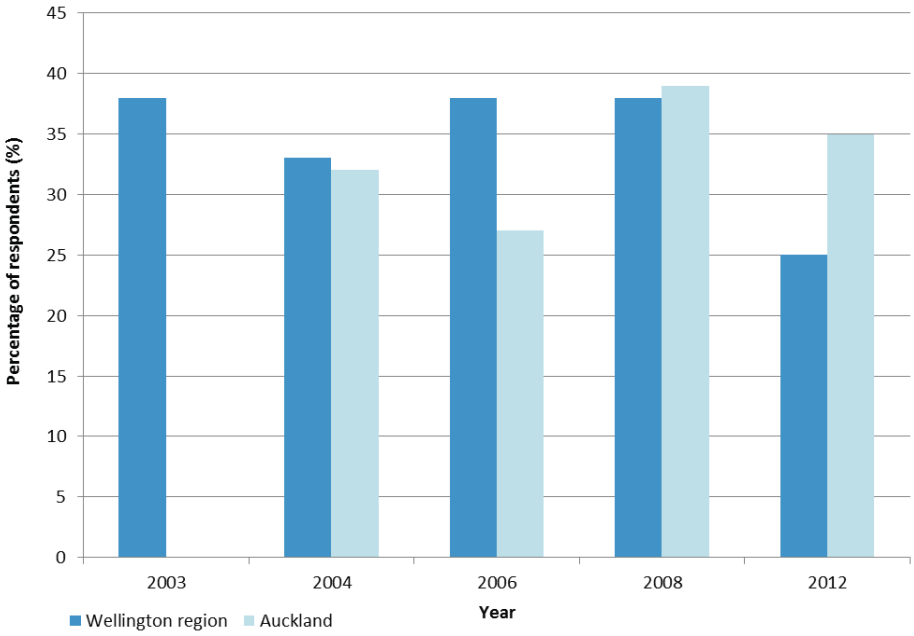
Data points available only for years shown.

CC003: Ease of cycling around the region

There has been a decrease in respondents' perceptions of the ease of cycling around the region since 2003

As well as being a highly energy efficient mode of transport, cycling saves money, is good for health, reduces congestion, and during peak travel times is often faster than driving. People's perceptions of the ease of cycling can be influenced by a range of factors including urban planning and design elements such as provision of bike lanes and linkage of bicycle facilities and infrastructure to key locations, integration with other transport modes such as buses and trains, safety concerns such as perceived risks from motorists, and topography.

Respondents that rate the ease of cycling around their region as 'good'



Source: GWRC and ARC Transport Perceptions Survey

Findings

- In 2012, 25% of respondents rated getting around the Wellington region by cycling as 'good'.
- The rate has declined from 38% of respondents that rated cycling around the Wellington region as 'good' in 2008.
- While respondents in the Wellington region were more likely than respondents in the Auckland region to think cycling around the region is 'good' in 2006, this situation has since reversed, with a far larger proportion in Auckland (35%) giving this answer in 2012 compared to 25% in Wellington.

Technical notes

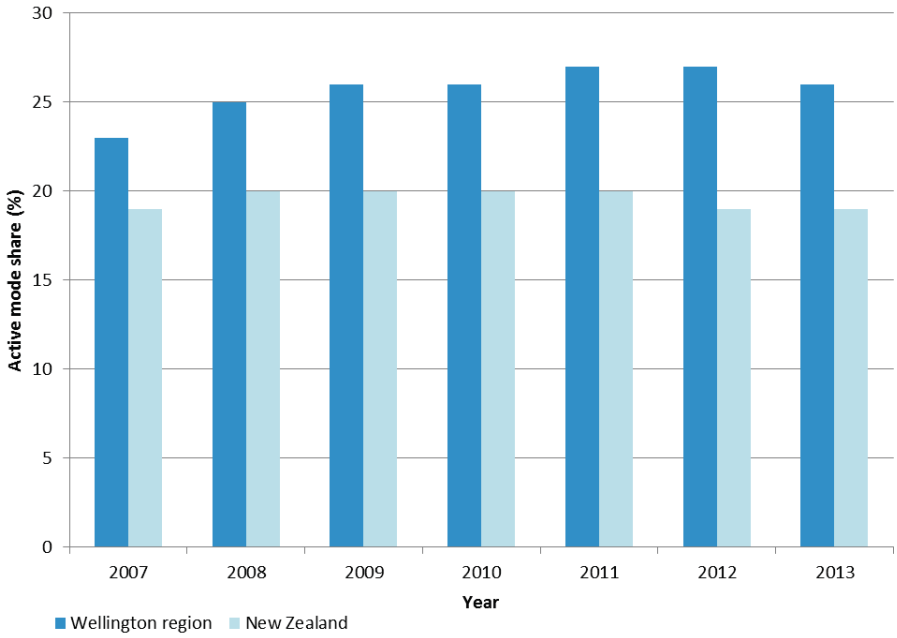
Data points available only for years shown.

CC004: Active mode share of total household travel

The use of active modes for travel around the region has increased slightly between 2007 and 2013

An increase in the percentage of trips by active transport modes (e.g. walking and cycling) increases physical activity, which improves physical and mental well-being, encourages social interaction and lowers the risk of a number of diseases such as cardiovascular disease, type 2 diabetes and several types of cancer. Greater use of active modes for travel around the region can also contribute to important transport outcomes such as reducing congestion and associated air pollution, greenhouse gas emissions and vehicle costs.

Active mode share of total household travel



Source: Ministry of Transport TMIF indicator TP005

Findings

- In 2013, active travel made up 26% of total travel by respondents of main urban areas in the Wellington region. This has increased slightly from 23% in 2007.
- Higher proportions of trips are made by active modes in the Wellington region than in New Zealand overall.

Technical notes

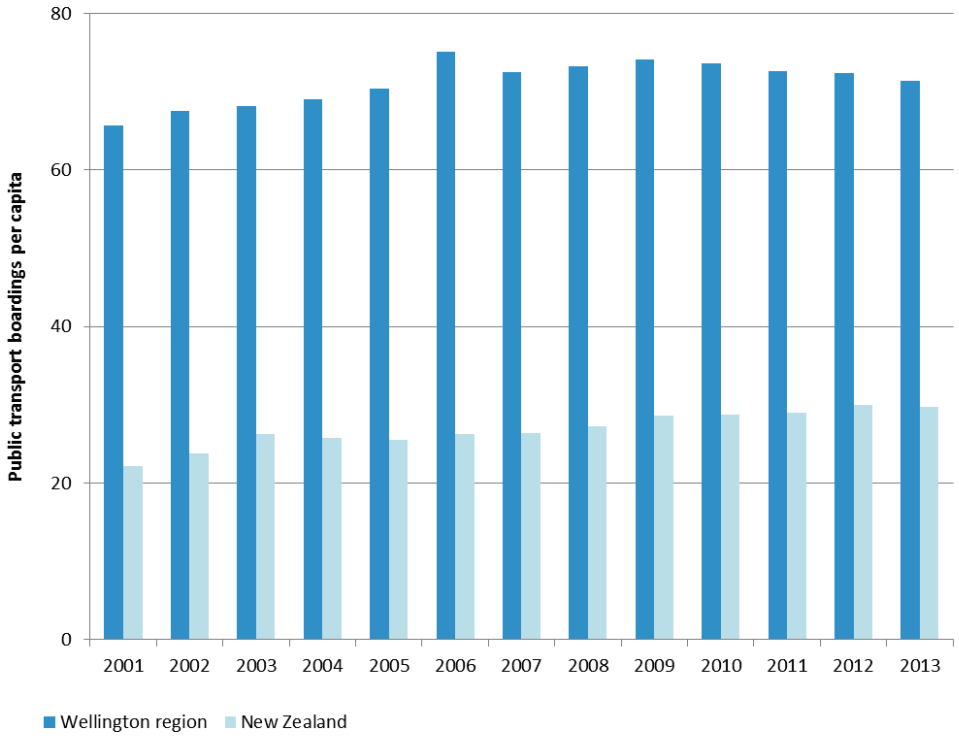
Data points available only from 2007 to 2013.

CC005: Public transport boardings per capita

Although public transport boardings per capita fluctuating across the time series, there has been an overall increase between 2001 and 2013

Public transport use is seen as a key sustainability indicator as it has wide-ranging benefits for the environment, employment options and access to services. It is generally a more energy-efficient means of transport than light passenger vehicles.

Public transport boardings per capita



Source: Ministry of Transport TMIF indicator TP005

Findings

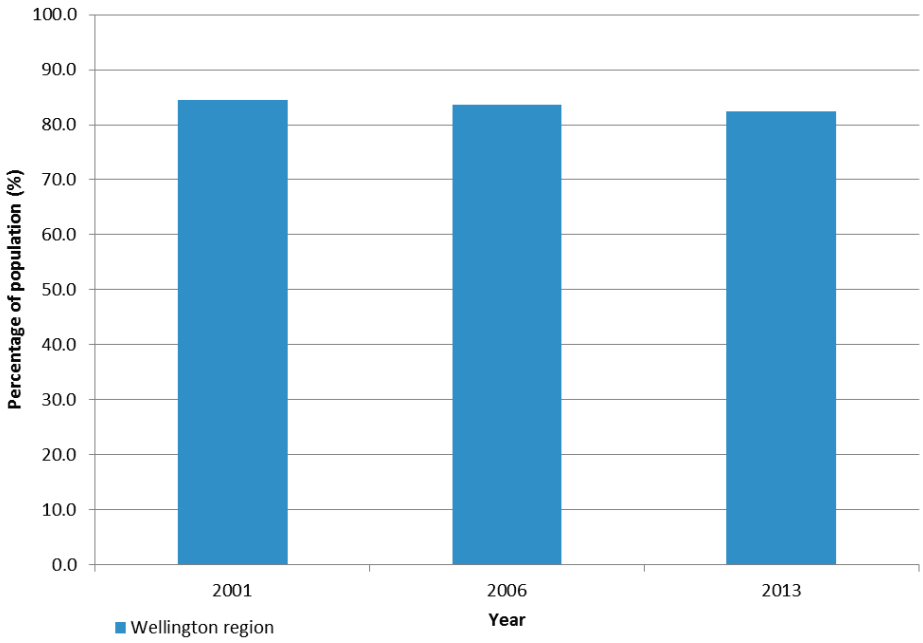
- In 2013, there were 71.4 public transport boardings per capita in the Wellington region, which is an increase from 65.6 per capita in 2001. The peak year for public transport boardings in Wellington was 2006 where there were 75.1 boardings per capita. The rate has generally fallen since then.
- Public transport boardings per capita across New Zealand have increased steadily over this time but national levels are still much lower than those observed in the Wellington region, which had more than double the national rate.

CC006: Access to public transport

The percentage of people living within 500m of a public transport stop decreased between 2006 and 2013

This indicator measures people's access to public transport. This facilitates their ability to access health services and programmes, recreational activities, education and employment. It also reduces dependence on private vehicles, which has positive benefits for the environment. Limited access to public transport can result in social isolation, especially among the elderly and the young.

Percentage of people living within 500m of a public transport stop



Source: Greater Wellington Regional Council

Findings

- The percentage of people in the Wellington region living within 500m of a public transport stop (bus stop or train station) decreased by 2.4%, from 84.5% in 2001 to 82.5% in 2013.

Technical notes

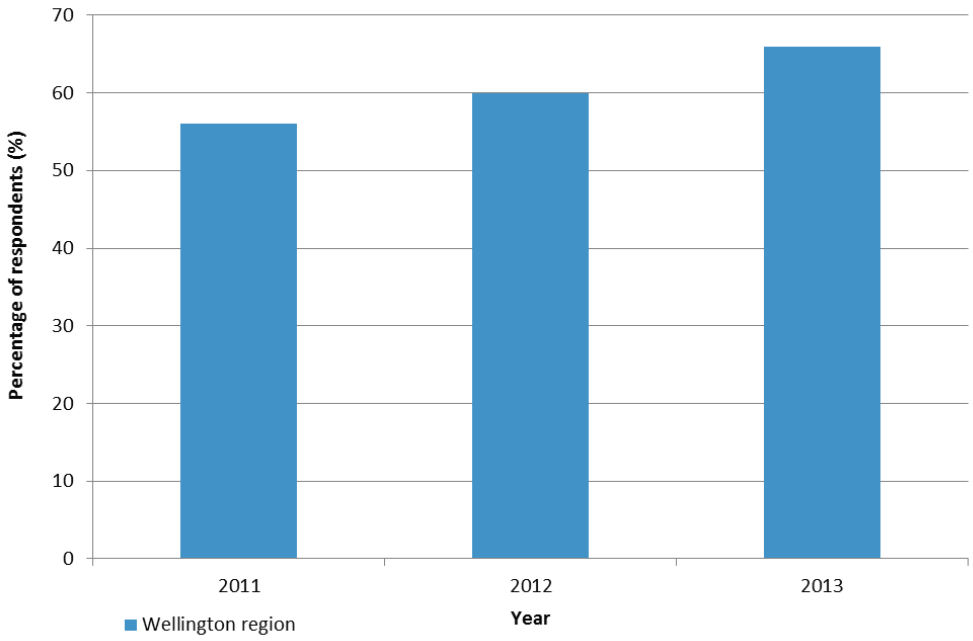
Comparable data points (derived from census results) available only for 2001, 2006 and 2013.

CC007: Ease of making a public transport journey across the region

Between 2011 and 2013 a growing proportion of respondents said it was easier to make a journey across the region by public transport

Public transport facilitates people's ability to access health services and programmes, recreational activities, education and employment. Perceptions of the ease of various forms of transport for getting around the region can impact on people's travel opportunities and choices.

Ease of making a journey across the region by public transport



Source: GWRC Annual Public Transport Satisfaction Monitor[34]

Findings

- In 2013, 66% of respondents rated getting around the Wellington region by public transport as somewhat easy, very easy or extremely easy. This has increased from 56% in 2011.

Technical notes

Data points available only for 2011 to 2013.

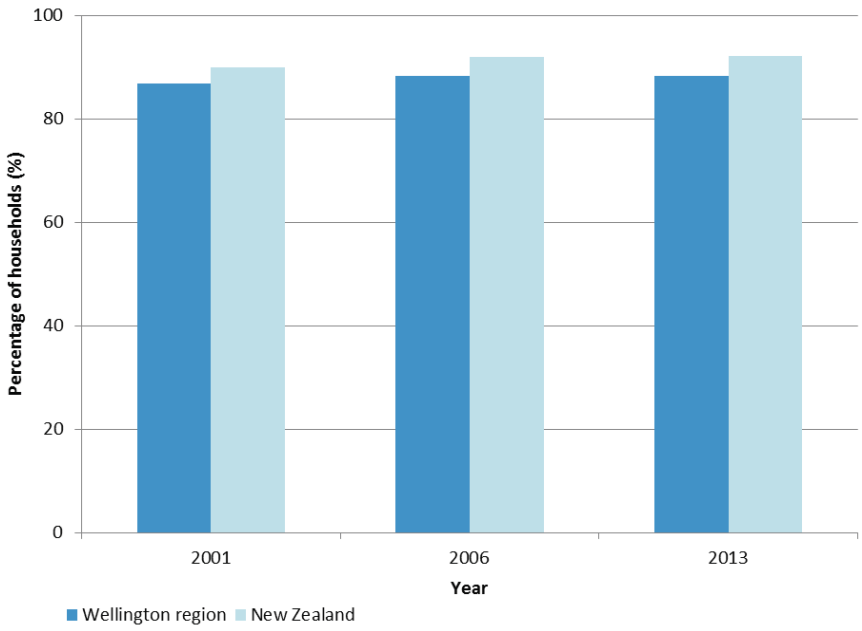
[34] In 2011 the wording of the question changed from "How easy do you think it is to make journeys across the Wellington region by public transport?" to "How easy is it to make journeys across Wellington using public transport?" Caution should be exercised when interpreting results.

CC008: Households with access to a motor vehicle

Between 2001 and 2006 the percentage of households with access to a motor vehicle increased, then stabilised

In areas with limited public transport services or infrastructure conducive to walking and cycling, access to a motor vehicle may help people to more easily access health services and programmes, recreational activities, education and employment. It can also increase the range of travel opportunities and choices available to households, and decrease the risk of social isolation.

Percentage of households with access to a motor vehicle



Source: Statistics New Zealand Census

Findings

- In 2013, 88.3% of households in the Wellington region had access to a motor vehicle, an increase from 86.9% in 2001. This share was unchanged from 2006.
- The percentage of households with access to a motor vehicle also increased for New Zealand as a whole between 2001 and 2006, from 89.9% to 91.9%, reaching 92.1% in 2013.
- The percentage of households with access to a motor vehicle is higher for New Zealand as a whole than for the Wellington region.

Technical notes

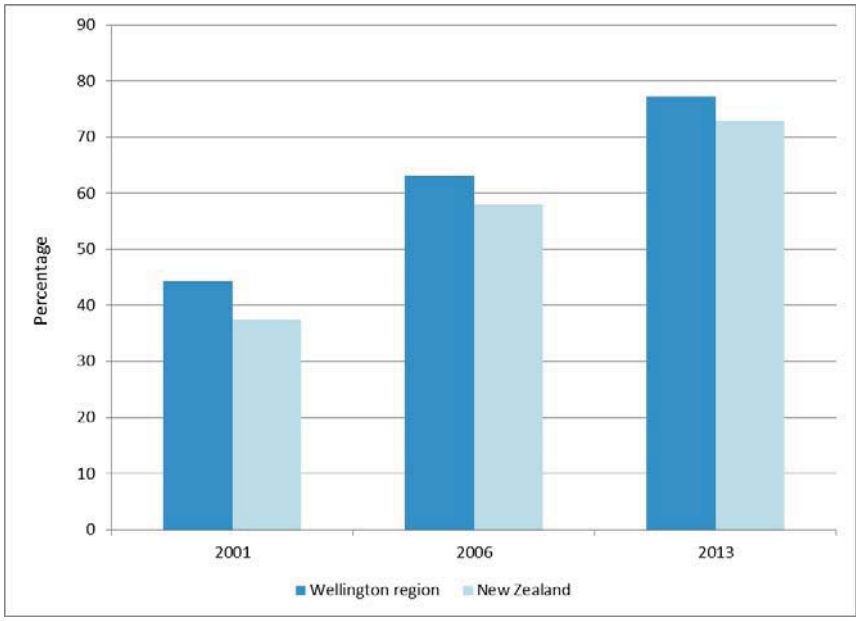
Data points available only for years shown.

CC009: Households with internet access

The percentage of households with access to the internet increased between 2006 and 2013

Access to communication via the internet enables social contact with friends and family in the absence of frequent face-to-face contact. The internet is also becoming an increasingly important means of accessing a wide range of information and services, including government services. People who are unable to access information technologies, or who lack the skills to use them, may risk being excluded from some social, educational, cultural and economic opportunities. This may adversely affect educational outcomes, employment prospects and other aspects of well-being.

Percentage of households with access to the internet



Source: Statistics New Zealand Census

Findings

- In 2013, 77.2% of households in the Wellington region had access to the internet, a large increase from 44.2% in 2001.
- The percentage of households with access to the internet has also increased for New Zealand overall over this time from 37.4% in 2001 to 72.8% in 2013.
- The percentage of households with access to the internet is higher in the Wellington region than for New Zealand overall.

Technical notes

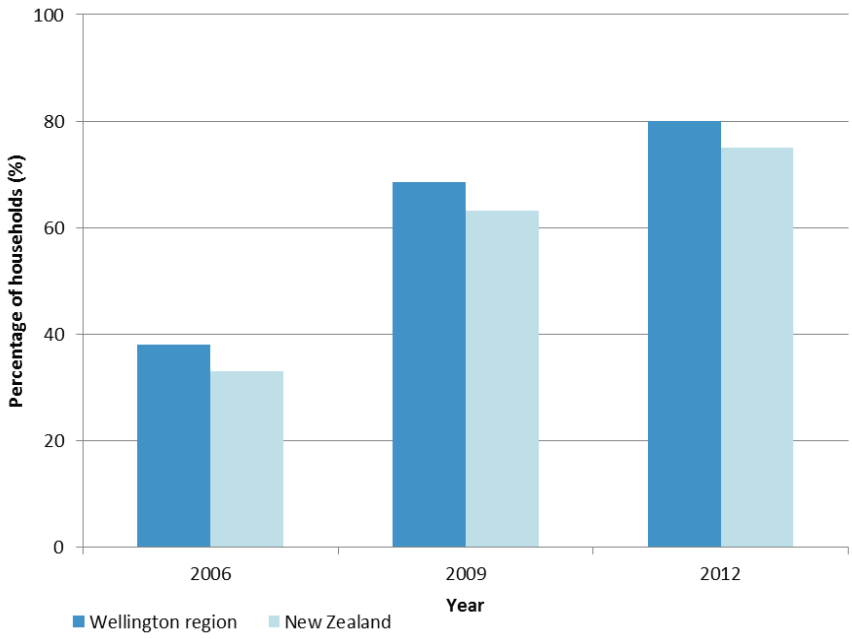
Data points available only for 2001, 2006 and 2013.

CC010: Households with broadband internet access

Between 2006 and 2012 the percentage of households with broadband access increased

Broadband is a high-speed connection to the internet that enables individuals, businesses and governments to gain fast access to many forms of information. High speed internet access can accelerate business development, and provide new opportunities for innovation, expansion, and e commerce, and provides easy access to educational resources and communications across disparate locations. Broadband also helps enable people to work from home, saving time and expenses.

Percentage of households with access to broadband



Source: Statistics New Zealand ICT Survey

Findings

- In 2012, 80% of households in the Wellington region had broadband, an increase from 38% in 2006.
- The percentage of households with broadband access also increased for New Zealand over this time (from 33% in 2006 to 75% in 2012).
- The percentage of households with broadband access is higher in the Wellington region than for New Zealand overall.

Technical notes

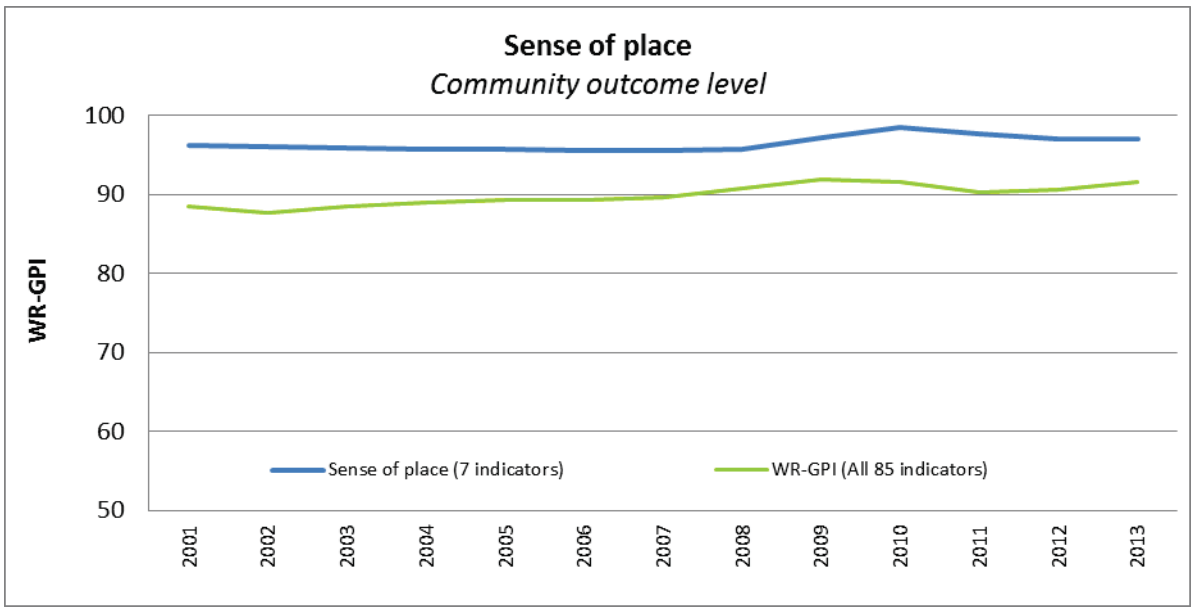
Data points available only for 2006, 2009 and 2012.

Sense of Place

Outcome goal: We have a deep sense of pride in the Wellington region and there is strong community spirit. We value the region's unique characteristics – its rural, urban and harbour landscapes, its central location, and its capital city.

IMPROVED

Overall outcome: The sense of place GPI has changed very little since across the 13 year time series, with the index being only 0.85% higher in 2013 than in 2001.



Indicators		Well-being trend 2001 - 2013
SP001	Sense of pride in city (look & feel)	↑
SP002	Perception that graffiti, vandalism & litter are a problem	↓
SP003	Region considered a great place to live	?
SP004	Sense of community	↑
SP005	Contact with friends & family	→
SP006	Volunteerism	→
SP007	Feelings of Isolation	→

Indicator symbol legend is provided in chapter 2, page 15

Sense of place findings

Over the 2001 to 2013 period, the index measuring change in the sense of place community outcome was highest in 2010 and lowest between 2006 and 2008. The index decreased gradually and marginally from 2001 to 2008, then increased for a couple of years before settling again at a level only slightly higher than that of 2001 (a 0.85% change between 2001 and 2013).

Over the study period there were improvements across two indicators, no significant changes for three indicators, and a decline in one indicator. Additionally, there is one indicator for which it is has not been possible to identify a trend as only one year of data was available. The sense of place indicator that trended most positively across the data points for which information was available was residents' sense of community with others in their local neighbourhood. The strongest negative trend across the sense of place indicators was in people's perceptions about graffiti, vandalism and litter being a problem in their local area.

Note that the most recent data collection year for six of the seven indicators is 2012. Due to limited data availability for most of the sense of place indicators, the region's progress towards achieving the sense of place goals is not straightforward to measure. As more data becomes available over time, it will be easier to draw robust conclusions about change in this community outcome area.[35]

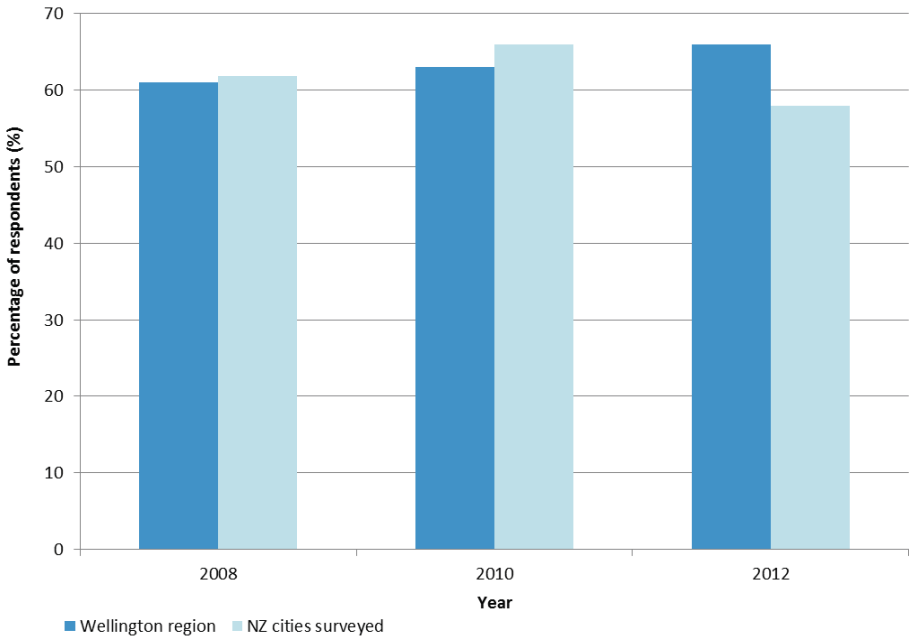
[35] The WR-GPI is a long-term monitoring tool.

SP001: Sense of pride in city (look & feel)

The percentage of residents who feel a sense of pride in the way their city looks and feels increased between 2008 and 2013

Built and natural aspects of the environment contribute to the way people feel about where they live and have an impact on people's quality of life and sense of well-being. Pride of place can also be about human relationships and the level of social capital that exists in a community Cultural and sporting events may also promote a sense of pride and collective identity in a city or region. Feeling a sense of pride of place is likely to result in increased participation and investment in the area in which a person lives.

Percentage of people who feel a sense of pride in the way their city looks and feels



Source: Quality of Life Survey

Findings

- In 2012, 66% of Wellington region respondents agreed or strongly agreed that they felt a sense of pride in the way their city looks and feels, increasing from 61% in 2008.
- In 2012 Wellington region respondents were more likely to feel a sense of pride (66%) in the way their city looks and feels compared to respondents in the NZ cities surveyed (58%).

Technical notes

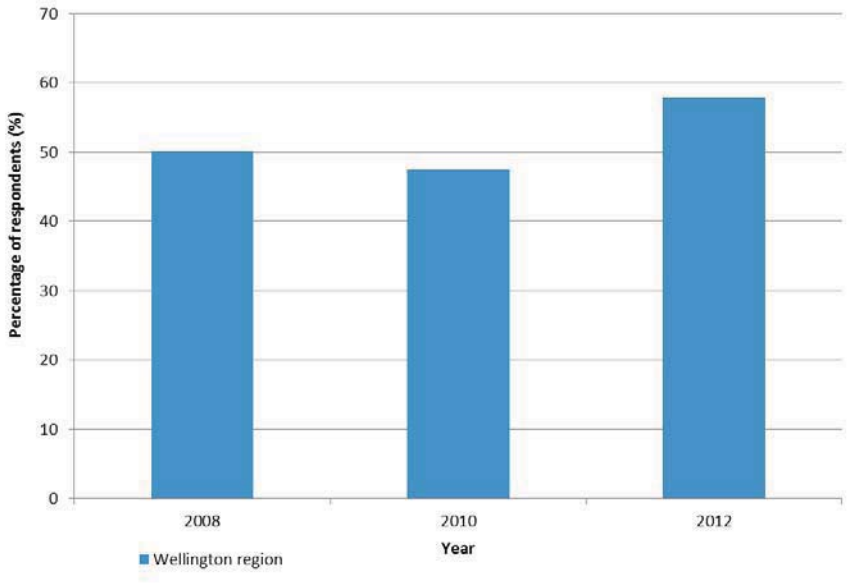
Data points available only for 2008, 2010 and 2012.
Data for NZ cities only collected in 2012.
New Zealand cities surveyed: Auckland, Christchurch, Dunedin, Wellington, Porirua and Hutt.

SP002: Perception that graffiti, vandalism and litter are a problem

The percentage of residents who thought that graffiti, vandalism or litter are a problem in their local area increased between 2008 and 2012

Litter, graffiti and vandalism can impact negatively on people's quality of life by affecting how safe they feel, and how proud they are of the look and feel of where they live.

Perception that graffiti, vandalism and litter are a problem



Source: Quality of Life Survey

Findings

- In 2012, an average of 57.9% of Wellington region respondents thought that people leaving litter in the streets, graffiti or vandalism had been a problem in their local area over the last 12 months. This is significantly higher than the 47.5% of Wellington region respondents with this perspective in 2010.
- From 2008 to 2010 there was a decrease in the percentage of respondents in the Wellington region

Technical notes

Data points available only for 2008, 2010 and 2012.

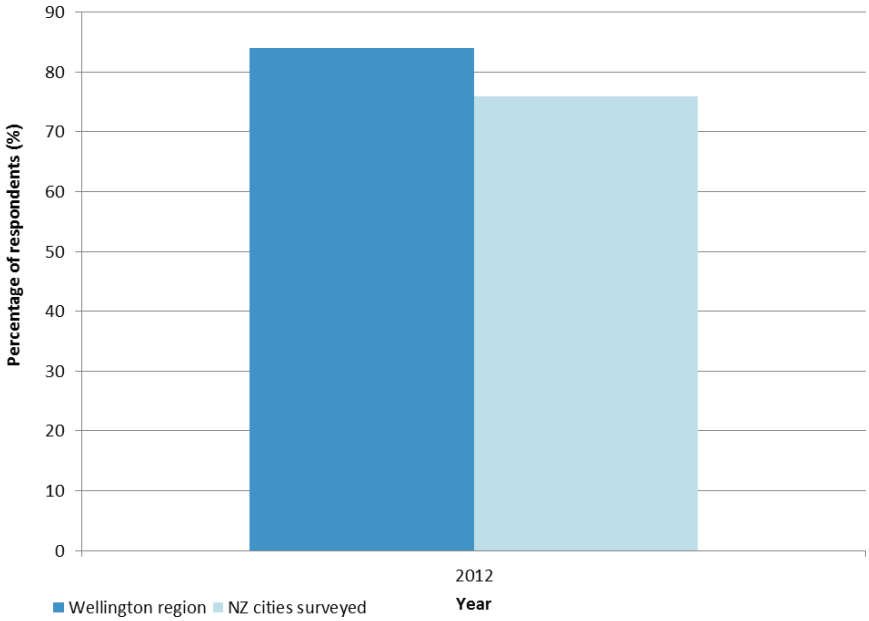
SP003: Region considered a great place to live

?

In 2012, 84% of people thought the Wellington region (or their city in the Wellington region) was a great place to live

A well-functioning and integrated society is underpinned by trust and connectedness at the community level. Neighbourhoods in which people keep an eye out for each other, take an interest in maintaining ties and networks and have a shared pride of place are more likely to be safe and fulfilling environments than neighbourhoods where there is little, or negative, interaction.

Percentage of respondents that agree or strongly agree that the Wellington region is a great place to live



Source: Quality of Life Survey

Findings

- In 2012, 84% of Wellington region respondents agreed that the Wellington region is a great place to live.
- This percentage was higher than the average across the New Zealand cities surveyed, where only 76% of respondents agreed the Wellington region is a great place to live.

Technical notes

Data available only for 2012.

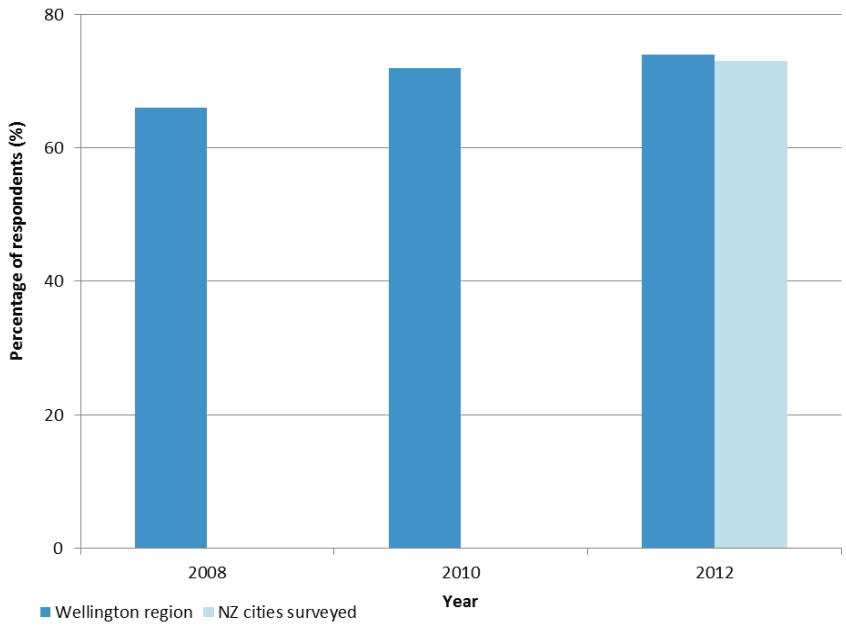
New Zealand cities surveyed: Auckland, Christchurch, Dunedin, Wellington, Porirua and Hutt.

SP004: Sense of community

The percentage of respondents that said they feel a sense of community with others in the local neighbourhood has increased since 2008

Local community members and neighbours are a key source of social support (especially in emergencies) and give people a sense of belonging. Contact with others in the local neighbourhood can help maintain social connectedness and trust between households and foster a sense of community.

Respondents' sense of community in the local neighbourhood



Source: Quality of Life Survey

Findings

- In 2012, 74% of Wellington region respondents agreed or strongly agreed that they felt a sense of community in the neighbourhood. This is just slightly higher than for New Zealand respondents overall at 73%.
- Respondents' sense of community in the Wellington region has increased from 66% in 2008 to 74% in 2012.

Technical notes

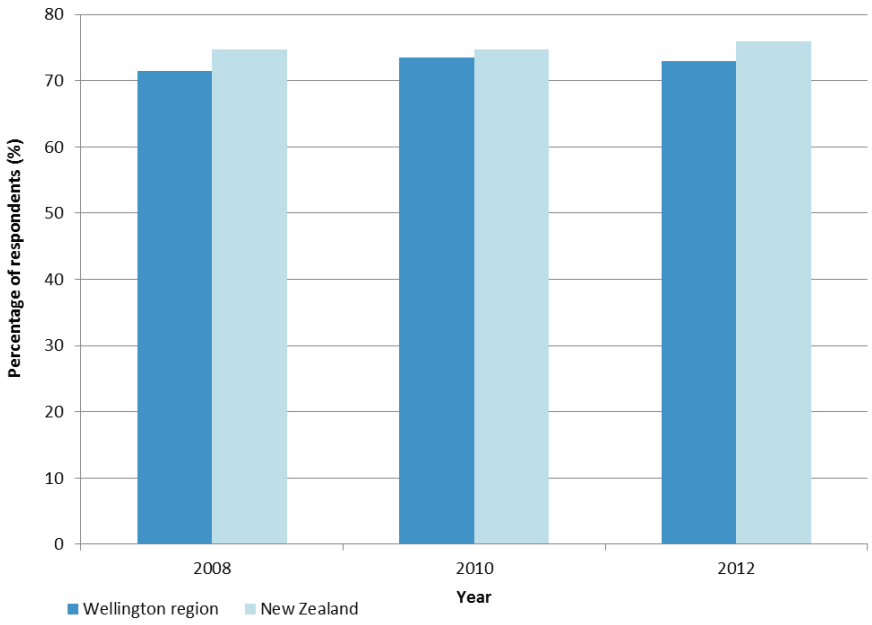
Wellington region data points available only for 2008, 2010 and 2012.
Comparable NZ cities data only collected in 2012.
New Zealand cities surveyed: Auckland, Christchurch, Dunedin, Wellington, Porirua and Hutt.

SP005: Contact with friends and family

The percentage of respondents who said the amount of contact they have with family and friends is 'about right' has been steady since 2008

Family and friends are the primary source of care and support for most people. Staying in touch with family and friends who live elsewhere helps maintain social connectedness between households and across geographical boundaries.

Respondents' reported contact with non-resident family and friends



Source: Statistics New Zealand General Social Survey

Findings

- In 2012, 73.0% of Wellington region respondents thought the amount of contact they have with friends and family (who do not live with them) was about right, which is lower than for New Zealand respondents overall. This has risen slightly from 71.4% in 2008.
- For New Zealand overall, the percentage of those who thought the amount of contact they have with family and friends (who do not live with them) is about right has increased very slightly from 74.7% to 76% over the same time period.
- The percentage of Wellington region respondents who thought the amount of contact they have with friends and family (who do not live with them) is about right is slightly lower that the percentage for New Zealand overall.

Technical notes

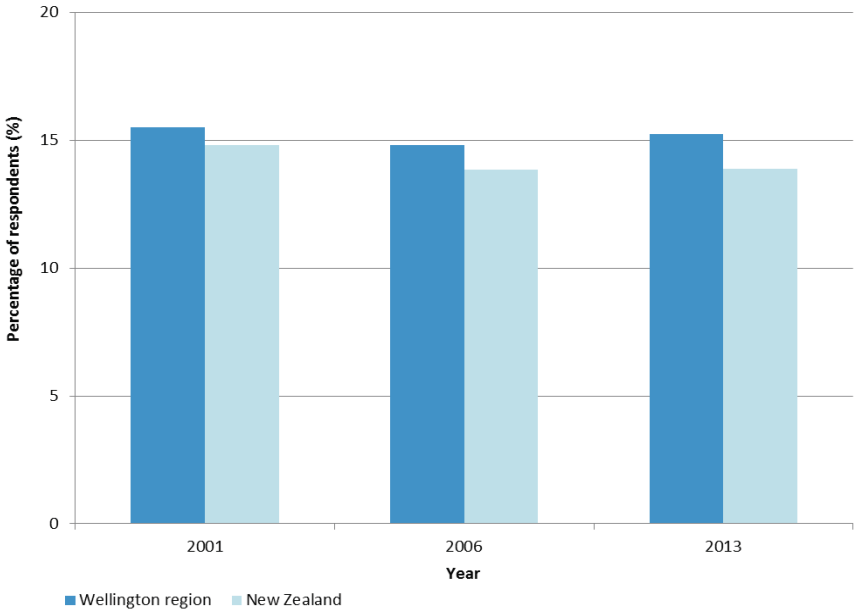
Data available only for 2008, 2010 and 2012.

SP006: Volunteerism

The percentage of adults that undertook voluntary work in 2013 was similar to 2001

Voluntary work underpins a wide range of groups and organisations whose activities contribute to social, cultural, environmental, and economic well-being. Voluntary work can provide benefits not only to the community, but also to volunteers themselves. The number of volunteers in the community is a proxy measure of community engagement and social connectedness. Volunteer work helps build social networks, increases social cohesion and supports economic activity.

Percentage of adults helping or undertaking voluntary work



Source: Statistics New Zealand Census

Findings

- In 2013, 15.2% of Wellington region adults helped or undertook unpaid voluntary work for or through an organisation, group or marae. This is higher than the percentage for New Zealand overall, which was 13.9% in 2013.
- Between 2006 and 2013, the percentage of adults in the Wellington region that undertook voluntary work increased to almost the rate of 2001 (15.5%), while the share for New Zealand was relatively steady.

Technical notes

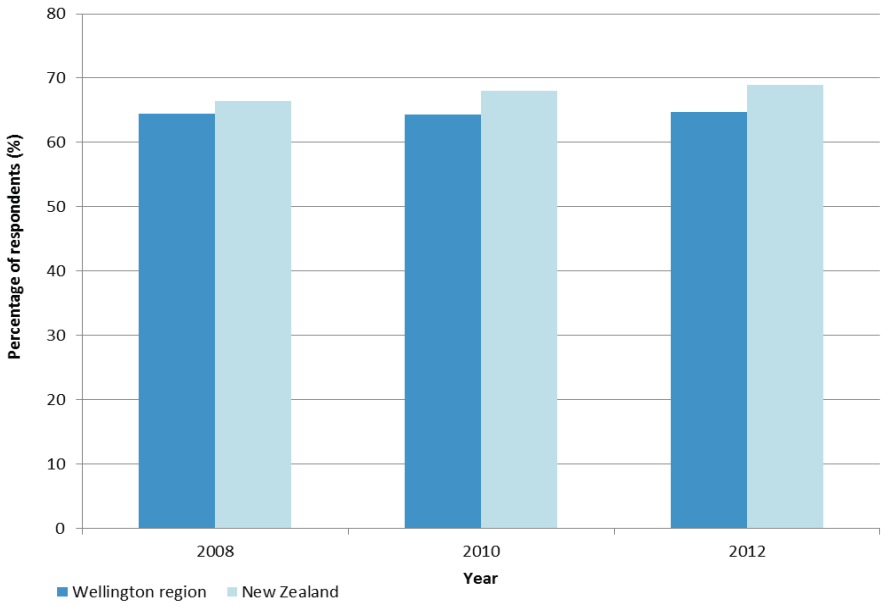
Data available only for the years shown.

SP007: Feelings of isolation

The percentage of people who reported they never felt lonely in the preceding four week period has been stable between 2008 and 2012

People can feel isolated for a variety of reasons including difficulties finding work, health issues or having few or no friends or family nearby. Feelings of isolation can weaken people's sense of engagement and social connectedness and can impact on physical and mental health. Feelings of isolation are also known to decrease overall social cohesion and are associated with anti-social behaviour, particularly amongst groups and individuals who perceive themselves to be marginalised.

Percentage of respondents that never felt lonely in the past four weeks



Source: Statistics New Zealand General Social Survey

Findings

- In 2012, 64.7% of Wellington region respondents said that they had not once felt lonely over the four week period prior to the survey. This has been a stable percentage since 2008 when the rate was 64.4%.
- Overall, compared to the Wellington region, respondents across New Zealand as a whole had a slightly higher incidence rate of not feeling lonely, reaching 68.9% in 2013. This indicates a slightly higher rate of loneliness in Wellington than New Zealand overall between 2008 and 2012.

Technical notes

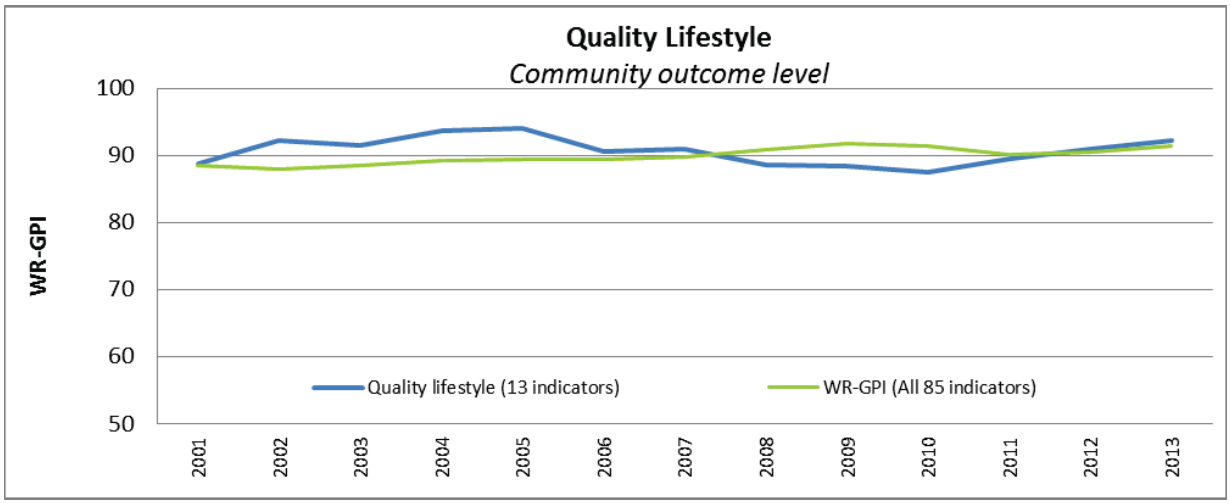
Data available only for 2008, 2010 and 2012.

Quality Lifestyle

Outcome goal: Living in the Wellington region is enjoyable, and people feel safe. A variety of healthy and affordable lifestyles can be pursued. Art, sport, recreation and entertainment scenes are enjoyed by all community members – and attract visitors.

IMPROVED

Overall outcome: The quality lifestyle GPI has fluctuated over time, but the 2013 result is 3.9% higher than that of 2001.



Indicators		Well-being trend 2001 - 2013
QL001	Population living in deprivation	
QL002	Households spending more than 30% of their disposable income on housing	
QL003	Population living in crowded households	
QL004	Number of applicants on Housing NZ priority A&B waiting lists	
QL005	Overall Life Satisfaction	
QL006	Self-reported happiness	
QL007	Job satisfaction	
QL008	Feeling of safety walking alone	
QL009	Recorded offences for crimes against the person - rate per 10,000 people	
QL010	Recorded offences for crimes against the property - rate per 10,000 people	
QL011	Ease of access to local parks or other green spaces	
QL012	Participation in social activities	
QL013	Commercial visitor guest nights	

Indicator symbol legend is provided in chapter 2, page 15

Quality lifestyle findings

Over the 2001 to 2013 period, the quality lifestyle index reached its highest points in 2003 and 2005, then declined for several years, reaching its lowest point in 2010, before trending upwards again. In 2013 the index was 3.9% higher than in 2001.

Though there has been little change in the overall quality lifestyle index across the 2001 to 2013 period, shifts have been observed for some of the individual values within the indicators. Between 2001 and 2013 across the Wellington region, six indicators in the quality lifestyle GPI improved, six declined, and one remained fairly stable.

The positive trends relate to recorded incidences of crime, adequacy of housing space, access to green spaces, overall life satisfaction and commercial visitor guest night numbers.

The indicators with negative trends relate to the proportion of the population living in deprivation, participation in social activities, self reported happiness, job satisfaction, housing affordability and the numbers of applicants on Housing NZ waiting lists.

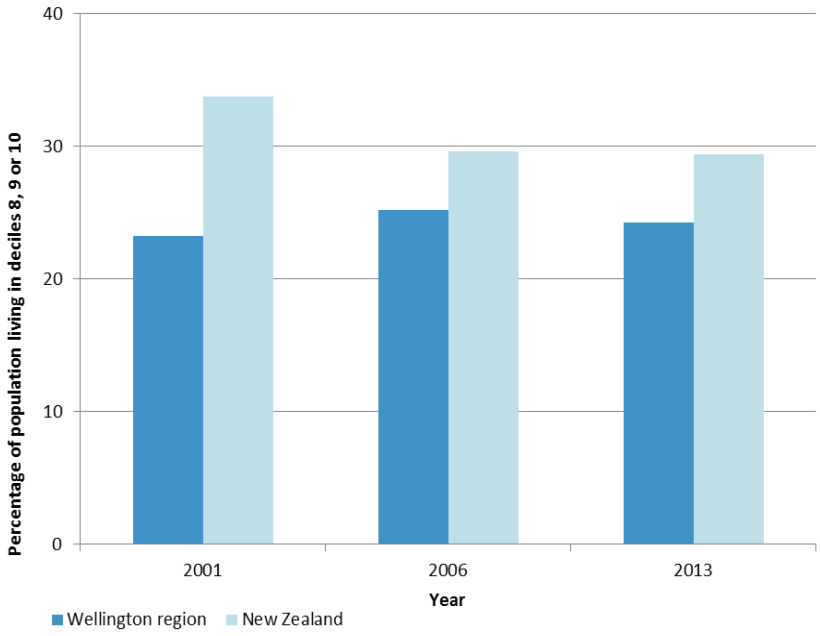
The indicator displaying little movement across the period relates to perceptions of safety.

QL001: Percentage of the population living in deprivation

The percentage of the population living in deprivation increased between 2001 and 2013

Addressing disadvantage is a key sustainability challenge. Persons and households experiencing low incomes, low levels of education and under-employment are less likely than others to have access to affordable housing, or to have the ability to secure a good quality of life for themselves and their families, now and in the future.

Percentage of the population living in deprivation



Source: University of Otago, Department of Public Health

Findings

- In 2013, 24.3% of the Wellington region population were living in deprivation (areas with decile ratings of 8, 9, or 10). This was slightly lower than in 2006 (25.2%) but higher than in 2001 (23.3%).
- Throughout the period shown, the proportion of the New Zealand population living in deprivation was notably higher than that in the Wellington region. In 2013 the rate for New Zealand was 29.4%.
- The proportion of the New Zealand population living in deprivation decreased significantly between 2001 and 2006, and fell slightly thereafter.

Technical notes

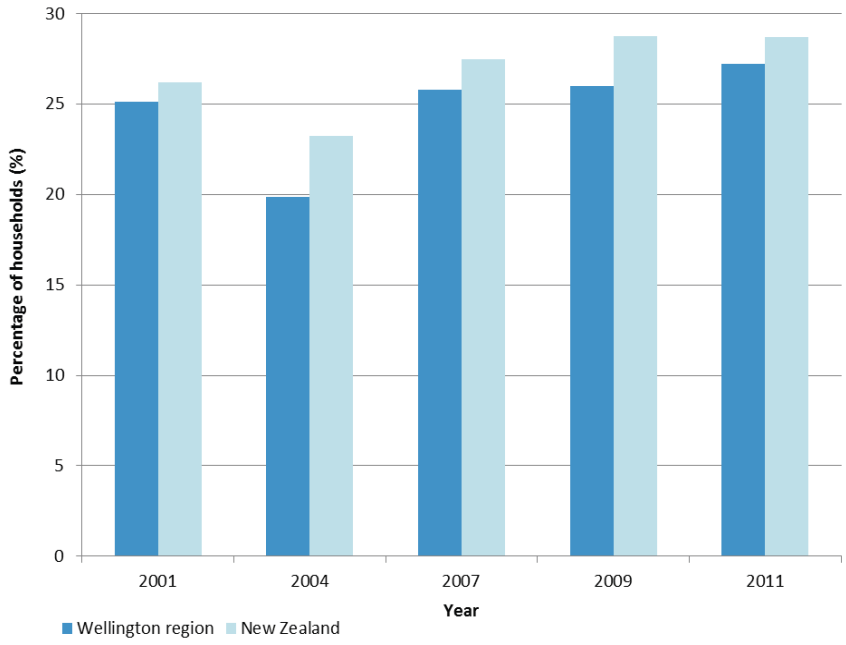
Data available only for 2001, 2006 and 2013.

QL002: Households spending more than 30% of their disposable income on housing

The percentage of households spending more than 30% of their disposable income on housing has increased since 2004

Affordable housing is important for people's well-being. For lower-income households especially, high housing costs relative to income are often associated with severe financial difficulty, and can leave households with insufficient income to meet other basic needs such as food, clothing, transport, medical care and education. High outgoings-to-income ratios are not as critical for higher-income earners, as there is sufficient income left for their basic needs.

Percentage of households spending more than 30% of disposable income on housing



Source: Statistics New Zealand Household Economic Survey

Findings

- In 2011, 27.2% of households in the Wellington region spent more than 30% of their disposable income on housing costs. This was an increase from 25.1% in 2001 and a strong increase from the low of under 20% in 2004.
- A similar trend was observed for households across New Zealand as a whole over this time, but for the entire period from 2001 to 2011, the percentage of households spending more than 30% of their disposable income on housing costs was consistently higher for New Zealand overall compared to households in the Wellington region.

Technical notes

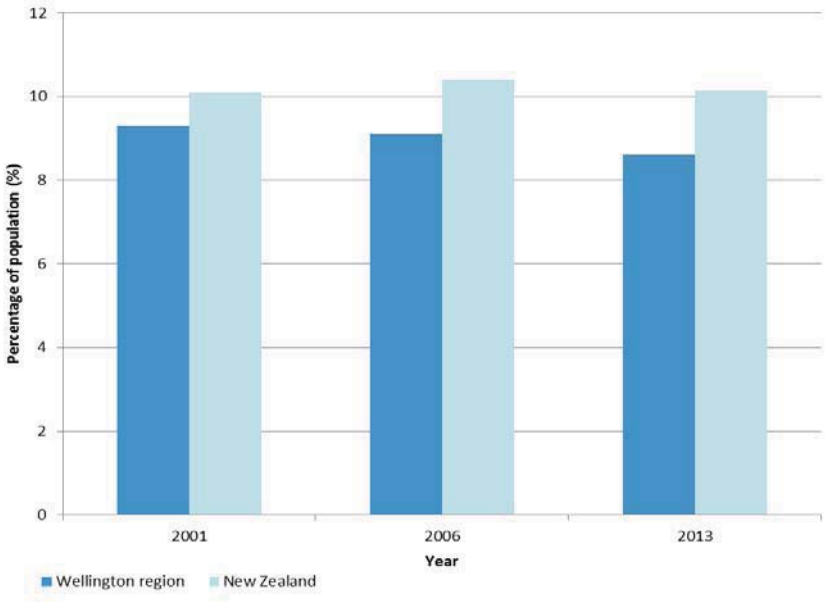
Data available only for years shown.

QL003: Percentage of the population living in crowded housing

The percentage of the population living in crowded housing fell between 2001 and 2013

Housing space adequate for the needs and comfort of a family is a core component of quality of life. National and international studies show an association between the prevalence of certain infectious diseases and crowding, between crowding and poor educational attainment, and between residential crowding and psychological distress.

Percentage of the population living in crowded housing



Source: MSD Social Report from Statistics New Zealand

Findings

- In 2013, 8.6% of the population in the Wellington region lived in crowded housing, down from 9.3% in 2001.
- In 2013, 10.1% of the population in New Zealand lived in crowded housing. The percentage for New Zealand overall has remained relatively unchanged across the years measured.
- Between 2001 and 2013, a higher percentage of the New Zealand population overall lived in crowded housing compared with the Wellington region population.

Technical notes

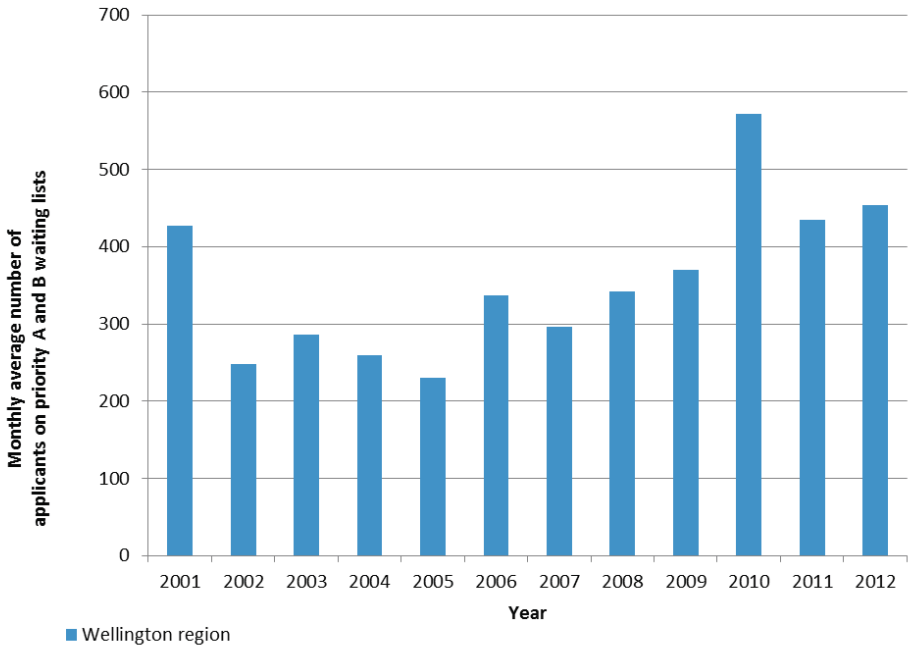
Data available only for years shown.

QL004: Number of applicants on Housing New Zealand priority A and B waiting lists

The number of applicants on Housing New Zealand priority A and B waiting lists was higher in 2012 than in 2001

Access to safe, affordable and quality housing is a fundamental determinant of well-being, central to health, stability, and social cohesion. High demand for, and insufficient supply of social housing can result in parts of the population living in inadequate or unaffordable housing conditions. This is likely to result in a range of negative consequences for those people, such as ill-health, financial stress, and a generally lower quality of life.

Number of applicants on Housing New Zealand priority A and B waiting lists



Source: Housing New Zealand

Findings

- In 2012, there were 454 applicants in the Wellington region on Housing New Zealand priority A and B waiting lists, compared with 427 in 2001.
- The number of applicants on waiting lists has fluctuated over the study period.
- There is a generally decreasing trend between 2001 and 2005, hand a generally increasing trend between 2005 and 2012, with a peak at 572 in 2010.

Technical notes

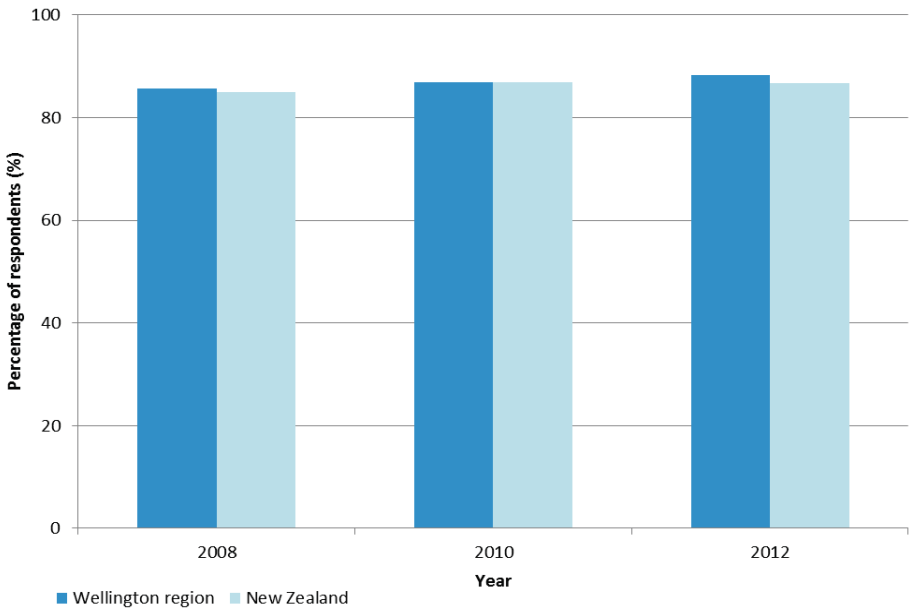
Data available to 2012 only. Priority A (at risk) and B (in serious housing need) included only. 2011 WR-GPI included A,B,C&D lists, as per Housing NZ policy at that time.

QL005: Overall life satisfaction

Between 2008 and 2012, respondents' rating of their overall life satisfaction slightly improved

Overall life satisfaction is measured through individuals' self-reports of feeling satisfied or very satisfied with life in general. Self-rated overall life satisfaction measures the gap between a person's hopes and expectations and their present experience.

Percentage of people who are satisfied with their overall life satisfaction



Source: New Zealand General Social Survey

Findings

- In 2012, 88.2% of Wellington region respondents felt satisfied or very satisfied with their life as a whole. This was up from 85.7% in 2008.
- In 2012, 86.7% of respondents in New Zealand overall reported that they were satisfied or very satisfied with their life as a whole. This was slightly higher than in 2008, and 1.5% lower than for the Wellington region.

Technical notes

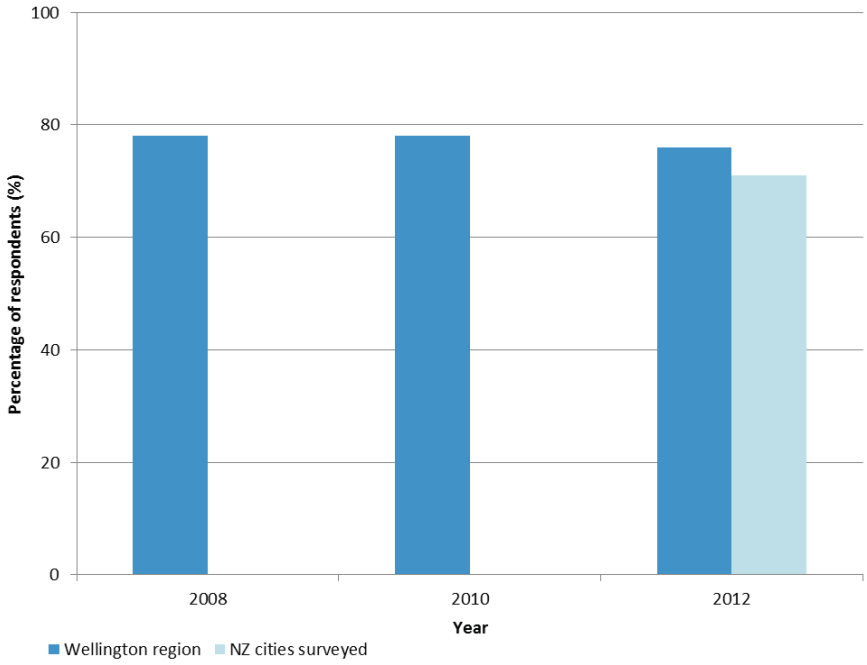
Data available only for 2008, 2010 and 2012.

QL006: Self-reported happiness

The percentage of respondents that indicated they were happy or very happy decreased slightly between 2008 and 2012

Self-perceptions of happiness provide a measure of individuals' mental well-being and are related to people's overall quality of life.

Percentage of respondents saying that, in general, they are happy or very happy



Source: Quality of Life Survey

Findings

- In 2012, 76% of Wellington region respondents said that, in general, they were happy or very happy, a decrease from 78% in 2008.
- In 2012, 71% of respondents from the NZ cities surveyed said that, in general, they were happy or very happy.

Technical notes

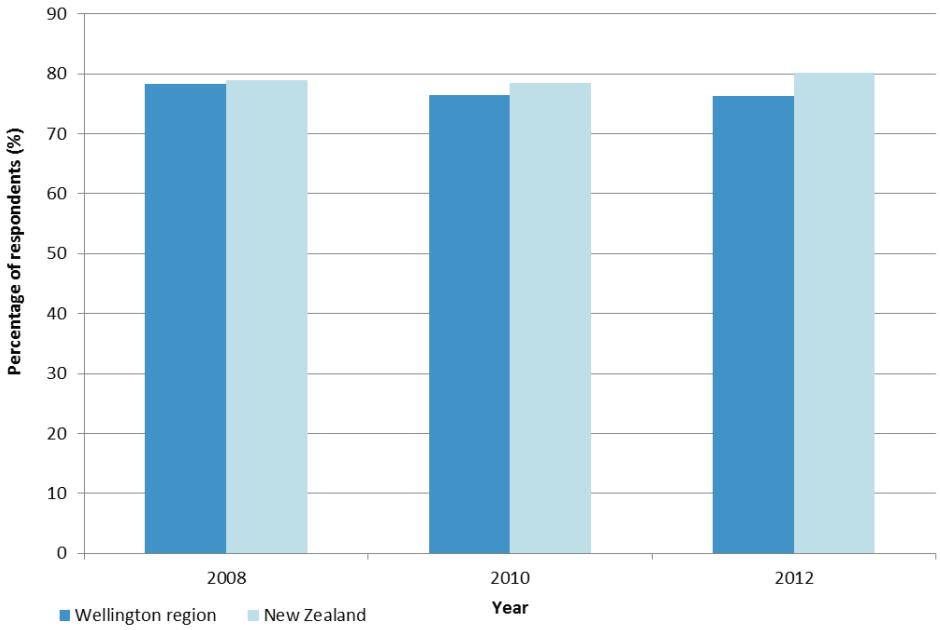
Data points available only for 2008, 2010 and 2012.
Data for NZ cities only collected in 2012.
New Zealand cities surveyed: Auckland, Christchurch, Dunedin, Wellington, Porirua and Hutt.

QL007: Job satisfaction

A lower percentage of employed respondents reported being satisfied or very satisfied with their jobs in 2012 than in 2008.

Studies have shown that job satisfaction is an important factor influencing the health of workers. Work dissatisfaction may cause people to suffer from depression or stress, negatively affecting their well-being, and likely impacting the quality of life of those around them. Job dissatisfaction has also been linked to higher rates of absenteeism and lower levels of productivity and engagement.

Percentage of respondents feeling satisfied or very satisfied with their jobs



Source: New Zealand General Social Survey

Findings

- In 2012, 76.3% of employed Wellington region respondents were satisfied or very satisfied with their jobs, a slight decrease from the percentage of satisfied or very satisfied respondents in 2008 and 2010.
- Respondents from New Zealand as a whole had greater job satisfaction throughout the period than those in Wellington, and in 2013 this proportion was estimated at 80.1%.

Technical notes

Data points available only for 2008, 2010 and 2012.

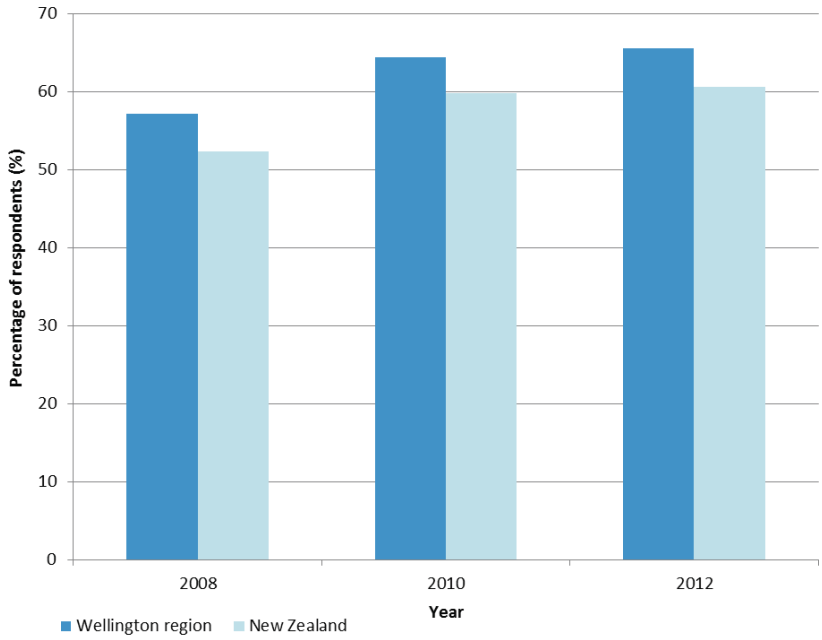
Due to data continuity issues, this indicator differs from that used in the 2011 Wellington Region Genuine Progress Index (WR-GPI). The 2011 WR-GPI used Quality of Life survey data that measured employed residents satisfaction with their work-life balance (2008 and 2010).

QL008: Feeling of safety walking alone

The percentage of respondents who felt safe or very safe when walking alone in their local neighbourhood increased between 2008 and 2012

If people feel unsafe in their local area they may be less likely to talk to their neighbours, trust others living in the area, use public transport, use public amenities and generally participate in their community. Aspects of the built environment, such as the way neighbourhoods are designed and maintained can impact residents' perceptions of safety, as can crime rates, and levels of community cohesion and trust. Assessing how safe people feel walking alone in their neighbourhood is considered a useful way to gauge how safe people consider their local area.

Feeling of safety walking alone



Source: New Zealand General Social Survey

Findings

- In 2012, 65.6% of Wellington region respondents felt safe when walking in their local neighbourhood after dark. This is an increase from the percentage recorded in 2008 (57.2% and 2010 (64.4%).
- The percentage of respondents from the total population surveyed who reported feeling safe when walking in their local neighbourhood after dark also increased between 2008 and 2012 (52.4% to 60.6%). However in each year surveyed, lower percentages of respondents in New Zealand overall felt safe compared to respondents in the Wellington region.

Technical notes

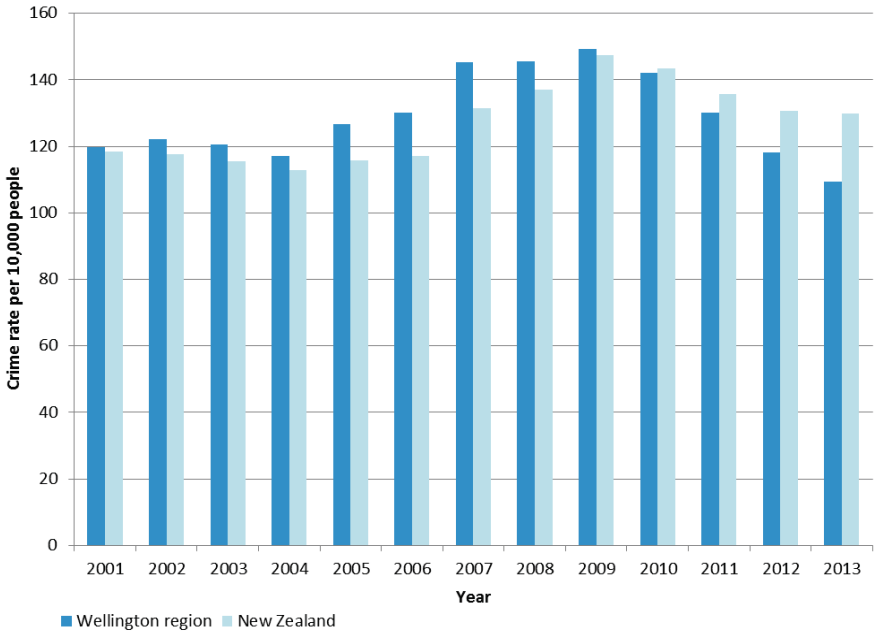
Data points available only for 2008, 2010 and 2012.

QL009: Recorded offences for crimes against the person - rate per 10,000 people

The rate of recorded offences for crimes against the person has been falling since 2009

Crimes against people have a negative effect on communities through the direct impact to victims and the indirect impact to the wider community due to the fear of crime. Studies show that the violent crime rate has a negative impact on the mental well-being of non-victims. The incidence of crime is both a cause and symptom of low quality of life, and is associated with poverty, unemployment, exclusion and the need for support services.

Recorded offences for crimes against the person per 10,000 people



Source: Statistics New Zealand Recorded Crime Offences

Findings

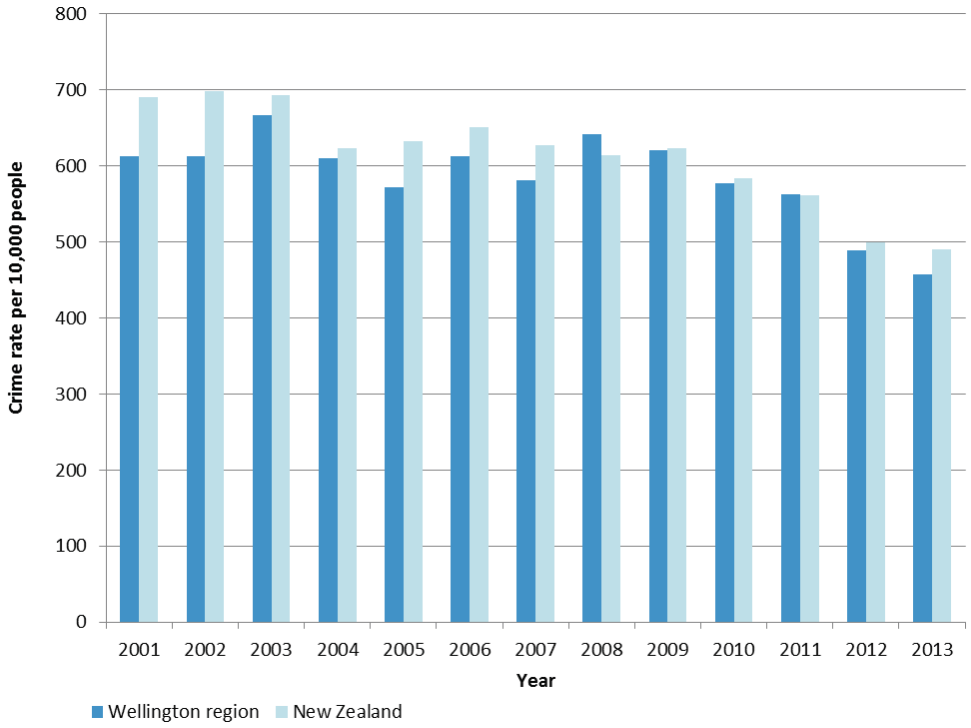
- In 2013, recorded offences against the person in the Wellington region were 109 per 10,000 people, the lowest rate for the 2001 to 2013 period.
- There was a rise in recorded offence rates in the Wellington region between 2004 and 2009, reaching 149 per 10,000, but the rate has been falling annually since then.
- There was a similar trend in national rates of recorded offences against the person, peaking at 147 in 2009, but falling more slowly since then to 130 in 2013, substantially higher than in 2001.
- Recorded offences against the person have generally been slightly higher in the Wellington region than in New Zealand overall, but this trend has reversed since 2010.

QL010: Recorded offences for crimes against property - rate per 10,000 people

The rate of recorded offences for crimes against property was significantly lower in 2013 than 2001

Crime and fear of crime has a corrosive effect on individuals and communities in terms of personal security, the enjoyment of an area for recreation, community trust and cohesion, and general amenity. Crimes against property, such as burglary, vehicle offences and other theft offences, have been shown to cause considerable mental distress for residents, including depression and anxiety.

Recorded offences for crimes against property - rate per 10,000 people



Source: Statistics New Zealand Recorded Crime Offences

Findings

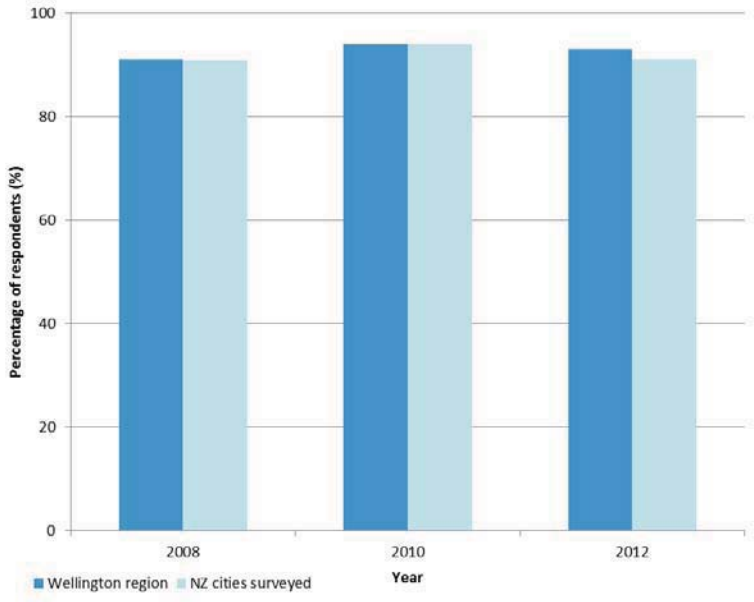
- In 2013, recorded offences against property in the Wellington region were at their lowest point since 2001, falling to 457 per 10,000 people. This compares to a peak over this period in 2003 of 666 per 10,000 people.
- There has also been a falling trend in recorded offences against property in New Zealand overall, falling to 490 per 10,000 people in 2013, also the lowest rate since 2001. In general, recorded offences against property have been higher for New Zealand as a whole than for the Wellington region.

QL011: Ease of access to local parks or other green spaces

Respondents' perception of the ease of access to local parks or other green spaces increased between 2008 and 2012

This indicator relates to a person's perception of how accessible parks and green spaces are to them. Factors affecting access to open spaces can be social, physical or emotional and may include distance/connectivity, isolation or social exclusion from particular places, and perceptions of safety.

Percentage of respondents that reported finding it easy or very easy to get to a local park or other green space in their city or local area



Source: Quality of Life Survey

Findings

- In 2012, 93% of Wellington region respondents thought that it was easy or very easy to get to a local park or other green space in their city or local area, a slight increase from 91% in 2008, but a small decrease from 94% in 2010.
- In 2012, 91% of respondents from the NZ cities surveyed thought that it was easy or very easy to get to a local park or other green space in their city or local area. This percentage is slightly lower than that reported in the Wellington region.

Technical notes

Data points available only for 2008, 2010 and 2012.

Data for NZ cities only collected in 2012.

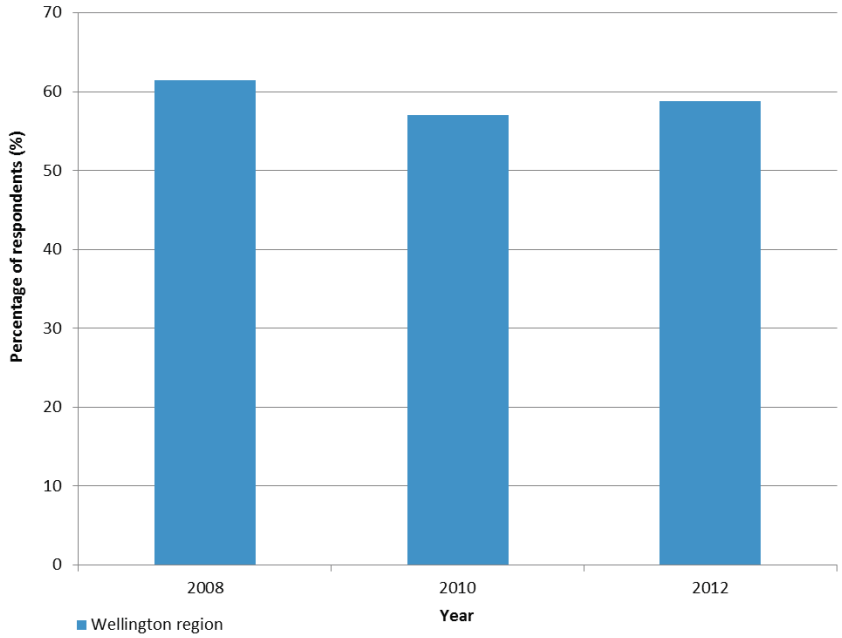
New Zealand cities surveyed: Auckland, Christchurch, Dunedin, Wellington, Porirua and Hutt.

QL012: Participation in social activities

There was very little change in the percentage of residents reporting that they belonged to two or more social networks or groups between 2008 and 2012

This indicator is a measure of participation in the wider community. Participation builds social cohesion and connectedness, thereby reducing isolation.

Percentage of respondents indicating that they belong to two or more social networks or groups[36]



Source: Quality of Life Survey

Findings

- In 2012, 58.8% of Wellington region respondents indicated that they belonged to two or more social networks or groups, a decrease from 61.4% in 2008. However, the 2012 result is a slight increase from 2010, when only 57% of respondents reported that they belonged to two or more social networks or groups.

Technical notes

Data points available only for 2008, 2010 and 2012.

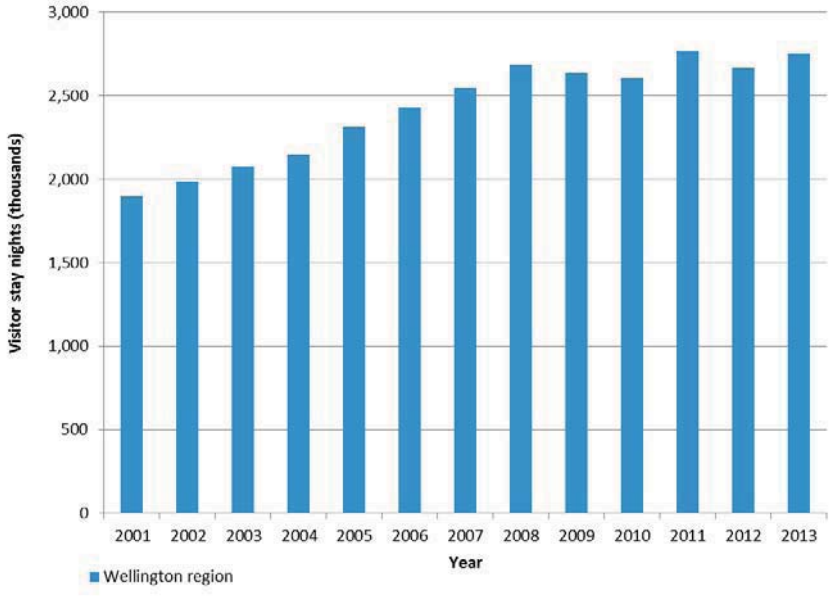
[36] Networks/groups include: a sports club, a church or spiritual group, a hobby or interest group, a community or voluntary group, a network of people from work or school, gym/walking group, age specific group or ethnic/cultural group.

QL013: Visitor guest nights

The number of visitor guest nights has stayed roughly the same since 2008, but has increased since 2001.

Tourism contributes significantly to the local economy. Infrastructure developed to serve the visitor market may also benefit local residents, enhancing the potential for improving quality of life in the region.

Visitor guest nights



Source: Statistics New Zealand Accommodation Survey

Findings

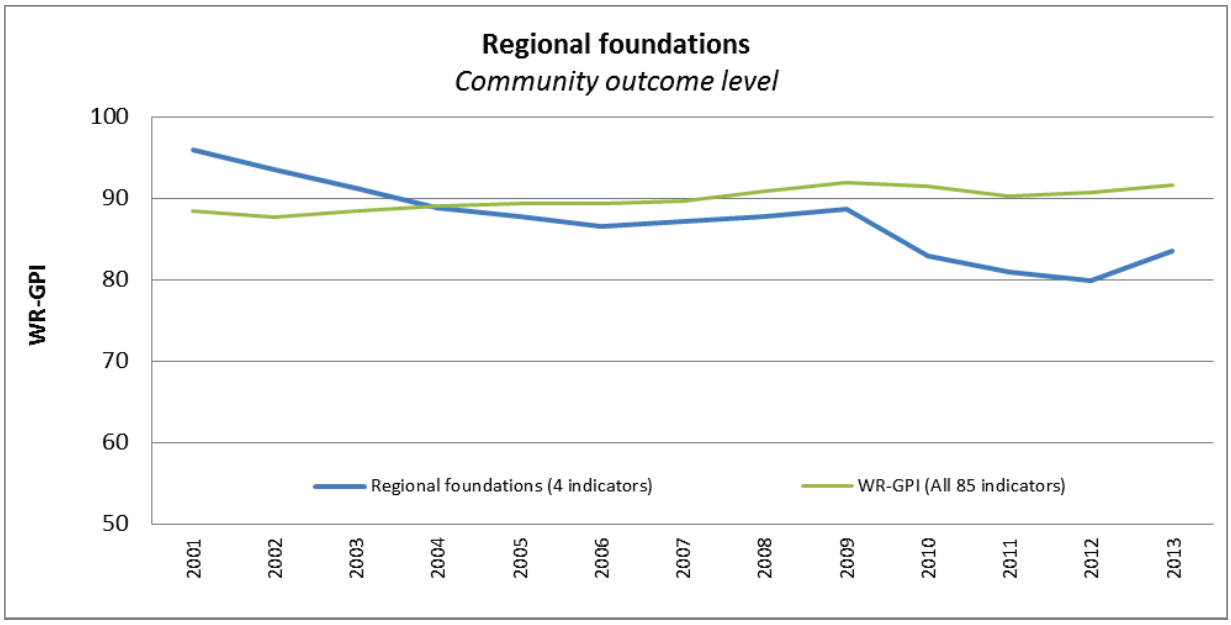
- In 2013, the number of visitor guest nights in the Wellington region was 2,753,000.
- The number of visitor guest nights in the Wellington region increased each year between 2001 and 2008, fell slightly to 2010, peaked in 2011 at 2,768,000 guest nights, and in 2010 fell back slightly, but remains far above the 2001 figure of 1,895,000.

Regional Foundations

Outcome goal: High quality and secure infrastructure and services meet everyday needs. These are developed and maintained to support the sustainable growth of the region, now and in the future.

DECLINED

Overall outcome: The regional foundations index fell by 12.94% between 2001 and 2013.



Indicators		Well-being trend 2001 - 2013
RF001	Water stress (proxy for sustainable water use)	
RF002	Perception of Council Services	
RF003	Perception of road network reliability	
RF004	Perception of public transport reliability	

Note: The 2011 WR-GPI contained a fifth regional foundations indicator, Power Outage. However as there was no data available for it in the 2011 WR-GPI, or for this report, it has been removed from the framework.

Indicator symbol legend is provided in chapter 2, page 15

Regional foundations findings

Between 2001 and 2013, the index representing regional foundations was at its highest in 2001 and lowest in 2012. The index decreased between 2001 and 2006, rose slightly over the next three years then fell sharply till 2012 before showing some recovery in 2013. Overall, the index decreased by 12.9% (2001 to 2013).

Across the respective data points available for each indicator, there were positive trends across two indicators and declines for the remaining two indicators. The indicator measuring water stress (water allocation compared to total water resource) trended negatively, as did perceptions of public transport reliability. These falls effectively drove down the regional foundations GPI; the gains in the other two indicators were relatively small. These small gains relate to perceptions of road network reliability in the region, and to people's satisfaction with council services.

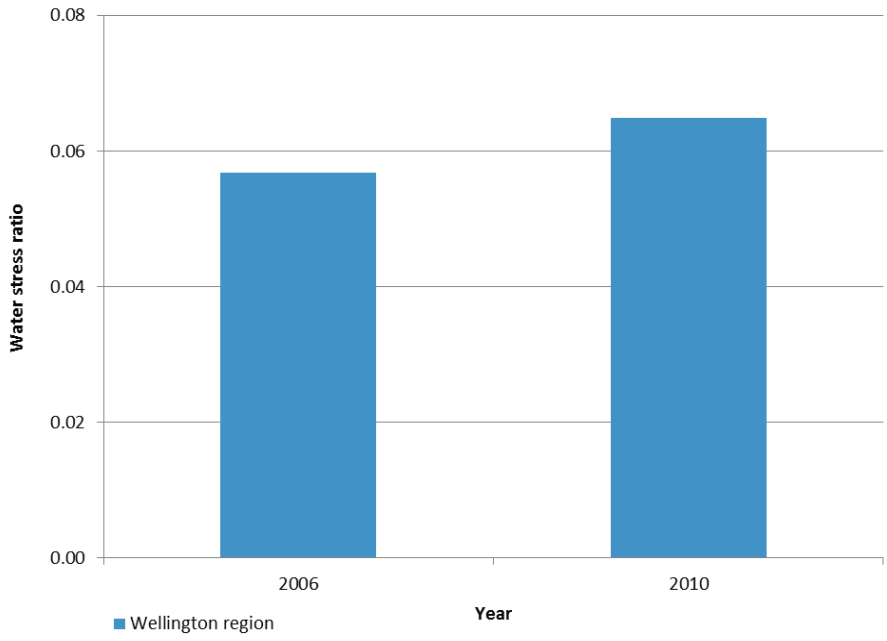
It must be noted that the current lack of data for one of the regional foundations indicators, and the lack of a data source for another of the indicators means that some degree of caution should be applied when evaluating the results for the regional foundations index.

RF001: Water stress (proxy for sustainable water use)

Water stress (water allocation compared to total water resource) in the region increased between 2006 and 2010, however the stress level is still considered 'low'.

Fresh water is a finite resource, so competing demands for water use must be balanced with maintaining the resource. This indicator is a proxy measure of sustainable water use.

Water allocation compared to total water resource



Source: Ministry for the Environment[37]

Findings

- In 2010, the water stress ratio (water allocation compared to total water resource) was 0.0649, an increase from 0.0568 in 2006.
- The increase is due to an increase in water allocation over this time. Despite the increase, water stress in the region remains low (ratio is less than 0.2).

Technical notes

Data points available only for 2006 and 2010.

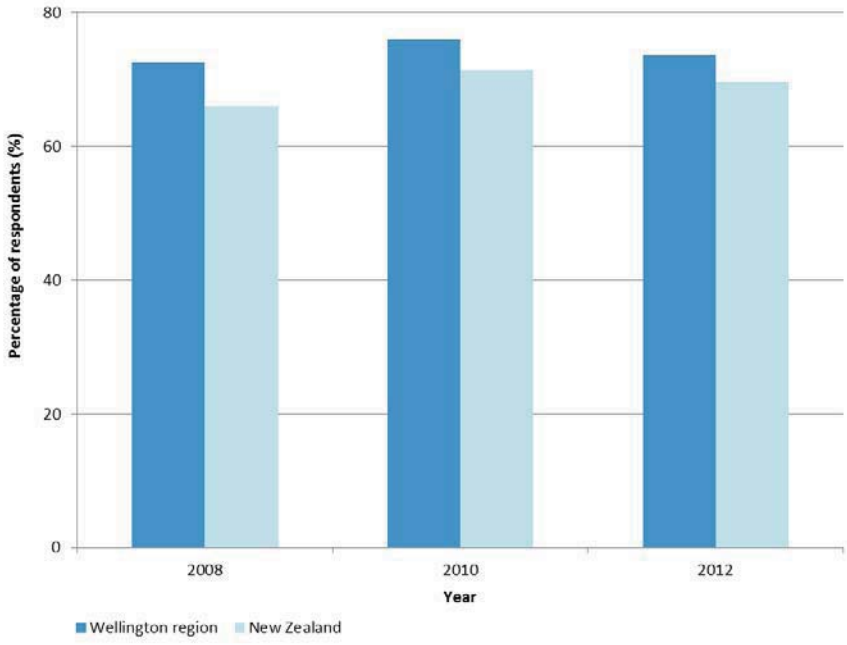
[37] Stress ratios: low – ratio less than 0.20; medium – ratio is between 0.20 and 0.40; severe – ratio is higher than 0.40.

RF002: Perception of council services such as water supply, drainage, rubbish collection and roads

Positive perceptions of council services increased slightly between 2008 and 2012

Councils provide a range of functions and services fundamental to the quality and continuity of many people's daily life. In the absence of high quality council services, members of the community may become isolated and be affected by a number of health and environmental issues.

Percentage of respondents indicating that they are satisfied or very satisfied with the quality of council services in their area



Source: Statistics New Zealand General Social Survey

Findings

- In 2012, 73.6% of Wellington region respondents were satisfied or very satisfied with the quality of council services in their area, a slight increase from 72.6% in 2008.
- Nationally, satisfaction with council services also increased, jumping from 66.0% to 69.6%.
- Between 2008 and 2012, satisfaction with councils services has been higher in the Wellington region than in New Zealand overall.

Technical notes

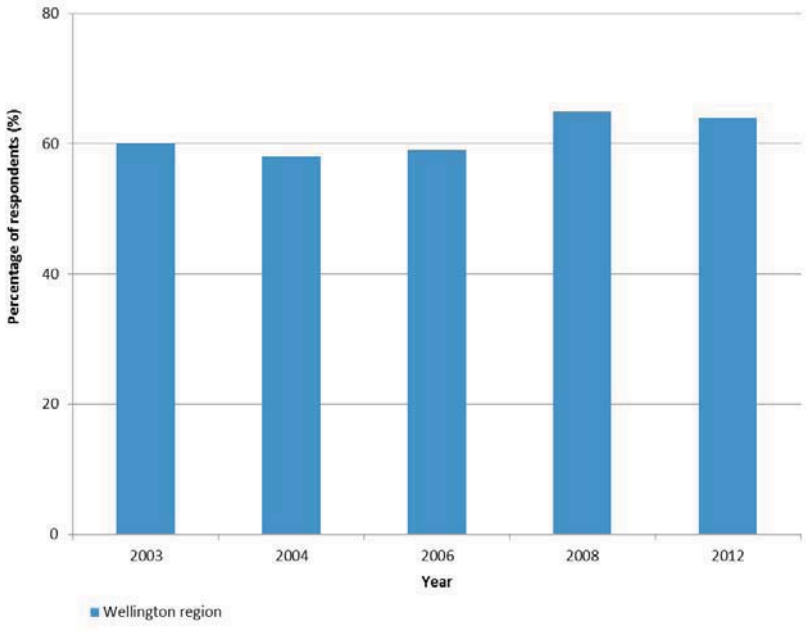
Data points available only for 2008, 2010 and 2012.

RF003: Perception of road network reliability

The percentage of respondents rating the road network as reliable in 2012 was higher than in 2003

Perceptions of the reliability of various forms of transport and the supporting infrastructure that enable movement around the region have a strong impact on people's travel choices and behaviours. Where the road network is perceived as unreliable, travellers are likely to start their trips earlier than they would if travel times were less variable and unpredictable. Many businesses also rely on the safety and efficiency of the regional road network, and perceptions of the reliability of the network have implications for decisions influencing the regional economy.

Percentage of respondents that rate the road network as reliable



Source: GWRC Transport Perceptions Survey

Findings

- In 2012, 64% of Wellington region respondents thought that the road network was reliable, an increase from 60% in 2003.
- The percentage of respondents who rated the road network as reliable in 2012 was virtually unchanged from 2008, when it reached 65%.

Technical notes

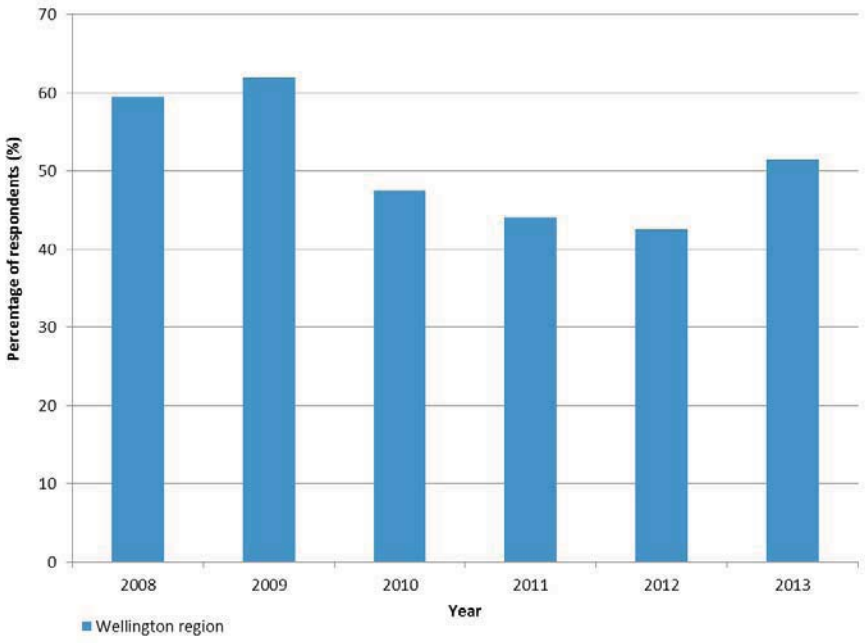
Data points available only for years shown.

RF004: Perception of public transport reliability

Respondents' perceptions of public transport network reliability was poorer in 2013 than in 2008

Perceptions of the reliability of public transport for getting around the region influence people's travel choices and mobility patterns. Reliability is also a measure for how well public transport infrastructure and services can cope with current and future demand.

Percentage of respondents rating the bus and train network as reliable



Source: GWRC Transport Perceptions Survey

Findings

- In 2013, 51.5% of respondents of the Wellington region thought that the train and bus services were reliable.
- In 2008, an average of 59.5% of respondents thought that public transport services were reliable. After peaking at 62% in 2009, perceptions deteriorated to a low of 42.5% in 2012 before rebounding in 2013.

Technical notes

Data points available only between 2008 and 2013.

CULTURAL WELL-BEING

DECLINED

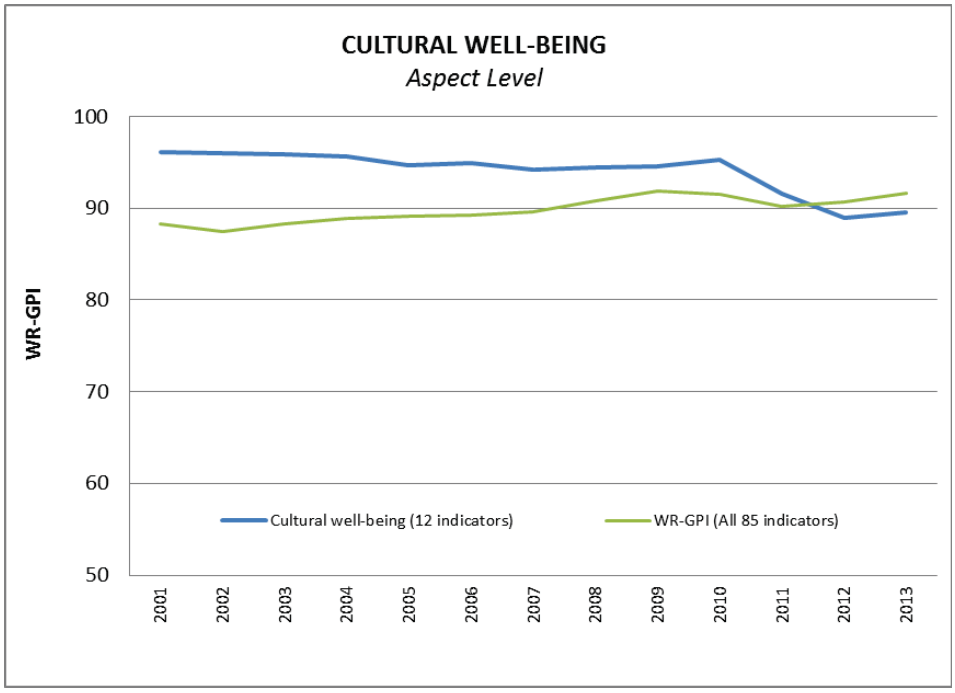
Cultural well-being is defined as:

The vitality that communities and individuals enjoy through:

- participation in civics, arts and cultural activities
- recognising and valuing our history, heritage, culture and diversity. [38]

2001 to 2013 outcome: The cultural well-being aspect of the WR-GPI was highest in 2001. It declined gradually until 2005, fluctuated slightly across the next five years before falling sharply by 6.6% between 2010 and 2012. The index exhibits a small upturn in 2013.

The cultural well-being aspect of the WR-GPI contains one community outcome – strong and tolerant community. 12 indicators are used to measure change occurring within it. Using the available data, individual index values for each indicator have been calculated for each year over the 2001 to 2013 period. The graph below shows the average of these index values. Because there is only one community outcome area within the cultural well-being aspect, the graph below represents both the well-being aspect and the community outcome.[39]



[38] Culture is a broad concept, spanning the range of distinctive spiritual, material, intellectual, and emotional features of a society, community or social group. In addition to art and literature, culture encompasses lifestyles, ways of living together, value systems, traditions and beliefs (UNESCO 2001). Cultural well-being is about the quality of how these features are embraced and expressed to help shape and define a community and contribute to its happiness and welfare.

[39] For some indicators, data is not available for the whole 2001 to 2013 period.

Strong and Tolerant Community

Outcome goal: People are important. All members of our community are empowered to participate in decision-making and to contribute to society. We celebrate diversity and welcome newcomers, while recognising the special role of tangata whenua.

CULTURAL: Strong and Tolerant community indicators		**Well-being trend** 2001 - 2013
ST001	Access to support in a crisis from another household	
ST002	Average voter turnout at local elections	
ST003	Understanding of council decision making processes	
ST004	Perception of public influence on council decisions	
ST005	Perception of impact of greater cultural diversity	
ST006	Percentage of population able to speak Te Reo Maori	
ST007	Percentage of population identifying as Māori, Pacific or Asian	
ST008	Listed and registered heritage places	
ST009	Perception of role of culture & cultural activities in forming a sense of national identity	?
ST010	Positive perception of a rich and diverse arts scene	
ST011	Attendance at arts events	
ST012	Children enrolled in Maori Language education services	
		Indicator symbol legend is provided in chapter 2, page x

Because there is only one community outcome, the results are plotted at the Aspect level on the previous page.

Strong & tolerant community findings

Of the 12 indicators that comprise the strong and tolerant community outcome, eight trended negatively over the study period, two improved, one was unchanged and for the remaining indicator only one year of data was available so no trend can be observed.

A major contributor to the negative trend in the outcome between 2001 and 2013 was the substantial drop of 18% in average voter turnout at local elections. The number of children enrolled in Māori language education declined by 16% and the percentage of the population who can have an everyday conversation in te reo Māori has also declined 13% since 2001 .

The sharp decline in the strong and tolerant community that occurred in the later part of the study period is largely explained by negative trends across three individual indicators between 2008 and 2012:

- the proportion of the population who believe their area has a culturally rich and diverse arts scene declined by 24%,
- the proportion of people that view cultural diversity as beneficial to their community fell by 14.5%, and
- the proportion of the population who think the public can influence council decision-making also declined by13%.

The overall decline in the strong and tolerant community area and the overall cultural well-being aspect to 2010 was partly offset by rising trends across two indicators:

- the percentage of the population identifying with the Māori, Pacific or Asian ethnic groups, which is a proxy for ethnic diversity, increased by 16.4% between 2001 and 2013, and
- the total number of registered heritage places in the region, which increased by 3% between 2009 and 2013.

Perceptions of the role of culture and cultural activities in forming a sense of national identity were measured for just one year, so no trend could be identified. However, compared to responses in New Zealand as a whole, the importance of culture and cultural activities in forming national identity was perceived to be higher among respondents in the Wellington region. There was no significant change in respondents' perceptions of availability of help in times of need and this was similar for New Zealand as a whole.

ST001: Access to support in a crisis from another household

The percentage of people who have access to support in a time of crisis from another household.

This indicator measures if people have someone to turn to for help and support during difficult times. If people have support they are more likely to feel safe and secure, which helps contribute to their overall well-being. This indicator is one measure of people's sense of social connectedness.

Percentage of people who have access to support in a time of crisis from another household

Source: Statistics NZ General Social Survey

Findings

- In 2012, 96.6% of respondents in the adult population of the Wellington region had someone to turn to for help in a time of need.
- This is similar to the percentage for New Zealand overall at 96.2%.
- There has been little change in Wellington region respondents' perceptions of availability of help in a time of crisis from another household between 2008 and 2012.

Technical notes

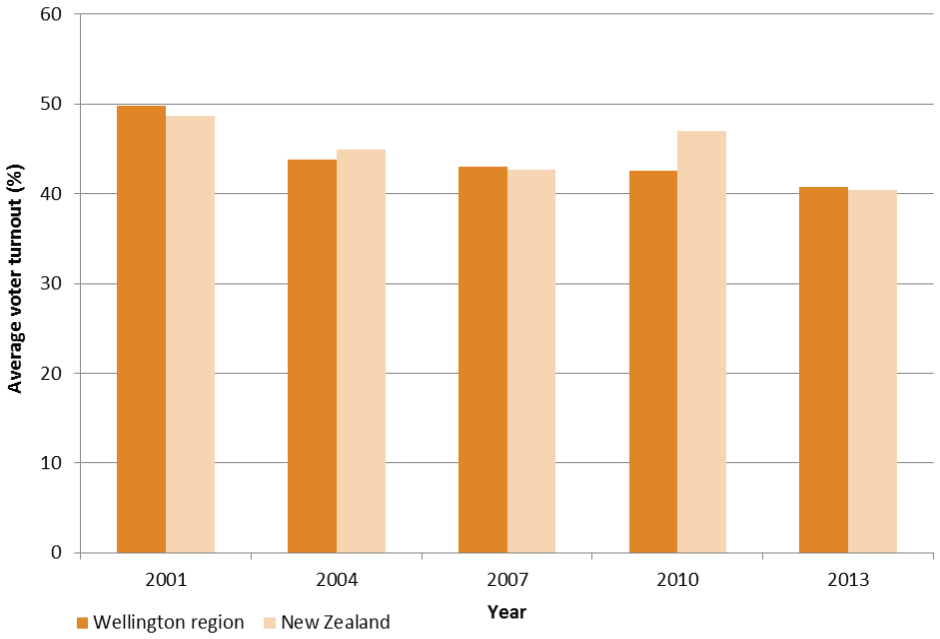
Data points available only for 2008, 2010 and 2012.

ST002: Average voter turnout in local council, DHB and regional council elections

Fewer people turned out to vote in 2013 compared to all reported years back to 2001

Voting is a fundamental way for people to express their political will. Citizen participation in the political process and in civic affairs is a sign of a healthy democracy. It also reflects people's sense of connection with and investment in the issues that affect the society in which they live.

Average voter turnout at local elections



Source: Department of Internal Affairs – Local Authority Election Statistics

Findings

- Voter turnout for the Wellington region was 40.7% in 2013, having fallen in every year of monitoring since 2001 when it was 49.8%. This covers voters at local Council, District Health Board (DHB) and Regional Council elections.
- Voter turnout for New Zealand as a whole in 2013 was virtually the same as for the Wellington region at 40.4%, having fallen sharply by 6.5% from the 2010 share.
- Voter turnout has been falling in the Wellington region and across New Zealand. The declining trend is consistent for elections to local council, DHB and regional council.

Technical notes

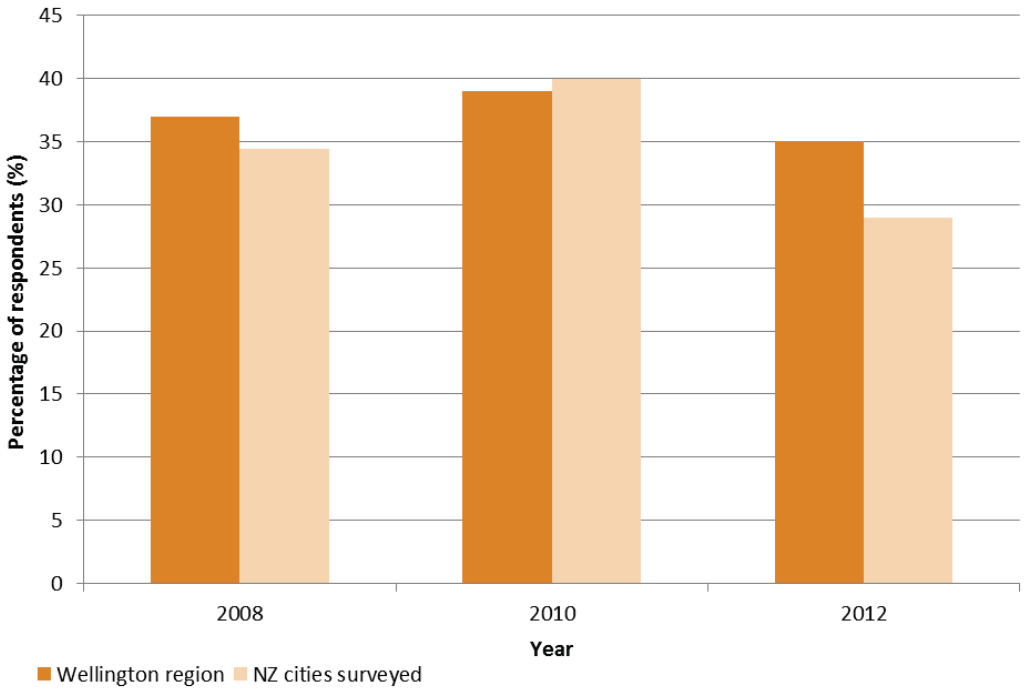
Data points available only for years shown.

ST003: Understanding of council decision-making processes

The proportion of the population that consider they understand council decision-making processes decreased between 2008 and 2012

Understanding of council processes plays an important part in the level of community involvement in decision-making. Having confidence in, and an understanding of, local authority decision making processes helps enable meaningful participation and effective input from residents.

Respondents' understanding of council decision-making



Source: Quality of Life Survey

Findings

- In 2012, 35% of respondents in the Wellington region adult population thought they understood how their council makes decisions.
- The percentage of the Wellington region that thought they understood how their council makes decisions has decreased slightly from 37% in 2008 to 35% in 2012.
- In 2012 35% of adults in the Wellington region thought they understood how their council makes decisions, compared to 29% of the population of the other cities participating in the survey.

Technical notes

Wellington region: Includes all territorial authority areas in the Wellington region (data points available only for 2008, 2010 and 2012).

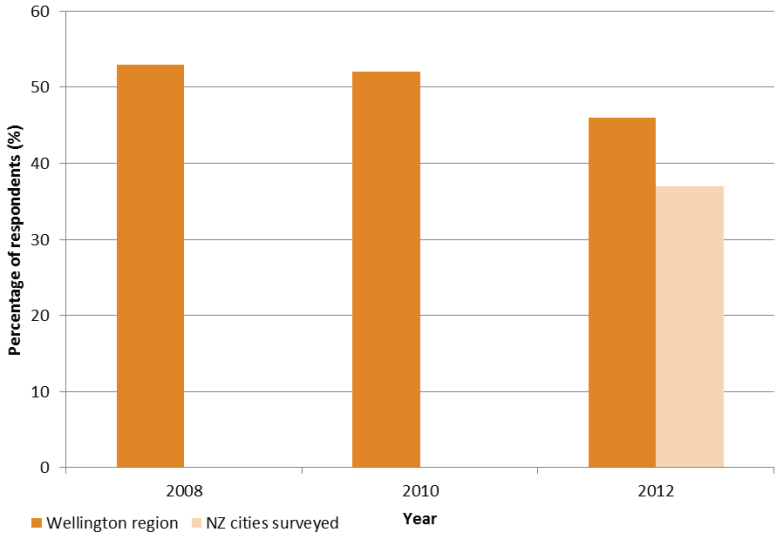
New Zealand cities surveyed: Auckland, Christchurch, Dunedin, Wellington, Porirua and Hutt.

ST004: Perception that the public can influence council decision-making

The proportion of the population who thought the public could influence council decision-making decreased between 2008 and 2012

This indicator measures whether a healthy democratic process is at work at the local level. The perception that the public is being listened to and that community input is valued and encouraged by councils, helps foster a sense of belonging, empowerment and community pride. Community engagement is essential to good governance. Community involvement in council decisions enables plans, strategies and policies to be better targeted and more likely to succeed.

Perception that the public can influence council decision-making



Source: Quality of Life Survey

Findings

- In 2012, 46% of respondents in the Wellington region adult population thought the public had an influence on council decision-making.
- The percentage of the respondents in the Wellington region who thought the public could influence council decision-making fell between 2008 and 2010, and fell further in 2012.
- In 2012 46% of respondents in the Wellington region adult population thought the public could influence council decision-making, compared to 37% of the population of the other cities participating in the survey.

Technical notes

Wellington region: Includes all territorial authority areas in the Wellington region (data points available only for 2008, 2010 and 2012).

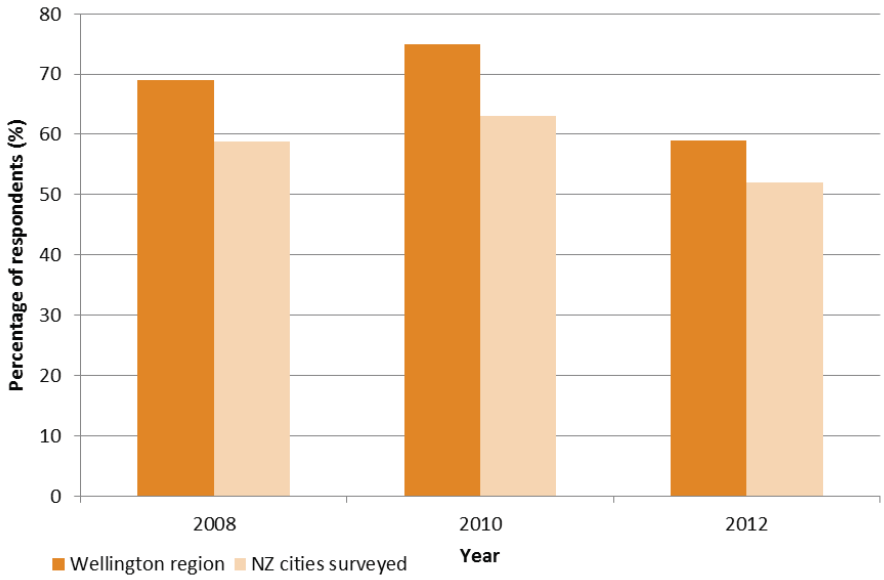
New Zealand cities surveyed: Auckland, Christchurch, Dunedin, Wellington, Porirua and Hutt (data available only for 2012).

ST005: Perception of impact of greater cultural diversity

The proportion of respondents that viewed cultural diversity as beneficial to their community decreased between 2008 and 2012

Different cultural groups have unique strengths and perspectives from which the wider community can learn and benefit. Cultural diversity broadens the range of ideas, customs, and approaches available to solve problems and enriches community life. Cultural activities and practices can also contribute to social connectedness and reduce isolation. Places that are inclusive, open, and display a willingness to embrace diversity are likely to benefit socially, culturally and economically from being a part of a culturally heterogeneous community.

Positive perception of cultural diversity



Source: Quality of Life Survey

Findings

- In 2012, 59% of respondents in the Wellington region adult population thought that an increasing number of people with different lifestyles and cultures made their local area a better place to live.
- The proportion of the Wellington region adult population who thought that an increasing number of people with different lifestyles and cultures made their local area a better place to live, increased from 69% in 2008 to 75% in 2010, but decreased to 59% in 2012.
- In 2012, adults in the Wellington region were more likely to think that cultural diversity makes their area a better place to live compared to adults in the other cities participating in the survey (59% compared to 52%).

Technical notes

Wellington region: Includes all territorial authority areas in the Wellington region (data points available only for 2008, 2010 and 2012).

New Zealand cities surveyed: Auckland, Christchurch, Dunedin, Wellington, Porirua and Hutt.

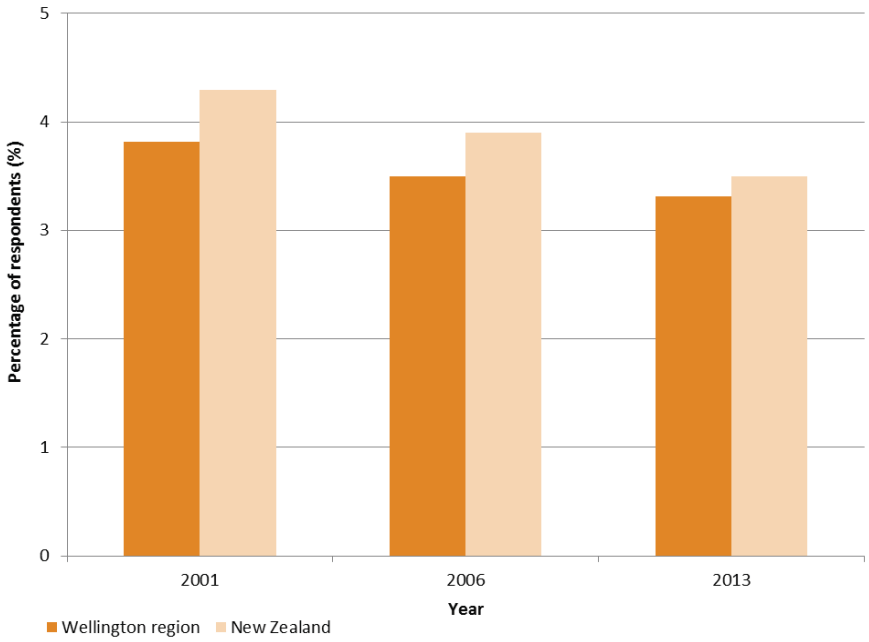
ST006: Percentage of people who can speak Te Reo Māori

The proportion of the population able to hold an everyday conversation in the Māori language decreased between 2001 and 2013

Te Reo Māori was made an official language of New Zealand under the Māori Language Act in 1987 and is one of New Zealand's three official languages. The Māori Language Commission states that:

> "the Māori language is a taonga that gives our country its distinct and unique cultural identity. For Māori to thrive as a language of everyday use, we must encourage its use in our homes and communities as much as possible."

Percentage of people who can speak Te Reo Māori



Source: Statistics New Zealand Census

Findings

- In 2013, 3.3% of respondents in the Wellington region could hold an everyday conversation in the Māori language.
- Since 2001 there has been a decline in the percentage of the Wellington region population and the New Zealand population who can speak Te Reo Māori.
- In each of the years shown, the percentage of the population in the Wellington region who can speak Te Reo Māori was lower than the New Zealand percentage.

Technical notes

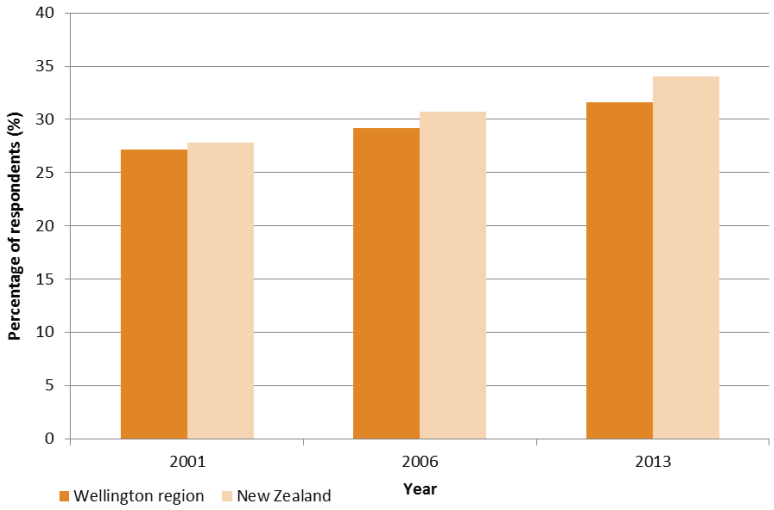
Data points available only for 2001, 2006 and 2013.

ST007: Percentage of population identifying as Māori, Pacific or Asian

The proportion of the population identifying with the Māori, Pacific and Asian ethnic groups increased between 2001 and 2013

Ethnic composition is a key measure of demographic change over time. The combination of cultures, languages, traditions and skills brings vibrancy to the region, which is reflected in cultural events and traditions. A good understanding of the ethnic composition can also help the region deliver better services and plan effectively for the future.

Percentage of population identifying with the Māori, Pacific and Asian ethnic groups



Source: Statistics New Zealand Census

Findings

- In 2013, 31.6% of respondents in the Wellington region identified with the Māori, Pacific and Asian ethnic groups.
- Over the last three census periods there has been an increase in the percentage of the population identifying with the Māori, Pacific and Asian ethnic groups in the Wellington region.
- The percentage of the population identifying with the Māori, Pacific and Asian ethnic groups was similar in the Wellington region and New Zealand in 2001. However, the rate of increase has been greater at a national level, resulting in New Zealand having a higher percentage of the population identifying with Māori, Pacific and Asian ethnic groups in 2006 and 2013.

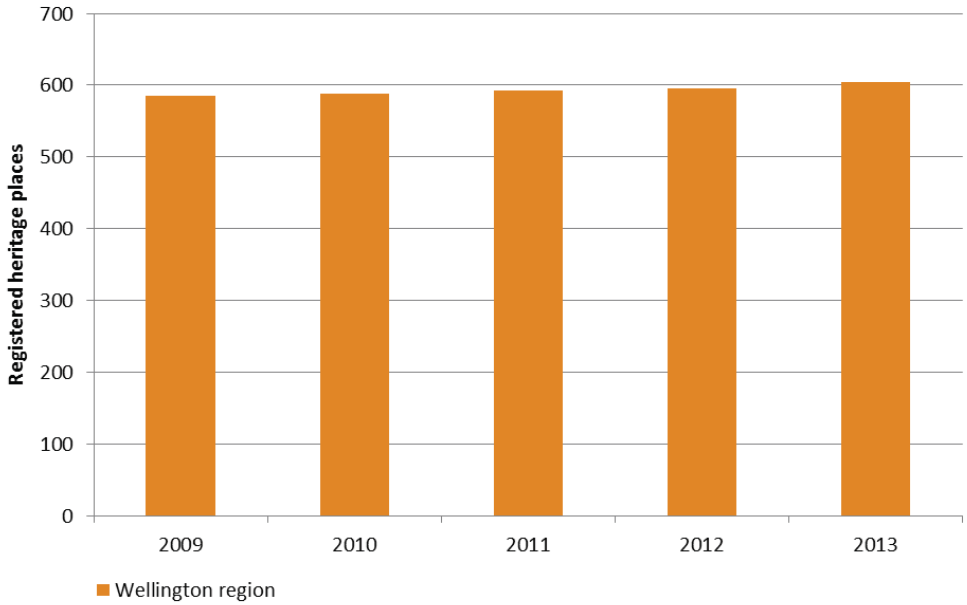
Technical notes Data points available only for 2001, 2006 and 2013.

ST008 Listed heritage places

The number of New Zealand Heritage List entries in the Wellington region increased gradually between 2009 and 2013

Retaining cultural capital requires preservation of cultural resources so they can be passed on to future generations. New Zealand's heritage places provide a link to past generations and support understanding of our history and cultural origins.

New Zealand Heritage List entries in the Wellington region



Source: New Zealand Historic Places Trust

Findings

- In 2013, 604 places in the Wellington region were on the New Zealand Heritage list.
- The number of historic places on the list increased by 3% from 585 in 2009 to 604 in 2013.

Technical notes

Data only available from 2009.
Methodology altered since 2011 WR-GPI publication.

ST009: Perception of the role of culture and cultural activities in forming a sense of national identity

? In 2008 77% of respondents in the Wellington region thought that culture and cultural activities were important to New Zealand's sense of national identity

Many things influence and generate a sense of national identity. Culture and cultural activities help create vibrancy and instil a sense of place. Culture and cultural activities are integral to New Zealand's national identity, and are a part of preserving and celebrating history.

Percentage of the population who believe that culture and cultural activities are important to New Zealand's sense of national identity

Source: Ministry for Culture and Heritage

Findings

- In 2008, 77% of respondents in the Wellington region believed that culture and cultural activities were important to New Zealand's sense of national identity.
- Slightly higher percentages of the Wellington region's population believe that culture and cultural activities are important to New Zealand's sense of national identity compared to the New Zealand population overall.

Technical notes

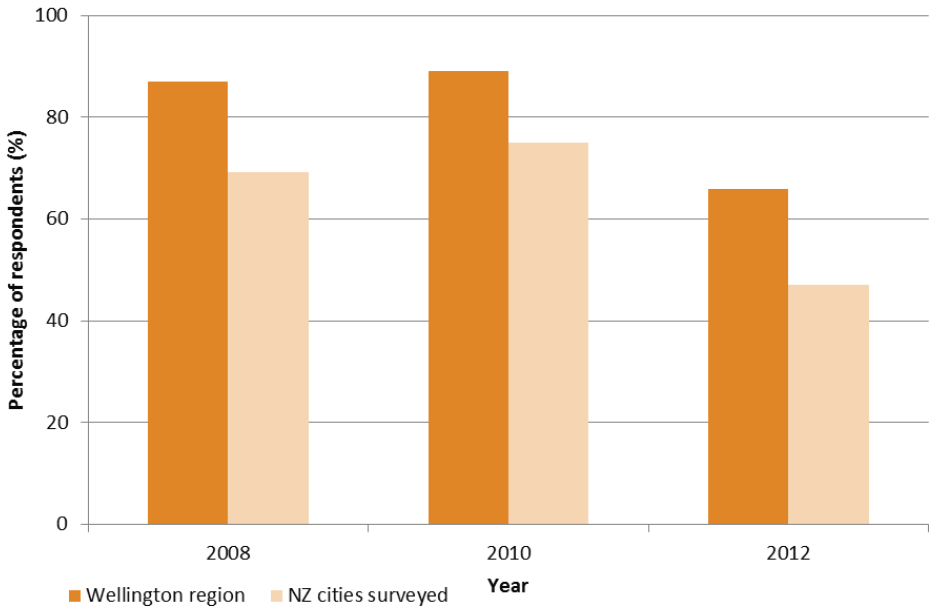
Trend data is not currently available.

ST010: Overall positive perception of a rich and diverse arts scene

The proportion of the population who believe their area has a culturally rich and diverse arts scene decreased between 2008 and 2012

The arts make a strong contribution to community vitality and identity, and are recognised for facilitating various modes of expression across social, economic, cultural and ethnic groups. The ability of people and communities to connect and to express themselves creatively through art, music, dance, stories, language, and by sharing their history and traditions, contributes to a sense of cultural well-being.

Percentage of population who believe their area has a culturally rich and diverse arts scene



Source: Quality of Life Survey

Findings

- In 2012, 66% of respondents in the Wellington region believed that the area they live in has a culturally rich and diverse arts scene. This compares to 47% for the other NZ cities surveyed.
- Since 2010, the proportion of Wellington's population who believe the area they live in has a culturally rich and diverse arts scene has decreased sharply from 89% to 66%.

Technical notes

Wellington region: Includes all territorial authority areas in the Wellington region (data points available only for 2008, 2010 and 2012).

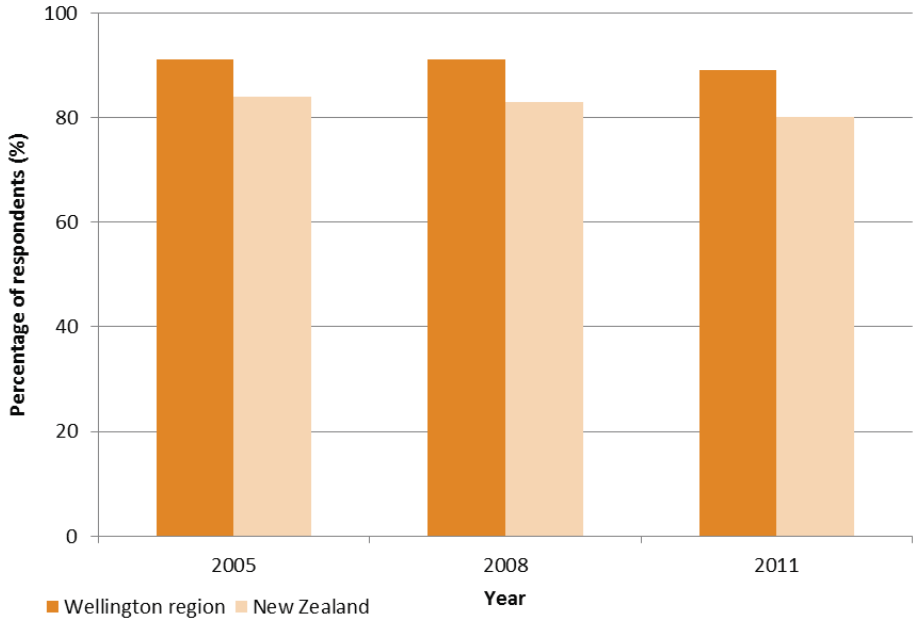
New Zealand cities surveyed: Auckland, Christchurch, Dunedin, Wellington, Porirua and Hutt.

ST011: Percentage of people attending arts events

Attendance at arts events declined between 2005 and 2011

The arts, through their communicative power, enhance individual engagement with the world in ways that have both personal and public benefits. Many arts events have a social dimension that provides a basis for building social connectedness and community identity. Attendance at arts events also contributes to economic development by supporting growth in creative capital.

Percentage of the adult population who have attended at least one arts event in the past 12 months



Source: Creative New Zealand

Findings

- In 2011, 88% of respondents in the Wellington region said that they had attended at least one arts event in the last 12 months.
- The share of respondents in the Wellington region reporting that they had attended at least one arts event fell slightly from 91% in 2005 to 89% in 2008, and fell again to 88% in 2011.
- The share of respondents saying that they had attended at least one arts event in the last 12 months has been consistently higher in the Wellington region than for New Zealand as a whole where the rate was just 80% in 2011.

Technical notes

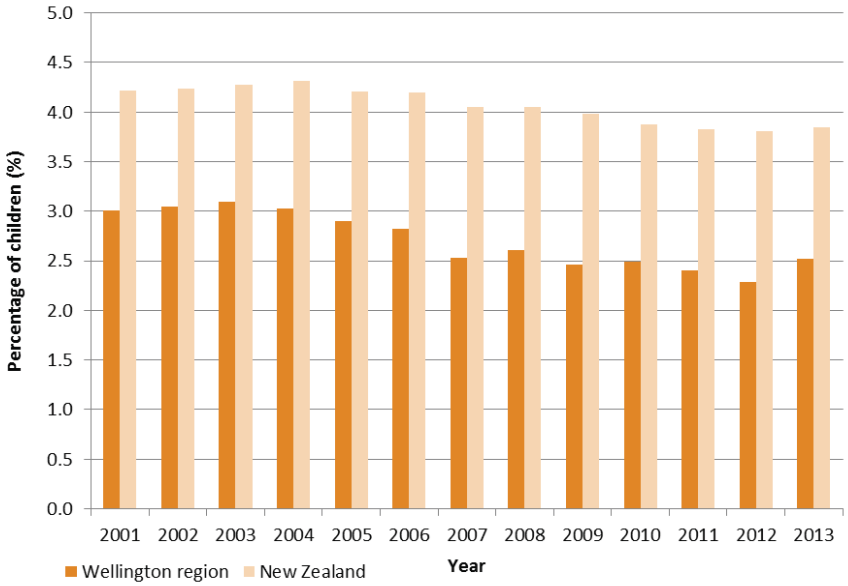
Data points available only for 2005, 2008 and 2011.

ST012 Percentage of children attending Te Kohanga Reo and Māori medium schools

The proportion of children enrolled in Māori-language-based education services is lower in 2013 than 2001

Māori language and culture are integral to the national identity of Aotearoa New Zealand. Te Kohanga Reo early childhood education centres and Māori medium schools provide culturally specific learning experiences such as mihimihi, karakia, waiata, poi, and haka that impart Māori knowledge through the use of Māori language, and enable children to internalise not just the language but also Māori culture. Children's immersion in Māori culture and participation in learning the Māori language are essential for the retention of the Māori knowledge and values into the future. Māori is an official language of New Zealand, and an essential component of national identity.

Percentage of children enrolled in Māori-language-based education services



Source: Ministry of Education

Findings

- In 2013, 2.5% of children in the Wellington region enrolled in early childhood education and schools were enrolled in Māori-language-based education services.
- The percentage of children in the Wellington region enrolled in Māori-language-based education services remained relatively constant between 2001 and 2004, decreased between 2004 and 2007, and has remained relatively unchanged since that time.
- The percentage of children in New Zealand enrolled in Māori-language-based education services follows a similar trend to that observed in the Wellington region, although the percentage of children enrolled for New Zealand is consistently higher across the time series, with the 2013 figure at 3.8%.

Technical notes

Data points available only for years shown.