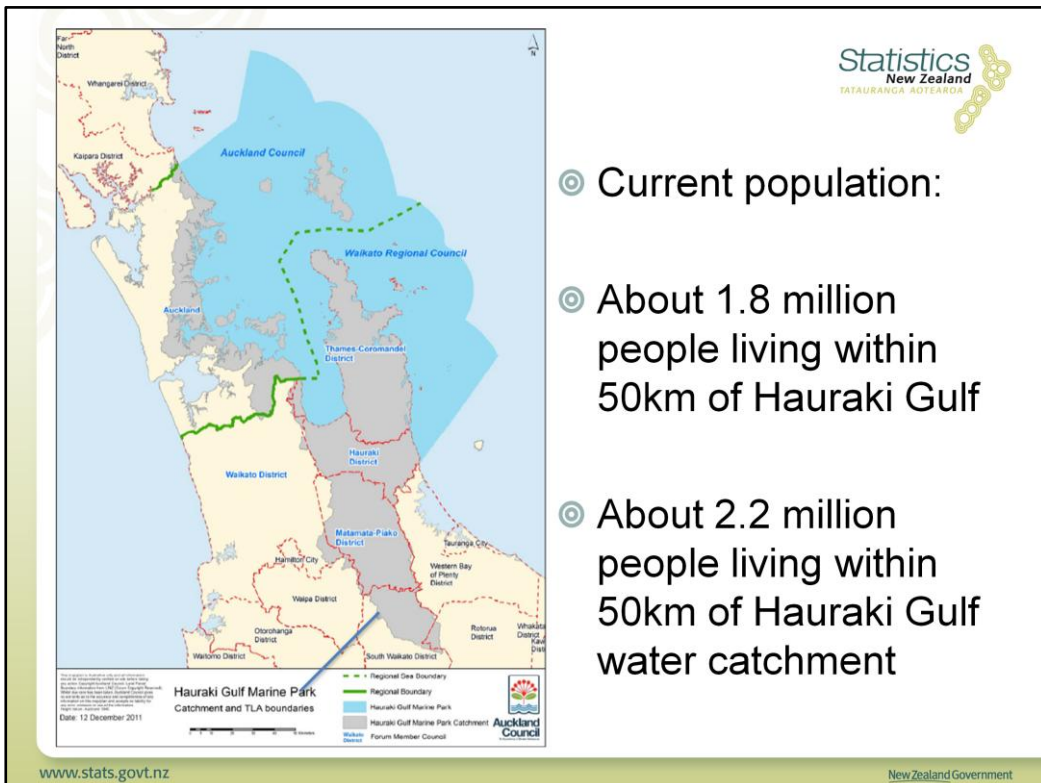


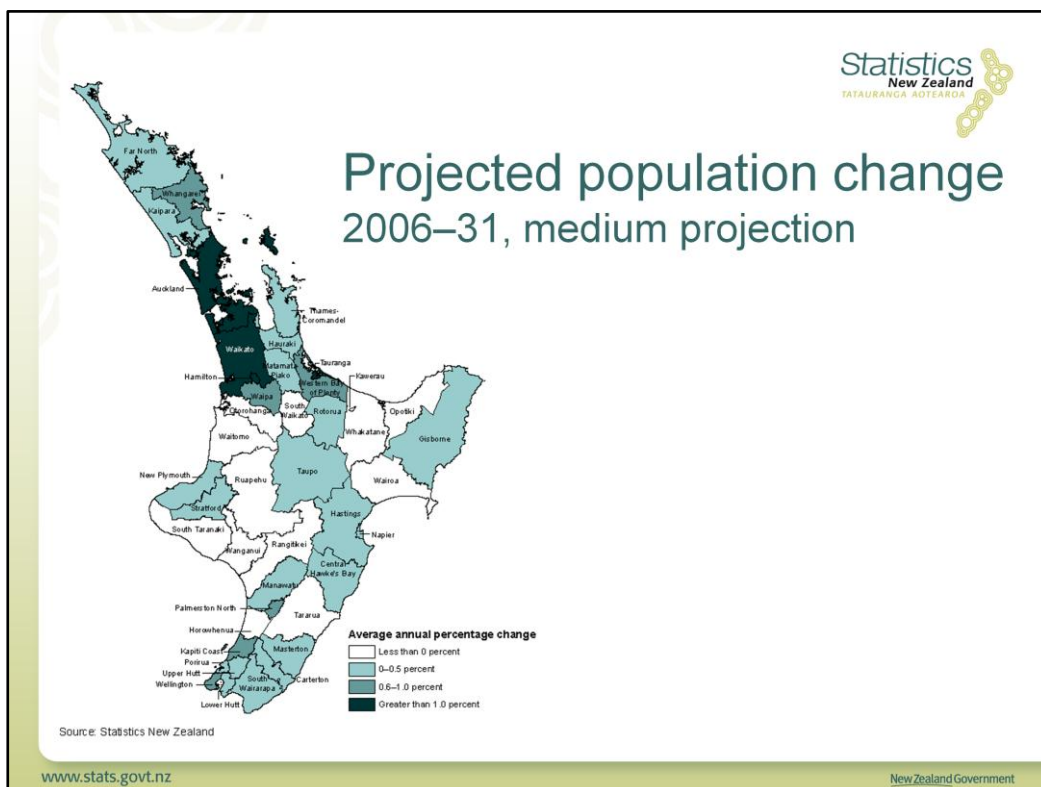
People, growth, and the Gulf

*Aspects of population growth –
Hauraki Gulf 2014 and beyond.*

*Rachael Milicich
General Manager Customer Delivery*

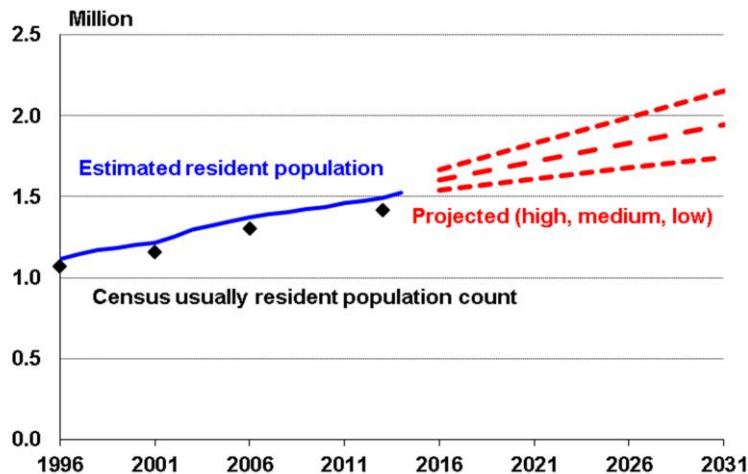


- People are mobile, so the population catchment of the Hauraki Gulf – people potentially using it – is wider than the environmental catchment.
- Collectively there are roughly 1.8 million people living within 50km of the Hauraki Gulf, and 2.2 million people living within 50km of the Hauraki Gulf water catchment. This includes 1.5 million residents of Auckland.
- In addition, there are likely to be up to roughly 100,000 visitors in this general Auckland-Waikato area on any given day – either visitors from overseas or visitors from other parts of New Zealand.
- Current population: Estimates of the resident population at 30 June 2014 indicate:
 - 1.53 million people living in Auckland
 - 350 thousand people living in Waikato territorial authority areas of Thames-Coromandel, Hauraki, Waikato, Matamata-Piako and Waipā districts, and Hamilton city
 - 168 thousand people living in Bay of Plenty territorial authority areas of Tauranga city and Western Bay of Plenty district
 - 105 thousand people living in Northland districts of Whangarei and Kaipara.



- Since WWII, Auckland has consistently grown faster than the rest of the country
- Future population: Projections (published in October 2012; updated projections are being released in February 2015) indicate that the local authority areas in and around Auckland and Waikato are likely to be among the faster population growing areas across New Zealand.
- This partly reflects the intermix of migration patterns, current population age structure, and fertility levels.
- By 2031, projections indicate roughly 2.3 million people living within 50km of the Hauraki Gulf, and 2.7 million people living within 50km of the Hauraki Gulf water catchment.
- About 60–80 percent of New Zealand’s population growth between now and 2031 is likely to occur in this broad northern North Island region.

Auckland's population – historical and projected

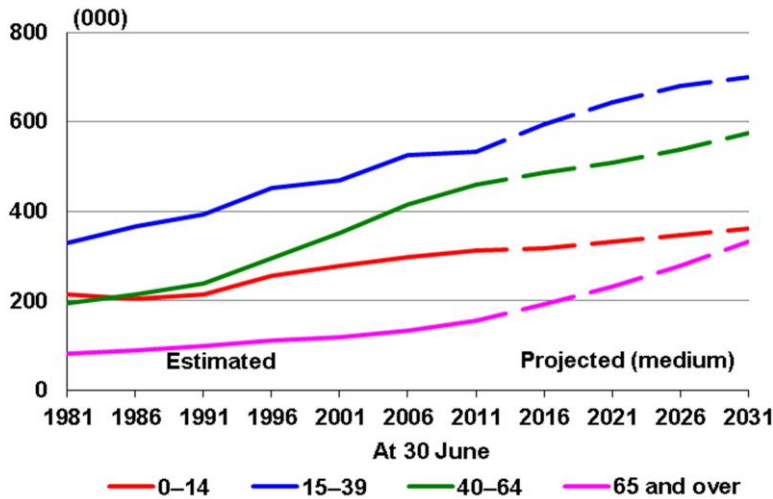


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- Auckland: 2013 Census count of 1.42 million, but a 30 June 2014 population estimate of 1.53 million.
- Why the difference? You can see that the population estimates sit above the census counts, not just in 2013 but historically. They do have different reference dates, but the main reason for the difference is that the estimates include people who are not counted by the census.
- First, there are residents temporarily overseas on census night. The census doesn't try to count them. They're generally away overseas on holiday or for business, and most of them return to NZ within a month of census; they're living here, often working, often using health and education services and so on, so it makes sense to include them in the estimates of the resident population.
- Second, there are people missed by the census. And this simply reflects that in a large and complex exercise such as the census, it is inevitable that some people will be missed who should've been counted; and indeed, there are a small number of people who are counted more than once. But generally the census misses more people than it double counts. In 2013 we had an estimated net census undercount of about 2% or 100,000 people nationwide, although importantly that undercount is not spread uniformly - males were more likely to be missed than females; young adults were more likely to be missed than children or older adults; people with Maori, Pacific and Asian ethnicities were more likely to be missed than those with European ethnicities.
- The estimates are also the starting point for population projections. To be clear, these are **not** predictions nor forecasts, but an indication of future populations based on specific assumptions about future fertility, mortality and migration - the three things that can change population. The projections are also based on current central and local government policies, and clearly changes in government policy could have a significant influence on future population change.
- Statistics NZ typically produces a range of projections - in this case a low, a medium and a high growth scenario. All 3 projections are plausible - and collectively they give an indication of future change. These projections were published in October 2012, and they are typically updated every 2 to 3 years. We'll be publishing an update of these projections in February 2015.
- Will Auckland's population grow by 1 million over the next 30 years? Well, it's possible according to the high growth scenario, but probably unlikely according to the medium growth scenario.

Broad age groups in Auckland

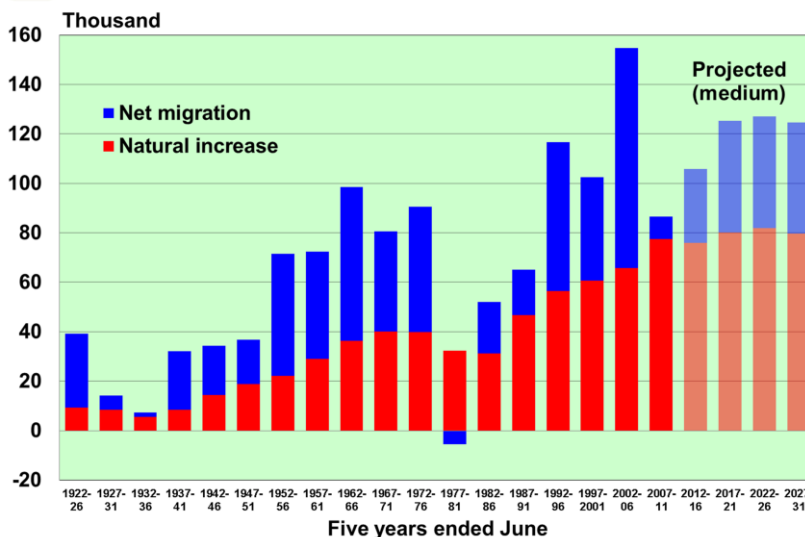


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- There are diverse patterns with population growth – for example by age –
- What we see, at least for these broad age groups, is growth across all age groups. Of these age groups, 15-39 is the largest. Through the 1990s and 2000s we saw relatively rapid growth among older working ages (40-64 years) as the baby boomers moved into this age bracket. As the baby boomers move out of that age bracket and into the oldest age bracket, we'll see relatively rapid growth in those older ages.
- By 2031 we might expect one-third of a million people aged 65+, or double the current number. Although by 2031, Auckland will probably still have more children than those aged 65+, unlike some other parts of New Zealand.

Migration and Auckland's population growth

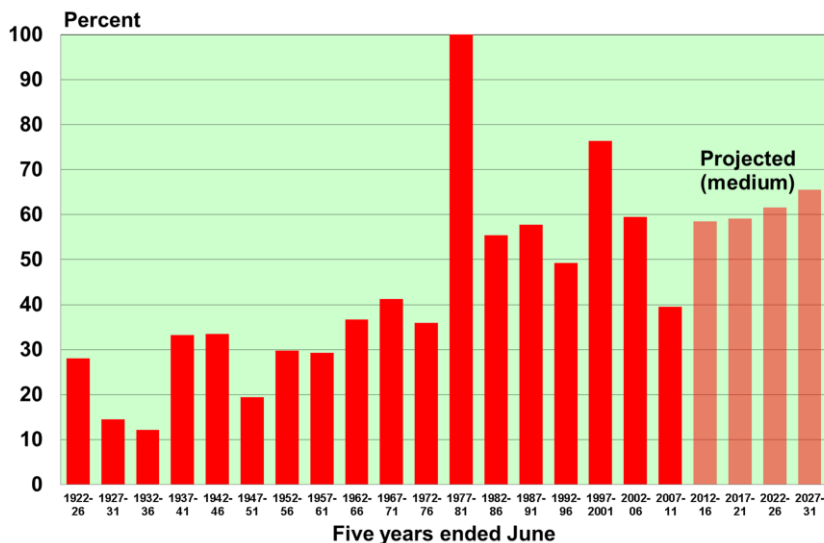


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- Migration and natural increase have fluctuating effects on Auckland's population growth -
- Historically, both net migration and natural increase have been important. Net migration is the difference between arrivals and departures - this includes migration between Auckland and the rest of NZ, as well as international migration. While natural increase is the difference between births and deaths.
- So at different times net migration has been the dominant component of growth, in recent years, and projected to 2031, about two-thirds of the population growth is coming from natural increase.
- 1977-81 was a slow growth period for NZ partly because of significant emigration

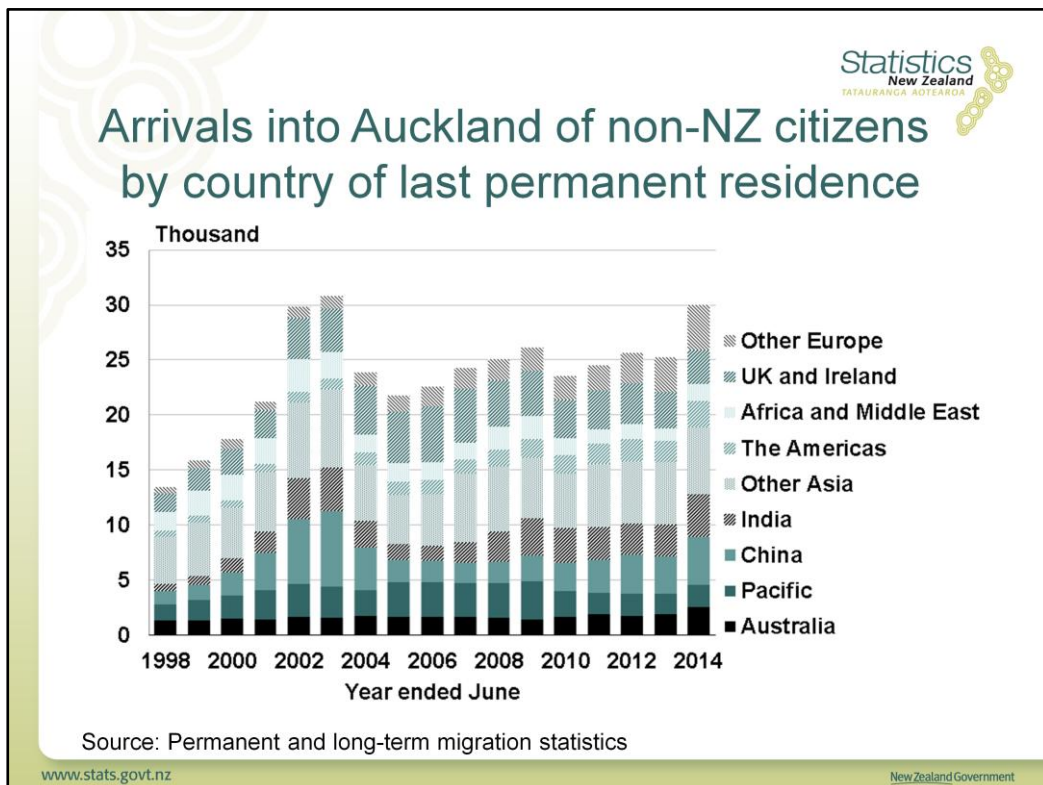
Auckland share of NZ's population growth



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- Auckland has become a dominant demographic force. As it has grown over the last century, it has accounted for an increasing share of NZ's population growth. In the most recent decades its averaged 50-60% of the nation's population growth. Projections indicate that Auckland will account for roughly 60% of growth over the next 2 decades.
- While 1977-81 was a slow growth period for New Zealand, Auckland's population continued to grow slightly, this is conveyed in the graph as 100%.



- Where do the international arrivals come from? Just focusing on the non-NZ citizens, fair to say that they come from every country imaginable. The largest source countries over the last 16 years (1998-2014) were:
 - UK and Ireland – 15% of Permanent and Long Term arrivals
 - China 13%
 - India 10%
 - Australia 7%
 - Although these 4 countries accounted for less than half of Permanent and Long Term arrivals.
- Arrivals from China had a noticeable upturn in 2002-03 partly driven by international students. A similar trend is currently occurring partly driven by students from China and India.
- In terms of broad regions, arrivals have been from:
 - Asia 46%
 - Europe 23%
 - Australia and the Pacific 18%
 - Africa and Middle East 8%
 - Americas 6%

Ethnic diversity

- ◎ 37% of Auckland's population was born overseas (2013 Census)
- ◎ Two-thirds of New Zealand's broad Pacific and Asian populations live in Auckland...
- ◎ ... and over half of New Zealand's broad MELAA (Middle Eastern/Latin American/African) population
- ◎ Auckland at 30 June 2013:
 - 890,000 people with a European ethnicity – 59% of the population
 - 350,000 people with an Asian ethnicity (Chinese, Indian, etc.) – 23%
 - 230,000 people with a Pacific ethnicity (Samoan, Tongan, etc.) – 15%
 - 170,000 people with Māori ethnicity – 11%
 - 30,000 people with a MELAA ethnicity – 2%

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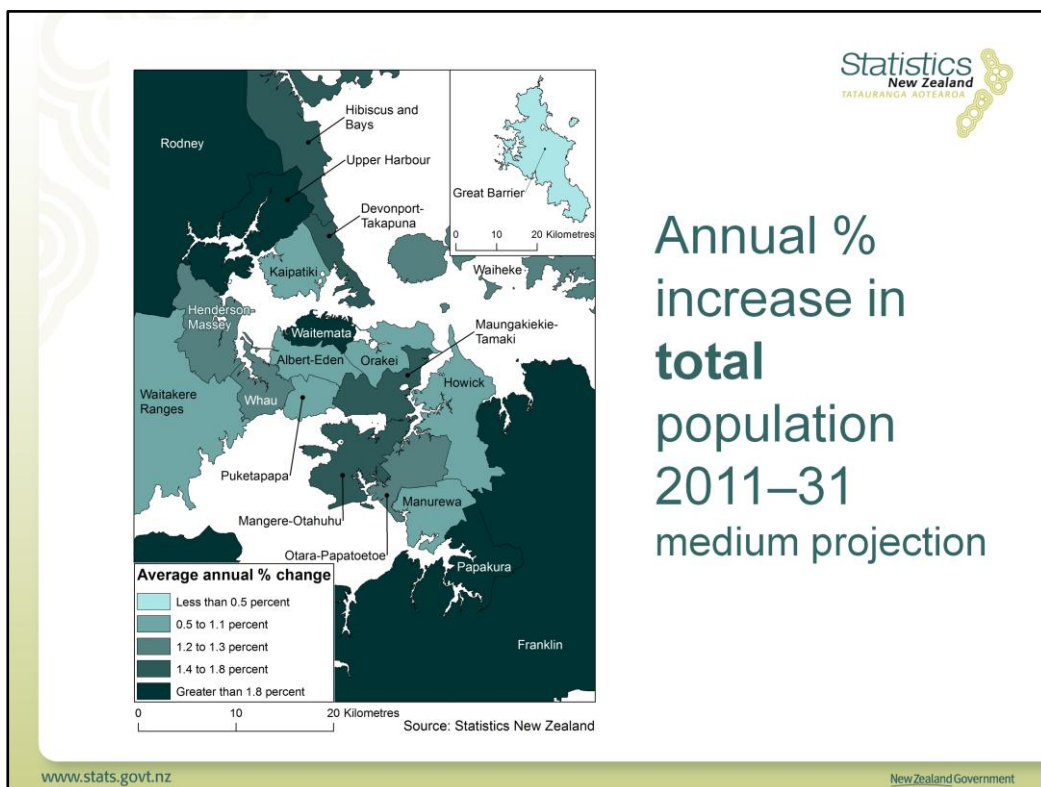
- Auckland is one of the world's most diverse cities. Currently 45% of Auckland's workforce was born overseas. (*MBIE 2014 REAR*)
- There are many ways to consider ethnic diversity – birthplace, ethnic mix, languages, etc.
- People can and do identify with multiple ethnicities, so ethnic populations cannot be simply summed to give the total population.
- In terms of Māori – nearly a quarter (24 percent) of the total Māori population live in Auckland

Projected ethnic growth

• Auckland in 2021:

- 920,000 people with a European ethnicity
 - 53% of the population
- 470,000 people with an Asian ethnicity (Chinese, Indian, etc.)
 - 27% of the population
- 290,000 people with a Pacific ethnicity (Samoan, Tongan, etc.)
 - 17% of the population
- 200,000 people with Māori ethnicity
 - 12% of the population

- Ethnic populations: Ethnic population projections indicate that the broad Asian, Pacific and Māori populations will all increase their share of the New Zealand population because of their faster growth rates. **Their shares are likely to increase across all age groups and geographic areas.**
- The broad European population is projected to grow, but not as fast as these other broad ethnic populations. As a result, the proportion of the population identifying with a European ethnicity is likely to drop.
- Ethnic projections are scheduled for update in 2015.
- The changing ethnic and cultural mix of the population has potential implications for the Hauraki Gulf catchment in terms of different cultural attitudes to the environment, to the management and regulation of that environment, and language challenges, for example.



- Auckland council estimates another 400,000 additional houses will be needed by 2040 that means 13,000 new houses every year.
- Statistics NZ's latest population projections for Auckland were prepared and published in late 2012, so take no account of the 2013 Census results. And they are of course projections, and future population growth will be partly influenced by local council decisions as to where they channel that population growth.
- Nonetheless, the projections indicate that the fastest population and household growth over the next 20 years will be in the outer local board areas – Upper Harbour, Rodney, Franklin, Papakura – and central city Waitemata. But none of the 21 local board areas will have a lower population in 2031 than they do currently, under this medium growth scenario.
- Auckland's 65+ population is projected to roughly double over the next 20 years, with the fastest growth in Upper Harbour, Franklin, Waitakere Ranges and Rodney. In those areas we're talking about the 65+ population growing 4% a year on average. But with the exception of Great Barrier, average growth of at least 2% a year in every other local board area.

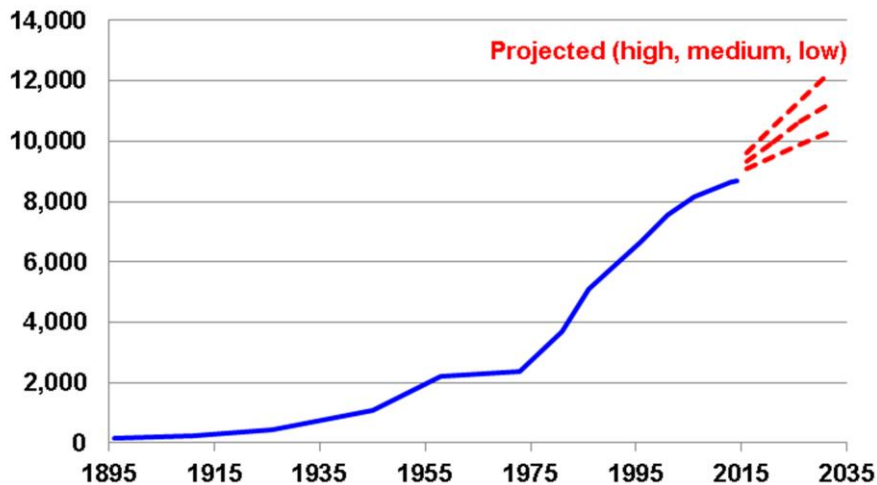


Growing population and economic activity is driving expansions in Auckland's transport

In the longer term Auckland's Transport plan is proposing:

- improvement of the existing road and rail network
- encouraging a shift to public transport
- support walking and cycling

Waiheke Island population



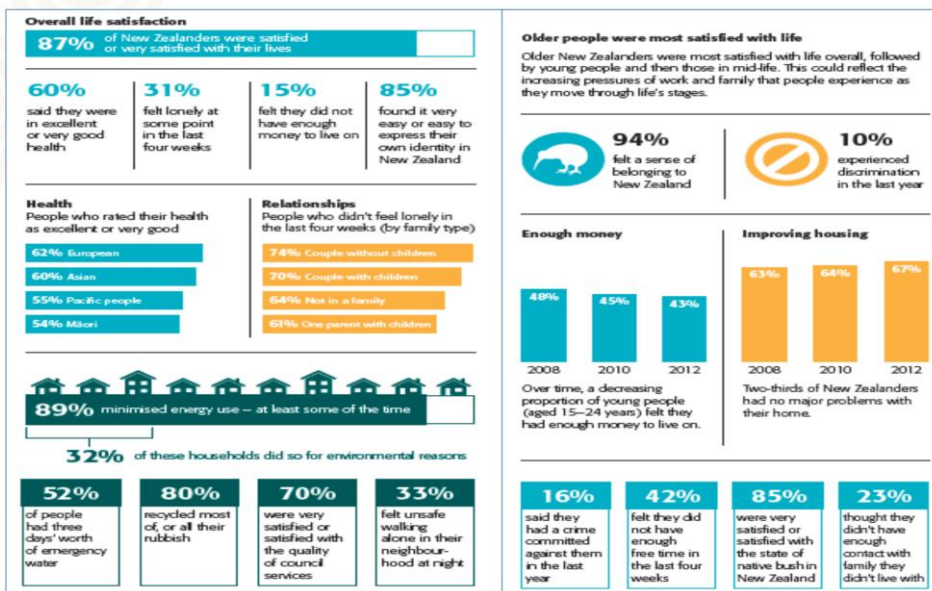
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- Changes in transportation impact on local communities. For example Waiheke Island is a good example of the changes occurring in the Hauraki Gulf.
- Population has grown over last century, particularly since the introduction of fast commuter ferries in the early 1990s.
- Visitor numbers have also increased significantly.
- Increasing population brings with it pressures on infrastructure as well as the natural environment.
- Of 43 water quality sites monitored in the Hauraki Gulf, Little Oneroa on Waiheke is one of three with a permanent water quality warning due to ongoing concerns. (Hauraki Gulf Factsheet *Coastal Water Quality* July 2014 Seachange)

Note: the projections were released in late 2012, before the 2013 Census. New population projections for Waiheke Island will be published in early 2015.

Well-being in New Zealand



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Our New Zealand General Social Survey measures a wide range of social outcomes to give a comprehensive picture of social well being across New Zealand.

- In 2012 NZGSS found that :
- Nearly 9 out of 10 people in Auckland said they were satisfied or very satisfied with their lives overall.
- 34 percent of people in Auckland said they had a major problem with their house.
- people living in the Auckland region were least likely to say they had more than enough, or enough money. Less than half (47 percent) of people living in Auckland said they had enough or more than enough money compared with 58 percent of people living in either the Wellington or Canterbury regions. (This is despite Auckland having the highest average household incomes in New Zealand - MBIE REAR 2014).
- But people living in Wellington were more likely to feel lonely than those living elsewhere in New Zealand (35 percent of Wellingtonians felt lonely a little of the time or more often, compared to 30 percent of those living in Auckland and 32 percent of those in Canterbury)

How people see it: Percentage who said they were 'satisfied' or 'very satisfied' with the state of the lakes, rivers, harbours, oceans and coastlines in their region



	2008	2012
Auckland	74%	80%
Waikato	72%	68%

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When looking at people's perceptions of the state of their environment, Auckland and Waikato appear to be trending apart in terms of their residents view of environmental outcomes according to NZGSS data.

While growth in manufacturing is contracting in Auckland in favour of knowledge intensive sectors, in Waikato agri-manufacturing is growing with above national average growth in chemicals, minerals and metal manufacturing.

Percentage who said they were 'satisfied' or 'very satisfied' with the state of bush and green spaces in their region

	2008	2012
Auckland	82%	87%
Waikato	81%	79%

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Auckland and Waikato appear to be trending apart in their residents perceptions of the state of green spaces also.

Most of Waikato's productive land is well developed and MBEs regional reports recommend tapping into human and business potential to generate greater value from it's natural resource.



Te Kupenga – Māori well-being

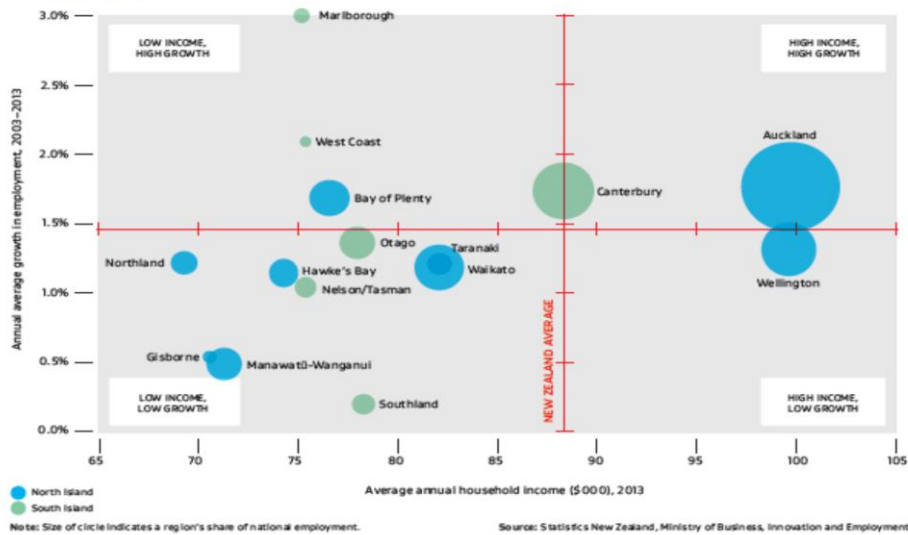
17

Te Kupenga measures a broad range of social, cultural and economic outcomes for Māori in New Zealand.

In 2013

- 70 percent of Māori adults said it was important to be involved in Māori culture, just 10 percent said it was not important to be involved in Māori culture.
- Between 2001 and 2013 there was a large increase in the proportion of younger Māori (15-44 year-olds) who reported some ability to speak te reo Māori.
- 83 percent said their whānau was doing 'well' or 'extremely well'.
- 62 percent had been to their ancestral marae, and 34 percent had done so in the last 12 months
- Just over half (54 percent) of all Māori adults said they had an ancestral marae they thought of their tūrangawaewae
- Of those who thought of their ancestral marae as their tūrangawaewae, two-thirds felt strongly or very strongly connected to this.

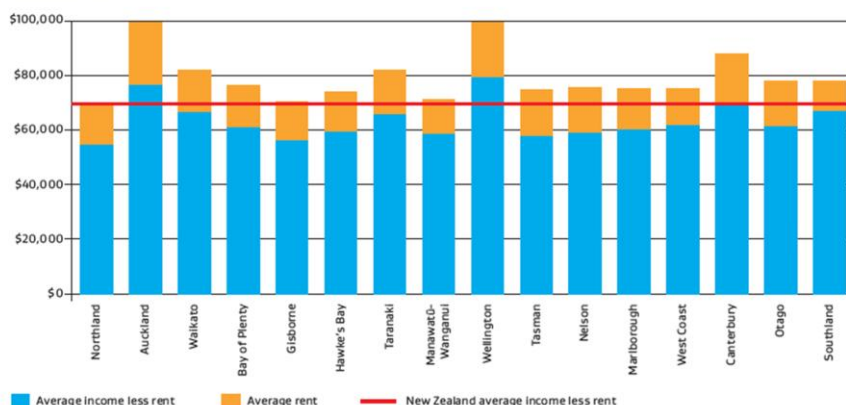
Household income & employment growth



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- The highest average household incomes are earned in our largest, most urban regions, Auckland, Wellington and Canterbury, where skill levels are highest. As in 2013, Waikato and Taranaki also benefit from relatively higher household incomes, primarily earned from resource-based dairy, and oil and gas exports.

Average annual household income and rent, 2013



Note: Income data and employment data is drawn from different sources to 2013 report and cannot be compared.

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

August 2011

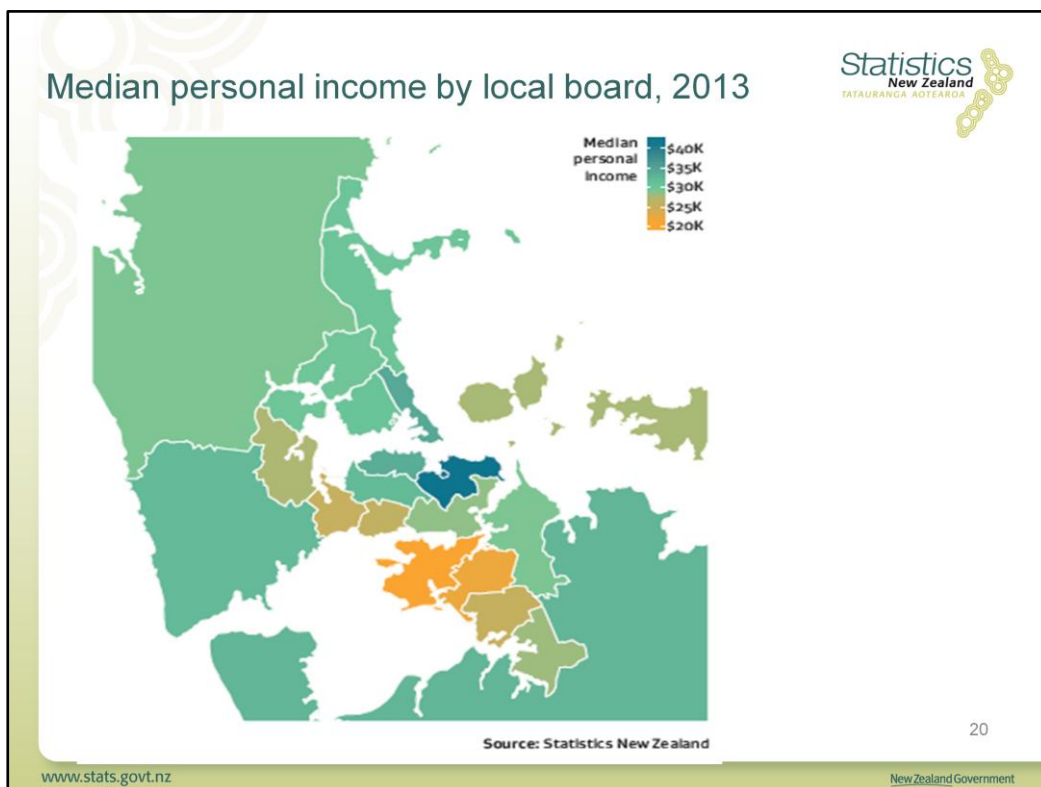
SOLGM Community Plan Conference

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- Household income is also affected by demographic factors. The high proportion of retired people in Northland, Bay of Plenty, Marlborough and Tasman reduces the average incomes of these regions, while the significant percentage of working age people in Wellington contributes to the higher incomes there. People live in larger households in Auckland and this also boosts average household incomes in that region. Higher income is somewhat offset by higher housing costs.

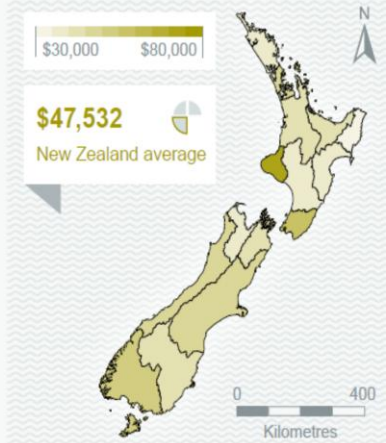


Auckland's overall characteristics mask large sub-regional differences that are common in larger cities. The concentration of high-skilled professional services employment in a centralised core, and lower-skilled manufacturing jobs in areas outside the city centre is a typical pattern. Professional services firms seek the agglomeration benefits

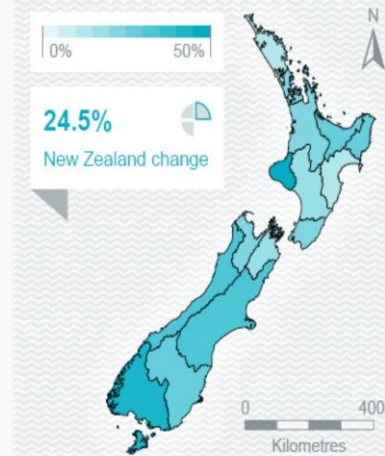
(such as knowledge workers, knowledge spill overs and scale economies) associated with a dense core, whereas manufacturing requires large land blocks with easy access to transport routes. The geographic distribution of different types of jobs is mirrored in the pattern of income across Auckland. Median annual incomes are significantly higher in central Auckland than South and West Auckland.

Regional economies – All

GDP per capita, 2013



Change in GDP, 2007–13

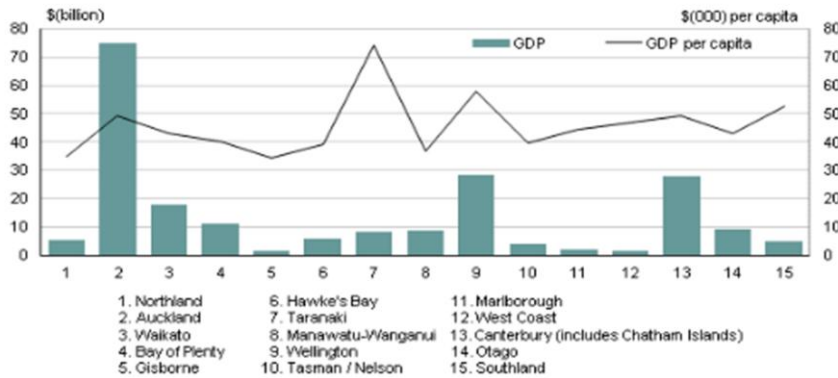


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- During 2007–13, the New Zealand economy expanded (in nominal terms) despite events that affected the economy at both national and regional levels. These events included the global financial crisis, fluctuations in commodity prices, the Canterbury earthquakes, and drought.
- Between 2007 and 2011 the strongest-performing industries were agriculture and mining, specifically dairy farming, sheep and beef farming, and oil and gas extraction. Other well-performing industries were the health care and social assistance; financial and insurance services; and rental, hiring, and real estate services industries. Manufacturing declined, and both retail trade and construction showed weak increases, mainly due to the impact of the global financial crisis.

Regional economies

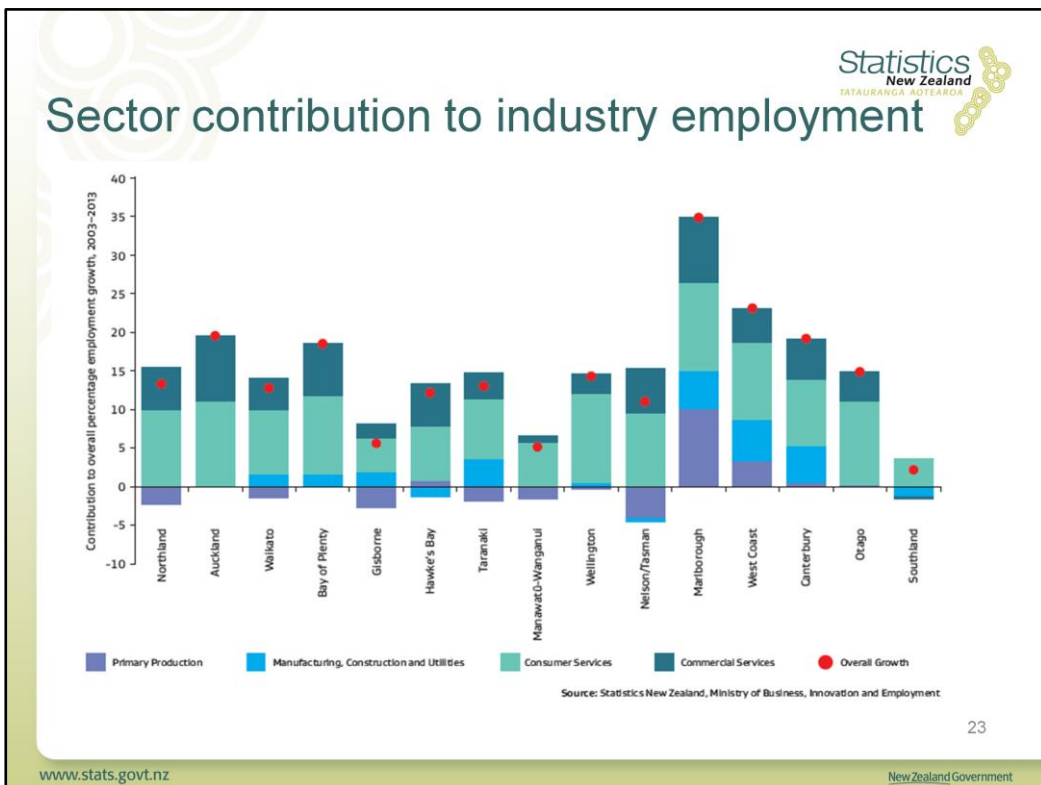
Gross domestic product and gross domestic product per capita
By region
Year ended March 2013



Source: Statistics New Zealand

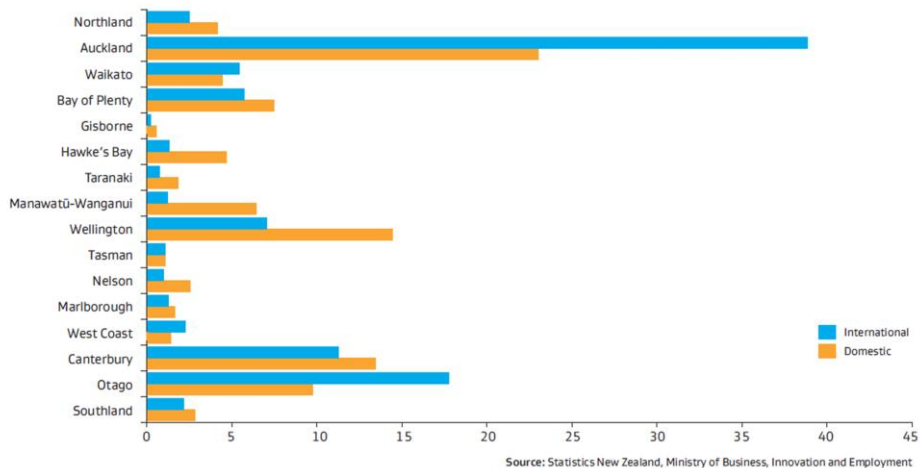
22

- Auckland is 35.3 percent of national GDP or \$74.7 billion in the March 2013 year. This compares with Taranaki at 3.9 percent or \$8.2 billion and Wellington at 13.5 percent or \$28.5 billion over the same period.
- In 2007–13, Auckland's economy expanded 22.6 percent, below the national movement of 24.5 percent. Expansion was slower than the rest of the country because industries that increased strongly (such as agriculture) have a small presence in the region.



- Nationally, much of New Zealand's employment is concentrated in the Auckland region (34 per cent). This is consistent with global trends of urbanisation, growth in the services industry and concentration of activity in city-regions. The workforce in our largest urban regions – Auckland, Wellington and Canterbury – provides national commercial services, while small regions such as Gisborne, Tasman, Marlborough and Southland produce various agricultural products.
- Auckland is home to half of New Zealand's employment in wholesale trade, information, media and telecommunications, and financial and insurance services. Wellington plays a complementary role in these services with almost another 20 per cent of employment in information, media and telecommunications; and financial and insurance services.

Share of tourism spend by region, 2013



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

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- Tourism businesses contribute to New Zealand's export receipts and provide significant employment in some regions. Tourism spend is concentrated in the regions of Auckland, Otago, Canterbury and Wellington. These regions have built on natural advantages to specialise in this sector.

Looking forward

- ⊙ Auckland represents one third of NZ's GDP, employment and population – but economic growth has slowed since 2007
- ⊙ Waikato has strong primary production and agri manufacturing focus with a relatively youthful population containing a higher than average Māori population.

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Within the over-arching story of strong population growth in Auckland and Waikato it's important to understand the differences and drivers of growth in each region, and the impact these might have on pressures within the Hauraki Gulf ecosystem.

Looking across the various data sources, some generated within the regions such as the environmental measures collected regionally, the national population data and projections collected by national agencies such as Statistics NZ, and the regional economic data published by MBIE and others, we can get a sense of the trends, and sometimes diverse pressures driving change in this area.

- Auckland is likely to increasingly dominate demographically in terms of its share of New Zealand's population growth and its increasing share of the total and ethnic populations.
- By 2031, projections indicate roughly 2.3 million people living within 50km of the Hauraki Gulf, and 2.7 million people living within 50km of the Hauraki Gulf water catchment.
- How this growth translates into outcomes for the state of the Hauraki Gulf will in part be due to the success of long term planning processes such as this Seachange initiative.

Resources

- ◎ [NZGSS well being across regions](#)
- ◎ [MBIE Regional Economic Activity Report 2014](#)
- ◎ [2013 Census Map – Quickstats about a place](#)
- ◎ [Waikato Progress Indicators –Tupuranga Waikato](#)
- ◎ [NZ Progress Indicators](#)
- ◎ [NZ Social Indicators](#)
- ◎ [Te Kupenga](#)

Additional detail

- ⦿ Regional GDP
- ⦿ Regional GDP by industry
- ⦿ Median personal income by local board

Regional economies – Auckland

Auckland

Regional GDP, 2013 35.3% of national GDP

\$74.7b
GDP value

22.6%
Change in GDP
2007–13

\$49,217
GDP per capita

\$14.1b
24.5%
New Zealand
\$47,532

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Taranaki

Regional GDP, 2013 3.9% of national GDP

\$8.2b
GDP value

47.5%
Change in GDP
2007–13

\$74,341
GDP per capita

\$14.1b
24.5%
New Zealand
\$47,532

Wellington

Regional GDP, 2013 13.5% of national GDP

\$28.5b
GDP value

21.7%
Change in GDP
2007–13

\$57,941
GDP per capita

\$14.1b
24.5%
New Zealand
\$47,532

28

Auckland is 35.3 percent of national GDP or \$74.7 billion in the March 1013 year. This compares with Taranaki at 3.9 percent or \$8.2 billion and Wellington at 13.5 percent or \$28.5 billion over the same period.

In 2007–13, Auckland's economy expanded 22.6 percent, below the national movement of 24.5 percent. Expansion was slower than the rest of the country because industries that increased strongly (such as agriculture) have a small presence in the region.

Regional economies – Waikato

Waikato

Regional GDP, 2013

8.5% of national GDP

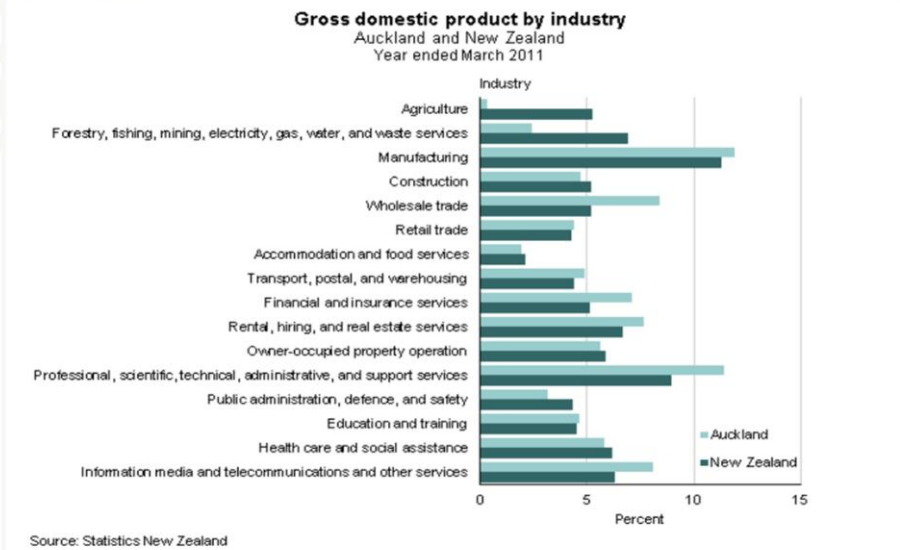


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Regional economies – Auckland



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In 2009, the global economic slowdown affected many of Auckland's industries, especially manufacturing; transport, postal, and warehousing; and wholesale trade.

In 2011, Auckland made up 56.4 percent of New Zealand's wholesale trade GDP. This is Auckland's largest share of any industry in 2011.

In 2012 and 2013, Auckland had moderate increases in GDP across a number of industries, with service industries the main contributors to the change.

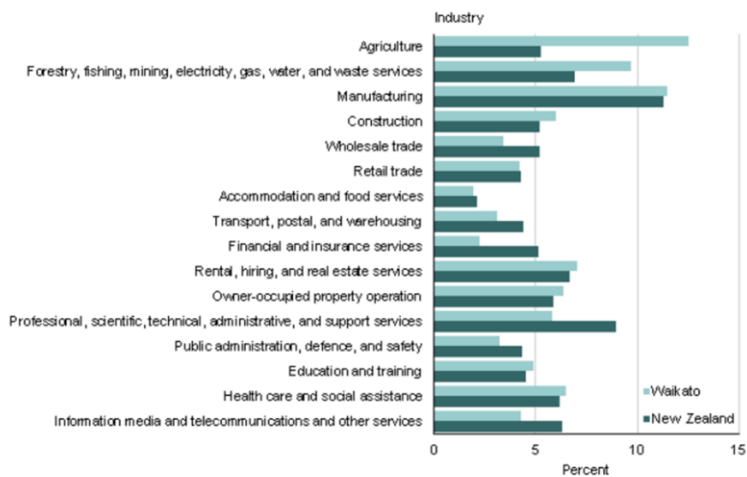
In 2012, financial and insurance services was the largest contributor to change followed by professional, scientific, technical, administrative, and support services.

In 2013, professional, scientific, technical, administrative, and support services and wholesale trade were the two largest contributors to change.

Regional economies – Waikato

Gross domestic product by industry

Waikato and New Zealand
Year ended March 2011



Source: Statistics New Zealand

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Pressures

- ⊙ Sedimentation
- ⊙ Water quality
- ⊙ Fish and bird life
- ⊙ Marine processes
- ⊙ Litter
- ⊙ Traffic
- ⊙ Land use

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All of this growth is, and will create environmental pressures around issues such as:

Sedimentation – from land development and forest clearance, in some localities this sediment contains toxic metal and organic contaminants – however the overall trend for the Auckland region is decreasing sediment suspended in seawater (Hauraki Gulf Factsheet *Coastal Water Quality* July 2014 Seachange)

Water quality – we know that 3 of the monitored sites in Hauraki Gulf have permanent warnings on water quality concerns, 11 are consistently excellent and 29 fluctuate in quality. On the Waikato side, water quality is satisfactory or better 75% of the time. Erosion of shellfish beds reduces important marine processes like water filtering.

Fish and bird life – decreasing bio-diversity includes reductions in kaimoana and seabird habitats have been affected by human activities. On the other hand 27 Gulf Islands are free of mammalian pests (Hauraki Gulf Factsheet *Biodiversity and Biosecurity* July 2014 Seachange)