

# Wellington Regional Investment Plan



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## Executive Summary

For some time now the Wellington region has been transforming, almost imperceptibly. No longer is it a staid government centre. It has become a contemporary technology-driven economy, a cultural centre and a visitor destination. Its history of slow population growth is gradually giving way to more significant growth and the regional economy too, is in growth mode. It's not without its challenges and many of those lay in access and resilience, but all in all its prospects are very positive.

Local councils have been thinking about the implications for their own areas but also for the region as a whole entity and this investment plan reflects this thinking process.

Wellington as a region is an interlocking network of cities, towns and rural communities. It is a city-region, small on a global scale, but sufficiently large to combine the advantages of a partially concentrated and partially dispersed regional economy in an attractive setting with a high quality of lifestyle and environment.

Optimising this balance of concentration and dispersal is the key to a positive future. Across the region are the ingredients of attractive lifestyles and varied living and employment options and as we become more mobile, we can access these region-wide benefits more and more. That mobility requires integrated design of transport, infrastructure and land use and this is where an investment plan can focus its attention for most benefit.

The Wellington Regional Investment Plan (the Plan) is our long-range blueprint that details the investment required over the next 30 years to ensure future success and improve the quality of life for the Wellington region. It is a vision for where we see ourselves and a plan for how to get there.

Its preparation involved extensive research and consultation across the region in 2018, including a steering group, governance group and a number of action groups comprising business, iwi, education and local and central government.

Councils have already committed to substantial investment (\$4.5b in capital expenditure over the next 10 years) in Long Term Plans (LTPs). This Plan seeks to integrate this investment, unlock the new opportunities and accelerate the achievement of results. To make it happen, we need to work in partnership across local government, iwi, community, business and with central government.

The national perspective is an important consideration. Wellington as the nation's Capital, plays a vital part in New Zealand politics and economy. It is also an international connector. We are the second largest

WELLINGTON REGION IS HOME TO OVER **500,000** PEOPLE (**10.7%** OF THE NZ POPULATION) AND HAS THE SECOND HIGHEST REGIONAL GDP (PRODUCING **13.3%** OF THE NZ GDP). WE ARE EXPERIENCING STRONG POPULATION AND ECONOMIC GROWTH AND THIS IS FORECAST TO ACCELERATE INTO THE FUTURE

### POPULATION

2018 **521,500** → 2048 **670,000**

### JOBS

2018 **299,000** → 2048 **391,000**

region by gross domestic product (GDP) with a highly skilled workforce and a creative and “tech” culture which complements our already strong government presence.

The Plan is built on the assumption that in economic, social, cultural and environmental terms, the region is more than the sum of its parts and with New Zealand evolving into super-regional economic blocs the lower North Island is an important piece of the total New Zealand picture. To retain and build on its strong contribution to the New Zealand economy, our region needs to continue to work together with increasing energy and commitment, building on our natural and emerging advantages and creating new capabilities.

### Where does the Plan fit?

Planning is the responsibility of each of the councils through their LTPs. These remain the core planning documents. This Plan, which is fully supported by the councils, focuses at a higher level, drawing together a strategic and spatial view of the region and seeking to inject the energy required for a collective lift of performance, achieving results faster from a better integrated effort.

The Plan is broader than local government and takes account of central government, the community and the private sector as they impact on regional development. Central government mechanisms such as the National Policy Statements for – Urban Development Capacity and Freshwater Management and the proposal for an Urban Development Authority will have a major impact on decisions influencing timing and location of regional projects.

### The Plan

Has a long term view out ten plus years, and takes account of the major changes and challenges the region will experience over that period.

### Why now?

We are at a moment in the region’s history where, with the right vision and programme, the region has the insight and self-confidence to modernise itself into the 21st century as a leader in the New Zealand economy, way of life and values. If the moment is allowed to pass and the initiative not taken, the opportunity may not arise again in the same form.

### Outcomes

Our research and engagement has identified four important areas in which we must make significant progress to enable the Wellington region to continue to be a place where people want to live, work and visit.

For each area the Plan describes the desired outcome, why it is important for Wellington’s future and what we need to focus on to deliver. These four areas do not stand alone; they are interdependent and build on each other. We need to make progress on achieving all outcomes simultaneously.

#### 1. Developing new housing supply and contemporary urban form

Aligning housing and urban form with the future economy and lifestyle aspirations of people across the region through:

- Affordable housing
- Contemporary lifestyle precincts
- Social housing
- Greenfield

## **2. Accessing opportunities through transport**

Design of an efficient multi-modal transport system which supports the city-region vision and integrates the economy and urban form through:

- Let's Get Wellington Moving
- North/South multi modal transport spine
- East/West transport spine

## **3. Building a modern low-carbon high-enterprise economy**

Building an active and innovative, knowledge-focused and broad-based economy seeking to drive clean growth primarily, but not only, through the technology and creative sectors.

- Knowledge and skills for the future
- Māori Economy
- Economic and Business Acceleration
- Wellington as a destination

## **4. Strengthening our resilience and reducing environmental impact**

Building regional infrastructure with the capacity to tackle climate change impacts and to better resist disruptive events such as earthquakes and enhancing the ability to achieve a quick recovery, should an event take place. Promoting urban development guided by the requirement to become a zero carbon region and supporting the development of replanting/planting trees and sustainable water storage.

- Lifelines
- Replanting/planting of trees
- Water storage
- Prioritising the transition to a zero carbon economy

## **Delivering**

Delivering on our Plan requires a co-ordinated and concerted effort. It will require strong and deep partnerships with central government and a region-wide joined up view of delivery across the different areas of the economy and geography.

It is only through this approach that Wellington, as an integrated region will thrive.

## Background

The Plan has evolved in the last eighteen months through a number of key stages.

### Identification of opportunities and priorities

Accessing and utilising existing knowledge and research from councils across the region was the first step in understanding potential opportunities for the region. A combination of cross-council workshops, a steering group and the Chief Executives forum helped shape the direction of the Plan. The Mayoral Forum helped set the priorities, enabling us to focus our efforts into the areas that matter.

Action teams which comprised a mix of business, local government, central government, education and iwi worked in four priority areas that dropped out of the council discussions:

- Developing new housing supply and contemporary urban form
- Accessing opportunities through transport
- Building a modern low-carbon economy
- Strengthening our resilience and reducing environmental impact

The action teams developed robust thinking on these four areas and identified priorities within them. The steering group workshopped these areas and the Chief Executive and Mayoral forums both provided input along the way.

### Detailed Actions

Each of the four priority areas include actions that have been identified as critical to achieving our overall objective. These actions were identified through extensive work with the action teams and the steering group. Many of the actions were already on the radar as being important, however, the Plan has now highlighted them within the wider regional context and reflects their value and necessity.

## About the Wellington Region

### Te Upoko o te Ika a Maui - Wellington

Wellington is an important location for New Zealand and the New Zealand people. Wellington is the head of the fish of Maui, the Harbour – Te Whanganui-a-Tara and Wairarapa Moana are the eyes of the mythical fish, and the great bay between them is the fish's mouth.

The region is an interdependent network of cities, towns and rural areas. It is the seat of Government but has long shed its grey, staid persona of public sector bureaucracy for a much more upbeat image, including the public sector. It is a growing centre for economic enterprise, knowledge and skills, creative and cultural pursuits and lifestyle. The region is a modern urban economy paired with a quality natural and social environment.

The interdependence of the region is a defining characteristic. Each part has a high level of dependence on every other part, especially the entwined nature of the CBD and the rest of the region. The present regional dynamic involve a commercial heart with a residential hinterland. The future involves a critical mass of creative and technology “knowledge-based” industries both in the CBD and extending across the region, benefitting from their regional co-location, and taking advantage of the lifestyle assets spread around the region.

### A high quality of life

Residents in the Wellington region enjoy a high quality of life relative to other parts of New Zealand. To begin with they are often well paid. According to the Infometrics Regional Economic Profile, mean earnings by workers in the Wellington region are 12 percent above the national average and it is the highest paid region in the country.

It is not just income, but across a wide range of domains that Wellington residents appear to have a high level of satisfaction.

The Quality of Life Survey conducted in 2018<sup>1</sup> indicates that residents continue to be well satisfied living in the Wellington region. Wellington region participants were positive about all dimensions covered by the survey, and indeed appeared to have above average satisfaction in the quality of their lives.

Eighty nine percent of respondents to the survey from the Wellington region reported that they thought they had a good quality of life, with just three percent reporting overall dissatisfaction.

This means that Wellington is seen as a destination and a place where people want to live and work. This is positive for the region but at the same time puts pressure on existing infrastructure and housing.

### Māori in the Wellington Region

Māori play a special part in the history, identity and life of New Zealand and the Wellington region. The region is home to around 58,332 (12 percent) people who identify Māori as their ethnicity (Appendix 1, Table 2: Share of the population that identify as Māori in the Greater Wellington Region, 2013 Census<sup>2</sup>). The last Census also indicated that the percentage categorised as mana whenua was 16 percent with

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<sup>1</sup> <http://www.qualityoflifeproject.govt.nz/index.htm>

<sup>2</sup> Māori Economy in the Greater Wellington Region, 30 March 2018, [www.berl.co.nz](http://www.berl.co.nz)



mātāwaka (Māori who come from other areas) the remaining 84 percent. Over half are under 30 years and StatsNZ predict this to continue through to 2038, with the over 65 age-category nearly doubling from 15 percent to 26 percent over the same period.

Six iwi authorities have their home across the region and through the Treaty of Waitangi, historical claims have been settled for four of the six with two still to settle (Figure 1).

Figure 1: Wellington Region iwi

Taranaki Whānui ki Te Upoko o Te Ika	Ngāti Raukawa ki te Tonga
Ngāti Toa Rangatira	Te Ātiawa ki Whakarongotai
Rangitāne o Wairarapa	
Ngāti Kahungunu ki Wairarapa	

## Wellington's Role in New Zealand

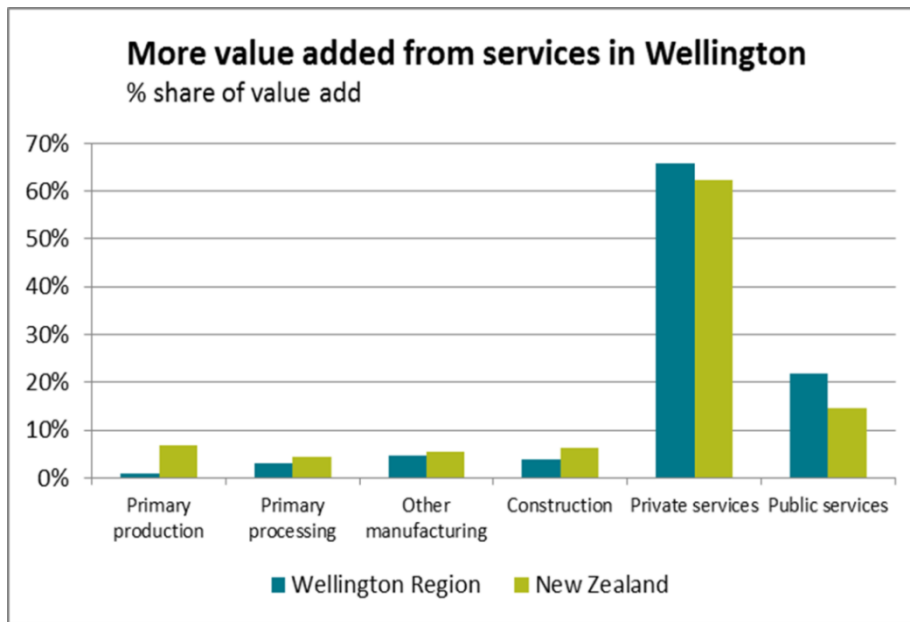
### A high performing economy

Wellington is at the leading edge of the New Zealand economy. Based on Infometrics Regional Economic Profile data per capita GDP in the region is 28 percent greater than the national average and 12 percent higher than that in Auckland. Wellington has a highly productive workforce. In 2018 the Wellington region had:

- 10.7% of the national population
- 10.9% of the working age population
- 11.5% of national employment
- 13.7% of national value added (GDP)
- 14.6% of the nation's professionals
- 16.6% of the nation's knowledge workers

Although, as the nation's capital, Wellington is known for its public service, private services are now the real engine room of the Wellington economy, with private services contributing three-times as much output as the public sector (Figure 2). Public services will continue to grow roughly at the same speed as the broader economy whereas knowledge-based services are likely to be much faster movers.

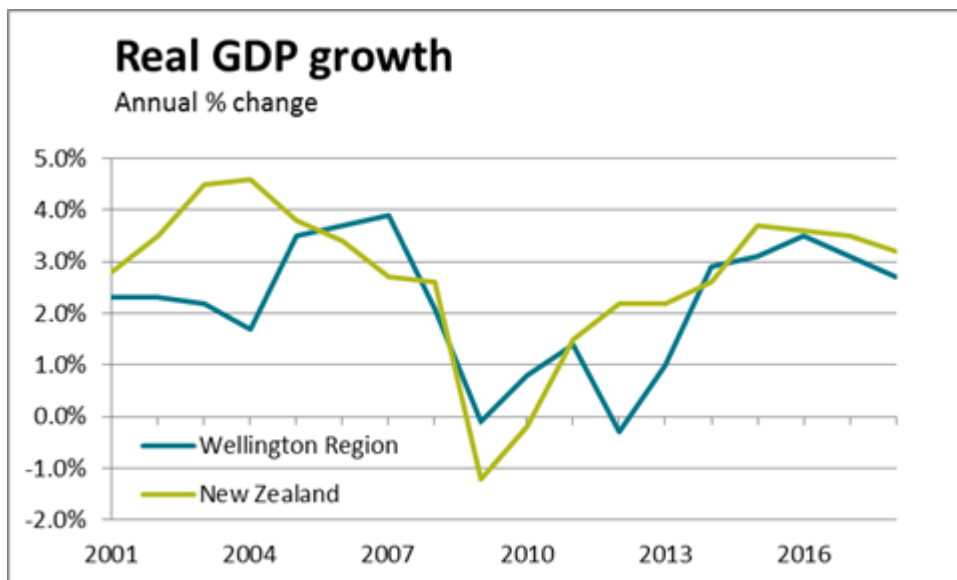
Figure 2: Added value from services



**Some catch up from the rest of New Zealand**

There has been some catch up from the rest of New Zealand over the last decade; while the Wellington region economy expanded by 19.5 percent in the ten years to March 2018, the New Zealand economy expanded by 23 percent. This is good for the nation, but New Zealand also needs to have its leading light economy to continue forging ahead (Figure 3).

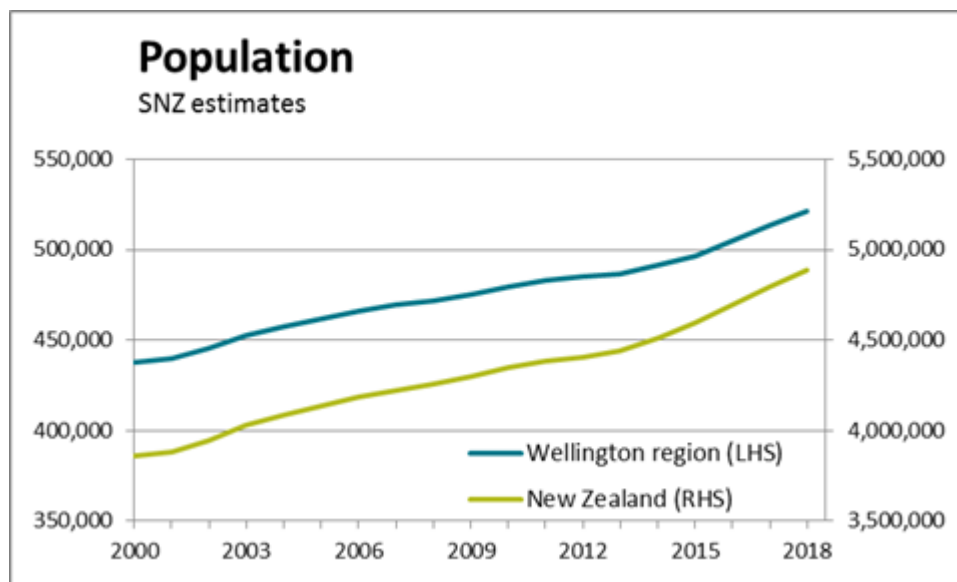
Figure 3; Real GDP growth



As a result of this catch up from the rest of NZ there has been a slower pace of population growth in the region compared to NZ as a whole. The population of the Wellington region is estimated by StatsNZ to have increased by 0.9 percent per annum from 426,900 in 1996 to 521,500 in 2018. However, with national population growth averaging 1.2 percent per annum, the Wellington region’s share of the national

population has fallen from 11.4 percent in 1996 to 10.7 percent in 2018. The last few years have seen a significant change with accelerated population growth in Wellington City and across the region; this has been at double the average rate of growth over the last decade (Figure 4).

Figure 4: Population growth



### Transport interconnectedness

There is increasing connectedness across the lower North Island and the top of the South Island and the region is well placed to build on those links to develop and achieve shared objectives. These linkages already provide rail commuter services and significant freight networks, which are the main connection point between the North and South Island for sea (state highway one). The Wellington Ferry terminal and port, thereby providing critical access for New Zealand in both freight and passengers (tourism).

### Strong prospects for the Wellington Region

Global trends are generally positive for the Wellington Region. So as long as the region’s infrastructure supports rather than inhibits the region, then the region appears to have strong economic and population prospects.

Table 1: Wellington Region share of national trends

	2018	2028	2038	2048
Population	10.7%	11.0%	10.8%	11.0%
Employment	11.5%	12.0%	11.7%	11.9%
GDP	13.7%	13.8%	14.0%	14.0%
Per capita GDP	126.6%	126.4%	129.2%	126.8%

### Global trends relevant to prospects for the Wellington Region

Powerful forces are changing our world. Their impacts are touching all countries, sectors, companies, and, increasingly, workers and the environment. We have identified five key global trends that are likely to have profound implications for the Wellington Region in coming decades (Appendix 1):

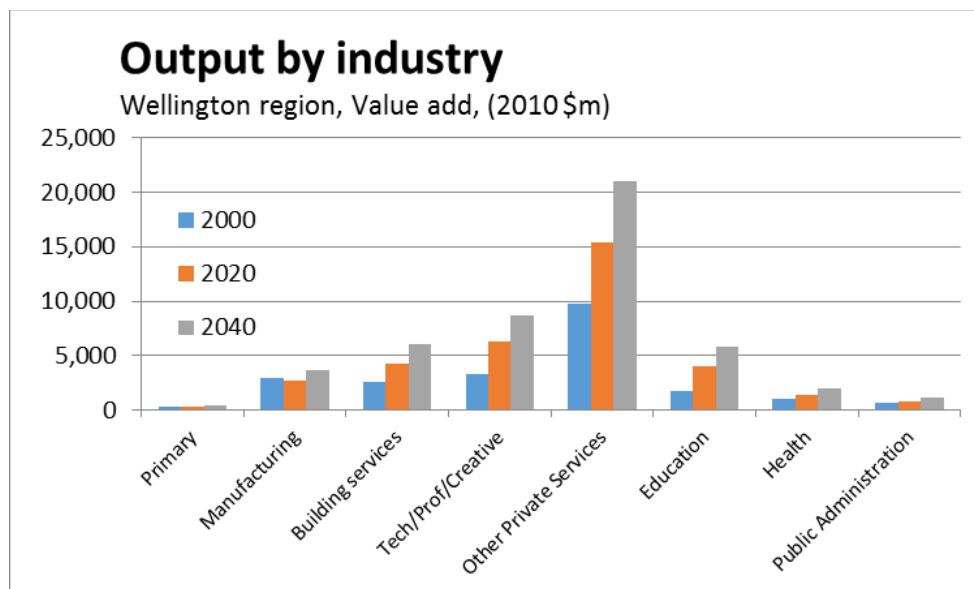
- Climate change
- Population ageing
- Digital technology and pace of change
- Globalisation of services
- Urbanisation

As a region we cannot be complacent when it comes to these forces of change, they need to be part of our focus and built into our development for the future.

### Industry prospects

Industry across the Wellington Region is notable for being in the tertiary and quaternary sectors with the region having a 37 percent share of quaternary GDP compared to 25 percent at a national level. The quaternary sector includes knowledge intensive service industries and Figure 5 highlights where growth is predicted to continue to happen. This puts pressure on the region to continue to be able to supply a highly skilled workforce well into the future (Appendix 1).

Figure 5: Output by industry



### Implication of population prospects

The population figures presented in this Plan are based on the high scenario from Statistics New Zealand’s (StatsNZ) subnational population projections for the Wellington region. These project the region’s population increasing from an estimate of 514,000 in 2017 to 650,000 by 2043. This implies an average annual growth rate of 0.9 percent, which is the same pace of growth experienced in the region since 1996.

Our economic projections (Appendix 1) suggest that the high scenario is a more plausible scenario than the medium projections. Economic and social trends are likely to favour economies like Wellington, in particular through:

- ongoing urbanisation;
- high agglomeration returns for CBD based economies;
- favourable growth prospects for industries that utilise information technology, and,
- increased globalisation of service-based industries.

As a result, projections based on GW's Wellington Regional Economic Forecast Model (Appendix 1) suggest that by the mid-2040s production in the region will increase from 13.7 percent of national production to 14.0 percent and from 11.5 percent of national employment to 11.9 percent.

In other words, a key challenge for the region is to be prepared for continued population growth. This leads to many of the proposals presented in the Plan:

- the use of housing precincts to encourage more intensive housing but also to support economic growth across the whole region
- initiatives to enhance the liveability of the region
- enhanced transport infrastructure as even with a large proportion of population growth expected in Wellington City, a 50 percent increase in daily commuter flows into Wellington City is expected over the next three decades

## Strengths, Challenges, Opportunities

Cities are a vital economic unit in a modern economy. They consolidate economic activity, innovation, culture and enterprise. They are economically efficient. But cities can alienate people. Many modern cities suffer from the phenomenon of stratification, where wealth, high property values, advanced education and other indicators of privilege concentrate into the inner ring around a city, whereas less privilege, lower education and property values are relegated to the outer fringes - the commuter zone. Cities are also associated with problems of congestion, increasing commuter times (and costs), unemployment and urban decay.

The ideas of city and urban form are undergoing a serious rethink to address these negatives. New generations are looking to be urban dwellers, but they want an urban future where the extremes of economics are tempered by human, social and environmental values. Cities of the future may be more intensely populated, so can they be better designed to create attractive environments? High quality design can enable affordable quality urban living, even with greater population density.

The Wellington region is moving towards a more concentrated or specialised economy. The concentration is on types of industries, not necessarily concentration in the CBD. The region's economy will be of increasing national and international scale and importance, with its concentration of knowledge-based industries. To support this economy and provide the essentials of a modern lifestyle, and meet the expectations of the new generations of young people populating these industries, the idea of the city-region becomes essential.

Furthermore, because of its knowledge focus, the Wellington economy is a high productivity economy in New Zealand terms, with GDP per employed person being around 15 percent higher than the national average. While this is a positive factor, there is still plenty of upside to be achieved if comparisons are made internationally.

Maintaining a high level of productivity will arise from continual skill and capability development, and ongoing investment in technologies which enhance human effort. This requires a culture of education and skill improvement and Wellington is pre-disposed in this direction.

### **City-region**

The idea of a city-region is fundamental to this Plan, it is a way of thinking that takes the benefits of urban concentration and regional diversity and turns them into an active whole. It combines scale and diversity – just enough scale to compete nationally and internationally and to create momentum, not so much scale that the human benefits of intimacy, population mix and human values are diminished or lost.

The central city of Wellington is a vital beating heart of the economy. Without it, there is no region, but it alone is not sufficient to succeed in a future world that demands a broader definition of lifestyle and economy. The city alone cannot provide the options that people are seeking at different stages of their life cycle and careers – factors that make them want to live and be part of a region with its options and variations. A region that is little more than an outlier of the city doesn't meet these requirements either.

The idea is a total working and living environment that meets the needs of its population in an efficient and modern manner. The city-region has nothing to do with political management. The city-region is a carefully designed package to meet the requirements productivity, motivation, collaboration, innovation and modern-future living and working.

### **Strengths**

- Our contribution to the national economy
- Our capability as a centre of government
- Our efficient and compact living and working environment
- Our high status in terms of skills, education and productivity
- Our location as a transport junction between the North and South Island

### **Challenges**

- Managing the demands of population growth and its implications
- Managing the pressures on house prices and the cost of living
- Moving people around the region effectively and sustainably
- Preparing for and mitigating the impacts of natural disasters and climate change

### **Opportunities**

- Business growth
- Innovation and productivity growth
- Talent and business attraction

## **Visioning the Wellington region**

Success can be measured in many different ways, but what is most meaningful to the people of the region will be what counts.

People invariably want five fundamentals that support the basics of life, roughly in the order in which they are listed below. These are similar to the Treasury's Living Standards Framework<sup>3</sup> and we have adopted them as guidelines for this Plan:

- **Employment** – not just jobs, but also opportunities for improvement and advancement.
- **Income** – sufficient family income to maintain a good quality life and which is not too disruptive of family values to earn it.
- **Housing** – a warm, dry, secure and affordable living environment, with easy access to employment.
- **Skills** – skills build up into capabilities and into careers. Skills are part of identity and confidence.
- **Vibrancy** – a work, social, cultural and community environment that has variety, dimension and interest, with access to facilities, amenities and experiences.

### What would the Wellington region of the future look like?

Understanding where we see ourselves 10, 20, 30 years into the future is critical for building the right path to achieving our goals. Through extensive workshops and discussions in the process of developing this Plan we have been able to distil down some qualities that people see as important for the region.

Wellington is already seen as a leader in urban form<sup>4</sup> however, to achieve the vision and desired future the following areas will need to be underpinned by an integrated system of transport and urban development with a strong environmental and resilient culture. Only then will these areas drive the growth and development of the region's economy.

#### Hub/satellite

The knowledge-based growth industries may partly be hubbed out of Wellington City with potential satellite activities around the region. For example, technology-related industries are growing quickly in Lower Hutt, Porirua and the Wairarapa.

Technology practices can be applied to traditional industries in other parts of the region, for example, added value food industries proposed for Wairarapa will draw on technology and digital skills. Enhancements in the tourism and visitor industry will do the same across the region.

#### Enterprise economy

Small and medium-sized enterprise growth is closely aligned with innovation. The development and particularly the extension of enterprises into mid-sized entities should be a focus right across the region, as this will increasingly become the foundation of the whole regional economy. A network of business development services may in its early stages rely on the expertise available in WREDA and Creative HQ, but as the satellite operations emerge they will gain their own identity and momentum.

#### Knowledge and skills centre

The Wellington region is already a strong centre for knowledge and skills, both traditional and new and its trajectory is to become stronger. These skills need to be flexible and transferable and able to be evolved as requirements change with technology. Wellington needs to continue to lead the pack as a learning centre.

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<sup>3</sup> <https://treasury.govt.nz/information-and-services/nz-economy/living-standards/our-living-standards-framework>

<sup>4</sup> PWC – Competitive Cities: A Decade of Shifting Fortunes 2019

### **Cultural and creative centre**

The region needs to be able to meet more than the employment and living needs of its residents. Culture, arts, heritage, sport and recreation are all part of the mix. Wellington is renowned for its cultural life and further evolution of this characteristic has been designed into the regional picture.

### **Changing nature of work**

A number of trends are driving the changing nature of work, including technology, digital and the internet. It is likely that operating businesses or organisations of any sort may become increasingly desirable from remote locations. Outworking options may emerge. For example, outworking centres in places like Masterton, Greytown, Martinborough, Paraparaumu and Upper Hutt may become an option for people whose primary job location is inner city Wellington. They may operate from these outworking centres for a day or two a week, or perhaps even a whole week, coming into the city from time to time for direction and engagement with colleagues.

These outworking centres may be associated with business development services and facilities to gain advantages from co-location and collaboration. They also have the potential to build connections between individuals, private enterprises and the public sector – they could help diminish siloes and generate business activity clusters

There is already strong evidence of this type of thing happening. Shared ‘co-working’ spaces are springing up around the city and the wider region in places such as Carterton, Porirua, Petone, and Johnsonville and within the Wellington inner city. Several of these have already extended into business networking and capability-building. These will need to be supported to achieve critical mass.

### **Advanced skills**

Attraction of talent and the development of specialist skills matched with the growth sectors of the modern economy will be vital to success. The ability to distribute skill development across the region and directly associate with growth businesses will be important.

The economy will require a dynamic approach to skills acquisition and enhancement. Over-reliance on pre-entry training will be replaced with in-service, on-the-job training and micro-credentialing suited to fast moving and evolving industries. The acquisition of skills needs to be addressed at a region level, not in isolated pockets.

### **Public and private**

An enterprise and innovation ethos would become an active part of the public and community sectors and would be a strong reason for the retention of these services in the region. The Wellington region of the future will have a greater depth of labour market and labour skills than equivalent parts of the country, giving it a natural advantage.

A strong association with enterprise in both the public and private sectors is likely to stimulate greater enterprise in the public sector, which has been a goal of public sector managers and leaders for some time. The recently started GovTech programme led by Creative HQ is an example of how to develop innovation in the public sector and is gaining international recognition.



## Outcome: Developing new housing supply and contemporary urban form

### Outcome sought

Their house and living environment are arguably the focal point of most people's lives. Similarly, housing is the key integrating factor in this Plan. The connection between transport is critical and in a zero-carbon future will become more so. Resilience in the form of protection from natural hazard and climate change events such as earthquakes, storm surge, flooding and sea level rise is vital.

The connection with the knowledge-economy is very important as lifestyle and quality of life are key factors in attracting the people to Wellington who are going to populate our growth sectors. Housing development allows people to select the housing option most suited to their requirements and circumstances.

The housing outcome sought in this Plan is increased quality housing supply in the context of integrated urban form. Housing and living circumstances are arguably the single integrating factor with all aspects of the Plan. People satisfied with their living situation will be strong contributors to the economy and community.

### Opportunity

Tight integration between housing, urban form, transport and economy opens up new opportunities. The opportunities lie much less in the suburban outward expansion of the past and much more retrofitting 'brownfields' developments with a strong emphasis on lifestyle and community and adjacent workplaces.

This brings both challenges and opportunities. It would include initiatives with the Ministry of Housing and Urban Development, Housing New Zealand and KiwiBuild with an emphasis on housing provision. It combines housing with transport and economic concentration. Proposed precinct initiatives focus on housing those people who will drive the emerging knowledge-based Wellington economy of the future.

To maintain and extend Wellington's position at the leading edge of technical and creative industries, the region needs people and especially those with relevant skills. People need to be properly housed in positive communities so that they can be productive and live satisfying lives.

It is estimated that the Wellington region is currently short of between 4,000-5,000 homes and this number is gradually increasing. The largest shortage is in Wellington City, but pressures are growing in other parts of the region. The threat is not just shortages of houses per se, but shortages of affordable houses, especially for young families who are the future of the regional economy.

If a high population growth scenario is applied, then something in the order of 56,000 plus new housing units will be required across the region by 2043.

There is international competition for talent. The Wellington economy is highly talent-dependent and needs to optimise its chances of attracting and retaining talented people by offering a positive combination of jobs, living circumstances and lifestyle. With property values rising across the region people in their early career are being driven out of the city to the fringes and beyond. The opportunity is to reverse this trend.

## Background information

With limited space in the Wellington region, housing will be more intensive and more closely linked to transport corridors, especially public transport. It also makes sense to utilise existing infrastructure (the three waters) in established areas wherever possible.

A particular initiative is the precincts approach. This involves taking areas of our cities that require urban design improvement and doing it in a systematic way with an eye to the requirements of the future. This includes consideration of population increase, prevention of urban flight, fewer cars and greater reliance on public and active transport, and an enterprise economy made up of small to medium high technology and innovative enterprises. Precincts would be innovative types of working and living environments and the region would be a leader in this type of development.

It is also an opportunity to partner with Government in a variety of ways to address the housing shortage and provide better quality affordable and social housing in established communities around city centres rather than at the extreme fringes, which is a developing trend.

House and community design needs to be of a quality that avoids any tendency towards the ghettoising of precincts and other development areas across the region.

Design principles for both new and current housing include:

- Housing our people; building communities
- Modern design in living environments
- Connection to transport corridors
- Environmental considerations
- Regional lifestyle extension
- Proximity of living and work

The population figures presented in this Plan are based on the high scenario from StatsNZ subnational population projections for the Wellington region. These project the region's population increasing from an estimate of 521,500 in 2018 to 650,000 by 2043. This implies an average annual growth rate of 0.9 percent, which is the same pace of growth experienced in the region since 1996. What is important to note, however is that the last couple of years have seen double that growth (2016-1.6%, 2017-1.8%, 2018-1.5%) with a much larger number of people coming into the region.

Our economic projections suggest that the region's population growth will be more in line with the StatsNZ high growth projections than the medium growth projections. Economic and social trends are likely to favour economies like Wellington, in particular through:

- accelerating urbanisation;
- high agglomeration returns for CBD based economies;
- favourable growth prospects for industries that utilise information technology, and,
- increased globalisation of service-based industries.

As a result, projections based on GW's Wellington Regional Economic Forecast Model suggest that by 2048 production in the region will increase from 13.7 percent of national production to 14.0 percent and from 11.5 percent of national employment to 11.9 percent.

The region is already facing challenges such as:

- Slipping into a housing deficit situation, with over 5,000 houses short regionally and rising
- The flight from the central city and, to a lesser degree, the regional city centres is gathering momentum as a result of increased house prices
- The complexities of housing provision and improvement of urban form and infrastructure are increasing, with insufficient tools to manage and fund these developments

In other words, a key challenge for the region will be to be prepared for continued population growth and not scare it away with unaffordable housing. This leads to many of the proposals presented in the Plan:

- the use of housing precincts to encourage more intensive housing development
- initiatives to enhance the liveability of the region
- enhanced multi-modal transport infrastructure as even with a large proportion of population growth expected in Wellington City, a 50 percent increase in daily commuter flows into Wellington City is expected over the next three decades

### Actions/focus areas

The scale of the change required is only possible in partnership with Central Government.

This section identifies the key focus areas in the housing and urban form action area and reflects on the application of the partnership with Central Government in each of these areas.

#### **FOCUS AREA 1: DEVELOPMENT OF A REGIONAL GROWTH FRAMEWORK**

Over the next 30 years the region is expecting 48,000 – 58,000 new houses to be built, however, to ensure the future growth is linked with transport and environmental analysis and leads to economic opportunities we will need to take an integrated and spatial approach.

Developing a regional growth framework approach will encompass many of the actions identified in this Plan but will delve down into the actions required to affect change. The focus will be at a regional-scale and will provide the evidence base and guide the 30 plus year vision for the region.

Central government will be a key partner. This work will dovetail into their own Urban Growth Agenda – a programme that aims to remove barriers to the supply of land and infrastructure and make room for cities to grow up and out. It will emphasise making better informed decisions and align planning and investment to be much more responsive to growth.

The growth framework will support the spatial elements likely to be required through the National Policy Statements on urban development and fresh water quality as well as the requirements for regional land transport plans to build in spatial elements to show how they support growth and enable urban development.

Project	Lead Agency	Key partners	Linked projects/initiatives
Development and implementation of a regional growth framework in partnership with central government, iwi and the private sector.	Councils	HUD, NZTA	LGWM Riverlink Precincts Greenfield

### Investment required

It is important for the success of this work that the investment comes from across the region as well as other key stakeholders. There will be a considerable time and information collection element to the work as well as investment in people.

### Return on Investment

A programme of projects to resolve growth issues and other challenges including relevant analysis.

## **FOCUS AREA 2: AN URBAN DEVELOPMENT AUTHORITY MODEL**

To deliver our Plan we will need to achieve substantial redevelopment in the CBD and many of our regional centres. Major housing and transport infrastructure will require substantial property acquisition and offers the opportunity to redevelop the remnant land to maximise the benefits. Achieving better quality housing, particularly more intensive housing will require new models to be developed and property to be amalgamated. Redeveloping sites where there are earthquake prone buildings or where land remediation is required can have additional risks that need to be mitigated. This requires a new model of working. Accessing UDA powers is the key to having more houses to be built sooner by enabling major urban regeneration, greenfield developments and multi modal transport development, such as through LGWM, Riverlink and Lincolnshire Farm.

We fully support the Government's Urban Development Agency coming into force. To get more houses built sooner, we would like an urban development vehicle that can be scaled appropriately with different partners for different projects. The powers that will be required should include planning and compulsory acquisition powers to unlock land for development, ensure streamlined consenting processes, and provide more certainty for the Government and Councils around housing timeframes and quality housing outcomes.

Integrating with LGWM will ensure that urban development is joined up with the investment in transport infrastructure such as mass transit, public transport improvements and tunnelling that will unlock development potential, and three waters infrastructure which meet the requirements of the National Policy Statement for Fresh Water Management. In addition a key part of the transport strategy for the region is to try and locate more people in closer proximity to where they work through precincts. This will involve creating better inner city neighbourhoods that are supported by good walking and cycling connections as well as public transport investment.

We would like UDA delivery vehicles with joint sponsorship, governance and operation to enable partnership models between MHUD, NZTA and relevant councils. We are prepared to invest for a return and see future dividends reinvested into development and infrastructure projects.

Project	Lead Agency	Key partners	Linked projects/initiatives
Creation of a tool box of regulations and funding tools at the regional level/scale to facilitate housing development in all contexts.	Councils and their housing CCOs	HUD	LGWM Riverlink Precincts Greenfield

### Investment required

It is envisaged that time will be required to assemble the regulatory and institutional arrangements to get the UDA powers in place and begin to design their application. It is therefore imperative that work on this capability commences quickly. It is envisaged that the Wellington region, like other regions, will require bespoke practices to enable it to achieve its goals. Design of these practices through a Government partnership is essential.

### Return on Investment

What we offer in return for these powers and partnership vehicle is the ability to assist in the delivery of new housing to support government's flagship KiwiBuild programme. Government has set an ambitious target of 100,000 new homes in ten years. A partnership with local government could meaningfully assist with this housing target by offering project partnership funding, land-holdings, and local expertise to deal with local issues.

- Support and make use of strategic sites across the Wellington Region
- A dedicated function to achieve outcomes

### **FOCUS AREA 3: SOCIAL AND AFFORDABLE HOUSING PARTNERSHIPS**

The need for more Housing New Zealand (HNZ) social housing across the region is urgent. Councils have a role to play in identifying Crown or Council owned land which could be used for social housing developments. Where these developments occur, there is a preference that they be mixed tenure including affordable and market value properties as well. Where councils are looking to intensify developments we would maintain the current number of social housing properties even if the proportion drops. Ideally, however, we would be increasing the amount of social housing – HNZ and Council housing – across the region. To increase fairness across housing providers, the Income Related Rent Subsidy (IRRS) should be made available to council tenants.

Discussions between councils across the region and HNZ are already taking place and will be ongoing. The recent announcement between the Government and Porirua City Council of 2,900 renewed and new state houses – a 150 net increase in public housing, and around 2,000 affordable, KiwiBuild and market homes is an example of what is possible. There are further opportunities for such development in Masterton, Naenae, Kāpiti, Grenada and Strathmore.

The opportunity is to comprehensively redevelop HNZ housing stock in areas where they are concentrated, and on average double the density of these communities to deliver a mix of social housing, KiwiBuild housing and private market housing. This is directly targeted to meet the housing and social needs of low socio-economic families and individuals. The requirement for this provision will grow proportionately with the population.

Most Wellington councils are looking at developments in the middle-income bracket. These may involve small and medium sized groupings of houses where the blocks and barriers to development can be broken down with the assistance of KiwiBuild resources and expertise. The key impediment is market risk, with developers reluctant to build new typologies or cheaper houses because their profit

margin is lower than it is on more expensive houses. There are also challenges in the upfront cost of infrastructure. A Government partnership can help minimise those risks.

Project	Lead Agency	Key partners	Linked projects/initiatives
Identification of land that is owned by HNZ, councils and/or iwi and look to increase the provision of affordable housing. Provide incentives to councils and NGOs to build and manage social housing.	Councils & HNZ	MSD, Developers, Builders	Regional Growth Framework Precincts Greenfield
Identification of priority areas across the region that can support the KiwiBuild programme Identify viably sized packages of houses for development	Councils	Developers, Builders, KiwiBuild	Regional Growth Framework Social Housing Precincts Greenfield UDA

#### Investment required

This requires both a partnership and new thinking around the spending and development of social housing. Wellington is a significant investor in the social housing market and it is essential that HNZ works closely with the region to understand the opportunities. To solve some of the housing shortages in this area (and that of affordable housing) there must be new thinking around building the community and urban form that the region desires.

#### Return on Investment

Supporting not only the desire of the Wellington region to provide housing for all but also the aspirations of central government to enable housing for all.

### **FOCUS AREA 4: CONTEMPORARY LIFESTYLE PRECINCTS**

This involves taking areas of our major cities that require urban design improvement and doing it in a systematic way with an eye to the requirements of the future. This includes consideration of population increase, prevention of urban flight, fewer cars and greater reliance on public and active transport, and an enterprise economy made up of small to medium high-technology and innovative enterprises. Precincts would be innovative types of working and living environments and Wellington would be a leader in this type of development.

These precincts are a highly designed combination of economic, lifestyle and housing dimensions designed to support the future population and economy in the context of quality lifestyles. They are well connected to current and planned transit routes so as to enable a greater focus on public transport.

Precincts are not cookie cutter developments; rather, they leverage distinct economic strengths in each area and vary not only by type but also in size.

Providing housing and jobs close to public transport, shops and services, makes life more convenient and enjoyable and reduces traffic congestion. Providing a range of housing types helps people live close to family and friends, no matter what their life stage.

Quality of place is an important attractor for talent, particularly for creative workers. Precincts support an environment of connectedness and enable diversity, which is a hallmark of success for urban economies.

Precincts are potential engines for sustainable development since they embrace residential and employment density via the strategic use of transit and provide the opportunity to turn streets and parks into living labs to test cutting edge sustainable projects in partnership with technology firms and entrepreneurs.

To make precincts successful we need to look at a number of key areas:

- **Critical mass:** Does the area under study have a density of assets that collectively begin to attract and retain people, stimulate a range of activities and increase financing?
- **Competitive advantage:** will it leverage and align its distinctive assets, including historical strengths to grow firms and jobs in the district, city and region?
- **Quality of place:** Does the precinct have a strong quality of place and offer quality experiences that attract other assets, accelerate outcomes, and increase interactions?
- **Diversity and inclusion:** Is the precinct an economically diverse and inclusive place that provides broad opportunity for city residents?
- **Collaboration:** Is the precinct connecting the dots between people, institutions, economic clusters, and place creating synergies at multiple scales and platforms? Collaboration also relates to developing synergies at multiple business scales and by various platforms<sup>5</sup>.

Project	Lead Agency	Key partners	Linked projects/initiatives
<b>Hutt City – RiverLink development</b> The RiverLink project will deliver better flood protection, better lifestyle and improved transport links for the people of Lower Hutt. This precinct is a complex proposition. It not only involves bringing people back into the CBD fringes to live and thereby adding life and vigour to the central city, but it also involves relocation of Melling Station to better service the CBD and river management at a vulnerable point in the flood defences on the Hutt River. The precinct allows for the development of knowledge-intensive industries in the Hutt and is only a short distance from Gracefield, which is a proposed innovation centre.	HCC	GW, NZTA	UDA Petone to Grenada Cross Valley Connection Riverlink (Melling interchange/Flood Protection) Regional Growth framework
<b>Wellington City – Te Aro, Mount Cook and Adelaide Road</b> This precinct is essentially a redevelopment area of the city. It already has a mixture of uses including commercial, residential and	WCC	GW, NZTA	UDA LGWM Regional Growth Framework

<sup>5</sup> Wagner & Storrington - 2016

Project	Lead Agency	Key partners	Linked projects/initiatives
<p>educational. Its advantage is that it is close to the city and knowledge-industry enterprises are already locating into the area as are student facilities. It is also an area where there are earthquake-prone buildings that will require redevelopment and in some cases, demolition.</p> <p>Because it is a redevelopment area it will have all the challenges of property acquisition and amalgamation and allocation of open spaces which will likely require consenting and financing arrangements that are not easily undertaken under current regulation. This brings into play the proposition of a UDA of some sort.</p> <p>Benefit of providing relatively affordable housing near the city and the co-location with growth industries for the city, the population of such a precinct will provide the passenger volume to support the light rail proposal. A co-benefit is earthquake recovery.</p>			
<p><b>Other potential precincts</b></p> <p><b>Porirua</b> The opportunity to develop the downtown area of Porirua City and other areas that are oriented around transport hubs.</p> <p><b>Paraparaumu</b> Building on the development of the expressway and future growth in Kāpiti.</p>			<p>Regional Growth Framework Social/affordable Housing UDA</p>

Investment required

- NZTA commitment to the Melling Bridge - joint consenting, design and then funding
- upfront infrastructure development in roads and public transport (LGWM)

Return on Investment

- integrated urban design
- supports population growth



**FOCUS AREA 5: GREENFIELD**

The development of new areas across the region will be an important consideration in providing for a growing population and intensification options in existing urban areas are exhausted. However, our focus needs to be on new forms of greenfield taking into account environmental, transport and key infrastructure issues and opportunities – in other words – good urban design.

Project	Lead Agency	Key partners	Linked projects/initiatives
To accommodate the projected population increase, greenfield developments will be required throughout the region. This Plan assumes that priority will be given to precincts first to take advantage of the economies of areas which are already served or partially serviced by infrastructure. The work emerging on the NPS-UDC will inform the investment required in existing and potential infrastructure.	Councils	Developers, Builders	Petone to Grenada Cross Valley Connection

Investment required

- support to create new forms of urban design
- upfront infrastructure development in roads and water

Return on Investment

- Greenfield developments are lower priority as a result of their lower return on investment as development costs are high.

## **Outcome: Accessing opportunities through transport**

Wellington's hilly, river and sea-lined geography has determined how our region has formed and where transport linkages were first established. These early routes continue to influence the transport planning efforts to shape the region, but the region has grown and evolved. More growth is expected and more change is necessary. The capacity of the transport network to meet both current and future demands is already limited and decreasing.

Geography also influenced the location of central government, its ministries, agencies and numerous associated economic activities. Coupled with the location of the port, inter-island ferries, universities and other regional institutions, this has led to the concentrations of jobs and the daily movement of workers from the wider region to the Wellington CBD.

Commuting times through the region to Wellington are getting worse. Morning peak-hour drivers to Wellington can spend 72 percent more time in traffic, an extra 20 working days a year. This is the worst morning commute in the world for a city of our size, and this is impacting on the region's productivity.

Transport provides the arteries that enable the exchange of goods, services and people between the diverse parts of the city-region. It enables higher levels of productivity with greater efficiency of the availability of resources. Regions that have effective and efficient transport do well and generate the confidence of residents.

### **Outcome sought**

The opportunity is to design the multi-modal transport system for the long-term future of the region. Providing an integrated approach to development through urban regeneration and design to ensure that transport systems are well connected and support quality of life and the environment.

### **Background information**

The priority focus in the Plan is on access to the Wellington CBD and intra-regional connections. Key centres and employment hubs in the region must be accessible to major population centres.

#### **Design principles**

- Thinking well beyond the present
- Bringing all parts of the region into the mainstream economy
- Improving regional productivity
- Trending towards carbon zero
- Rebalancing modes of transport to prioritise active and public transport

### **Opportunities**

The synergies between transport and housing are strong. Multi-modal transport associated with housing areas and precincts will be important and access to transport corridors will be a vital consideration in the location of new housing areas. There are also strong resilience co-benefits through providing more secure routes and alternatives to access parts of the region post a major hazard event. Obvious projects are the Ngauranga to Petone cycle-way, Petone to Grenada and the Cross Valley Connection. Most importantly, transport will encourage the free-flow of people and resources around the region to support a modern concentrated economy. If concentration means congestion and paralysis, we have failed. This challenge cannot be over-estimated.

## Actions/focus areas

The projects in this category are major by any measure. They are also highly complex and, in some cases such as the proposed mass transit as part of LGWM, they are projects that have limited precedent in New Zealand.

### FOCUS AREA 1: LET'S GET WELLINGTON MOVING

Wellington's transport network has reached capacity at certain times of the day and week and with significant growth this could be exacerbated. There is a lack of space to increase road capacity and a need to shift travel to other modes (public transport, walking and cycling). The increasing role of Wellington City as an economic powerhouse in the region with greater concentration of population in and around the central city means solutions to the current challenges are vital. There is also a major opportunity to shift patterns of travel to more sustainable modes and reduce the impacts of vehicles and emissions on the city.

Project	Lead Agency	Key partners	Linked projects/initiatives
<p>A comprehensive integrated programme of transport interventions that address transport problems, stimulate economic and housing growth and city-shaping opportunities</p> <p><b>Priority projects:</b></p> <ul style="list-style-type: none"> <li>○ Comprehensive walking networks and connected cycleways.</li> <li>○ Significant improvements to public transport, including routes from the north, bus priority through the central city and key suburban routes</li> <li>○ Road pricing – to incentivise sustainable transport options</li> <li>○ High capacity mass transit from the central railway station to the regional hospital and international airport</li> <li>○ Basin Reserve – easing the bottleneck for traffic moving east of the city and to the airport.</li> <li>○ Duplication of the Mt.Victoria tunnel to provide enhanced access to the Internal Airport and eastern suburbs.</li> </ul>	WCC, GW, NZTA	Government	<p>UDA</p> <p>North/South multi modal transport spine</p>

#### Investment required

- Commitment to long term funding
- Long term partnership with NZTA

#### Return on Investment

- Supports growth across the city
- Reduction in emissions
- Integrated urban design

## FOCUS AREA 2: NORTH/SOUTH SPINE

This spine refers to the backbone running north from Wellington City and splitting at Ngauranga to the northwest and northeast corridors. This is the spine that connects the region. Current road projects at the north end of the northwest spine are significantly enhancing access. Current priorities lie primarily in the northeast spine.

Project	Lead Agency	Key partners	Linked projects/initiatives
<b>Priority projects:</b>			
○ Rail track network upgrades – this is especially from Upper Hutt to Wairarapa.	KiwiRail	NZTA, GW	LGWM
○ Ngauranga to Petone regional cycling route – this would be both a commuter and recreational route and most importantly it has a resilience purpose in protecting the rail and road arteries from sea damage.	NZTA	HCC, WCC, GW	LGWM
○ Melling Interchange – a significant part of the Riverlink project aimed at improving the resilience, accessibility, efficiency and safety of the Melling intersection.	NZTA	HCC, GW	Riverlink, LGWM
○ Rail capacity improvements – increased population will result in significant increases of commuters by as much as 25% on the Wairarapa line and over 50% on the Kāpiti line. This will require additional rolling stock and system improvements.	KiwiRail	GW	LGWM
○ New rolling stock – enable an increased Lower North Island Commuter Service (Wairarapa and Manawatū).	GW	NZTA	LGWM

### Investment required

- Commitment by KiwiRail to upgrade tracks and capacity
- Long term commitment to rail
- Support in the development of the Wairarapa and Palmerston North routes to ensure rolling stock is fit for purpose and provides long term outcomes.

### Return on investment

- Reduction in emissions
- Support population growth across the region
- Freight link improvements
- Lower North Island triangle connection
- Provides additional capacity on the Metro network and additional resilience (dual power trains could operate even if electricity is off)

### FOCUS AREA 3: EAST/WEST CONNECTORS

While the north/south spine is the priority, a connected region requires a major east/west connector. The connector is made up of two links – Petone to Grenada and the Cross Valley Connection to Seaview. The Cross Valley Connection has been given a second order of priority which means it is further back in the investment plan time schedule, but this should not imply that it lacks importance.

Project	Lead Agency	Key partners	Linked projects/initiatives
<ul style="list-style-type: none"> <li>○ <b>Petone to Grenada</b> This is a project with multiple co-benefits. Wellington clearly lacks adequate east/west connection between its northeast and northwest spines. This project will address this and will: <ul style="list-style-type: none"> <li>● Enhance resilience by providing access from the lower Hutt Valley to Porirua and vice versa</li> <li>● The road will open up a potential Greenfield housing area relatively close to the central city, though slightly removed from transport corridors.</li> </ul> </li> </ul>	WCC, HCC, PCC	GW, NZTA	Greenfield housing development
<ul style="list-style-type: none"> <li>○ <b>Cross Valley Connection - Petone to Seaview</b> This project also has multiple co-benefits. Whilst its primary purpose is to open up the eastern valley for housing development, especially North Wainuiomata, and improve access to the Hutt City Centre, it will also replace the Petone Esplanade as an access way to Seaview. There are serious resilience concerns with the esplanade.</li> </ul>	HCC	NZTA	

#### Investment required

- Commitment to the investment in east/west connector roads to unlock housing potential and build resilience across the region.

#### Return on investment

- Builds resilience across the region, both day to day and in a natural disaster
- Improved travel times for businesses and therefore increased efficiency
- Reduced emissions (reduced travel time and improve multi-modal options)

**FOCUS AREA 4: INTER-REGIONAL CONNECTORS**

Project	Lead Agency	Key partners	Linked projects/initiatives
<p><b>High priority project:</b></p> <ul style="list-style-type: none"> <li>Multi User Ferry terminal There is a need to expand and modernise the ferry terminal facilities as a result of both transport and resilience considerations. Questions remain about location – Kaiwharawhara and Kings Wharf options are being explored. Road improvements would also be required. The ferry is fundamental to the visitor aspect of the region’s economy and is a vital link for freight which makes it a high priority.</li> </ul>	CentrePort, GW	NZTA, WCC, Bluebridge, Interislander	North/South multi modal spine , LGWM
<p><b>longer term priority:</b></p> <ul style="list-style-type: none"> <li>Airport runway extension This is a big ticket item and a major piece of engineering. Its long term importance is largely unquestioned because as the local economy expands, international access will become more important. At present, the justification lies more in tourism than general commerce and government. There are limited co-benefits when compared to other projects</li> </ul>	Airport	WCC, Government	LGWM

Investment required

- Commitment and partnership across agencies to ensure not only the new terminals but also the roading investment that will be required to go with it.

Return on investment

- Provides a core transport link and resilience in connection in and out of the region for both freight and visitors

## **Outcome: Building a modern-low carbon high enterprise economy**

It is the economy that is central to this Plan and which has an important driving role for other elements of the Plan. The link with housing is strong, especially the precincts, as this housing provides accommodation for workers generally, but especially knowledge-workers, and is a major consideration in lifestyle driven decision-making. The link with transport is vital with the need for goods, services and people to move around. If the knowledge-economy is to flourish not just in the city but also the broader region then the halo effect of the concentrated industry in Wellington City is strong.

### **Outcome sought**

Build a future-proofed low-carbon and future-focused knowledge-based economy with a clear position in the nation and the world.

### **Background information**

Wellington has had the constant of Government, often providing the backdrop for other industries. The Wellington technology economy owes much of its existence to servicing the needs of Government and that has provided it with the foundation on which to build a broader capability with greater reach into the national and international economy. The knowledge intensive sector which stretches from creative and technology to education and training is now a strong growth industry of the future.

In addition, Wellington has also become a creative centre for film and media, and despite considerable international competition, it has been able to hold its own and expand significantly. New Zealand is rich with film locations and now has an international reputation for its film making skills.

### **Design principles**

- Regional concentration
  - Regional specialisation
  - Public/private integration
  - Greater integration of business development efforts
  - Greater connection and networks
  - Development of the regional ecosystem
- 
- The Wellington economy is developing well, especially in recent years, but support is required to keep it at the innovation frontier, which it must do if it is to gain the best from this investment strategy
  - The development of the whole regional economy is important and while traditional industries will be important, technology will be vital to their success
  - The single greatest barrier to progress appears to be talent and skill shortages. These need to be addressed directly
  - Another barrier is the availability of investment for new ventures and to extend existing ventures

### **Opportunities**

The region can continue to evolve and increasingly become known as a modern enterprise economy. The challenge is to become enterprise, not just in name, but in nature, and that will require fostering the local enterprise culture.

## Actions/focus areas

### FOCUS AREA 1: KNOWLEDGE AND SKILLS FOR THE FUTURE

Across the board of vocational skills, the Wellington workforce is well qualified by national comparison. For the region to lead in the technology, creative, science and professional services sectors and to have a strong innovation focus, the identification, recruitment and development of talent is even more important. The future workforce for the region (and NZ) will need to be more agile; have the ability to understand and work on new exponential technologies and understand the impact that automation will drive across the economy. Talent enhancement is an area of strategic action. In this respect, a package of programmes is envisaged with a need to build the suite in greater detail.

Project	Lead Agency	Key partners	Linked projects/initiatives
Workforce development plan – understand the full needs of the regions employers and how the education and training systems will support their needs.	WREDA	GW, WRS Office, Chambers of Commerce	Skills plan, Māori economic development plan
Skills development and action plan – building support for lifelong learning and development. Ensuring the systems are in place to support not only young people into jobs but career transitions and aging workforce development – life-long learning.	GW, WRS Office	TEC, NZQA, Tertiary sector	Workforce development plan, Māori economic development plan

#### Investment required

Investment is required to ensure we have the right systems in place to meet current and future skill development. We are rapidly moving further into an area of technology never seen before. The speed of change means workforces must develop to keep up but this needs to happen in an agile way so that businesses at the forefront of research and technology have the skill base to continue to grow.

Strong partnerships with education providers, business and intermediaries are a prerequisite to making this happen. Systems at the national (and regional) level need to change and evolve to meet the needs of the future, not just be based in historic ways of doing things.

#### Return on Investment

- Focused approach from all parties
- Improved productivity as digital penetration increases
- A workforce that is able to keep up with the changing face of work and therefore less reliant on benefit payments
- The Wellington region workforce at the forefront of developing and working on new technologies

### FOCUS AREA 2: ECONOMIC AND BUSINESS ACCELERATION

There is an active infrastructure of business development in Wellington City through successful organisations such as Creative HQ and Biz Dojo. In fact, Creative HQ is a national leader and is supporting services in other parts of the country. There are also business mentor and related services available in and around the city.



There are early stage business support entities in the wider region with incubator/shared space-type facilities in a number of places. However a comprehensive regional network focusing on all types of business development, but with specialist focus on knowledge-intensive industries, supporting the digitisation of businesses and enabling business to understand financing opportunities is considered necessary to drive future growth. This network would provide facilitation services to assist business clusters achieve growth. The facilitation service would build on existing services, encouraging partnership and joint ventures.

Project	Lead Agency	Key partners	Linked projects/initiatives
Support for scale-up or acceleration services - with specialist focus on knowledge-intensive industries. Priority for Wellington is to build scale into many of its enterprises so that they have the capacity for greater innovation and export success	Creative HQ	WREDA	
Facilitation of digital enablement acceleration - Productivity would be further enhanced by enterprises adopting greater technology enablement, not only in the more traditional areas of accounts and finance, but in marketing and distribution.	WREDA		
Business Finance – in the area of Venture Capital (Series A and B capital) there is a skinny market. Investigation is required into how to make this part of the market more buoyant and responsive in the Wellington region to fuel the development challenge	WREDA		

#### Investment Required

An ongoing and increased regional approach to development is essential.

#### Return on investment

- Improved scaling of businesses across the region
- Improvement of investment in innovation
- Business performance improvement

### **FOCUS AREA 3: MĀORI ECONOMIC DEVELOPMENT STRATEGY AND ACTION PLAN**

The Māori economy is important not only for Māori, but for the overall economic performance of the Wellington Region and New Zealand as a whole.

- Young, growing Māori population
- 58,332 Māori live in the Greater Wellington region, 12 percent of the population (2013 census)
- Nearly 60 percent of Māori are under 30 years old
- 16 percent of Māori living in the region mana whenua to the region

- Māori share of the working age population will grow significantly in the coming years.

Enabling and supporting a thriving Māori economy means whānau, hapū, iwi and Māori communities lead healthy and prosperous lives where their housing, employment, education, and health needs are met. There is a strong crossover with the housing and transport outcomes for the region, especially where there is displacement which has impacts on education, training and employment.

Building, in partnership, with iwi and mātāwaka a strategy and action plan to identify how to improve the performance and productivity of the whole Māori economy in the Wellington region and then support the delivery and actions where needed is essential.

Project	Lead Agency	Key partners	Linked projects/initiatives
<b>Vision and focus areas for Māori</b> how to: <ul style="list-style-type: none"> <li>• develop and add value to the iwi/Māori asset base;</li> <li>• encourage export opportunities for iwi/Māori companies;</li> <li>• build capability of iwi/Māori companies and collectively held assets;</li> <li>• increase labour market participation and employment rates and improve the quality of employment for Māori in the Wellington Region.</li> </ul>	Iwi, GW	Councils, WREDA, TPK, MBIE, MSD	Knowledge and skills for the future Visitor and tourism Housing

#### Investment required

The investment required to make this happen is a partnership with TPK, Iwi and the region. Commitment from all parties is essential to making sure the right outcome is delivered to support and drive the growth across the Māori economy. It is essential that key Māori concepts become embedded in service design and delivery.

#### Return on Investment

- Additional cultural dimensions to the region
- Strengthening of the destination definition and tourism offering
- Addition of undeveloped knowledge and skills to the economy
- Strengthening of Māori businesses

#### **FOCUS AREA 4: WELLINGTON AS A DESTINATION**

The region must increasingly become a destination in its own right, not only for tourists and visitors, but for residents, talent and investment. The visitor and tourism sector is of particular importance because of the benefits it provides to the region. It provides employment and attracts young people, business and investment to the region. It makes lifestyle activities and facilities economically possible that could not be sustained solely by the local population.

Project	Lead Agency	Key partners	Linked projects/initiatives
Wellington region destination strategy that answers the question why visitors, talent, business and students should come to Wellington and how we should project the tourism and liveability assets of the region.	WREDA	Councils, Tourism NZ	Regional Trails Convention Centre Indoor Arena Kāpiti Gateway
Regional trails development - the region contains some outstanding trail-based experiences and has the potential to significantly grow the use of outdoor trails and the opportunity to become a world-class trails-based destination offering outstanding experiences to a variety of markets. This includes the development of the Porirua Adventure Park, the extension to the Remutaka rail trail and the five towns' cycle trail.	WREDA	Councils	Regional destination strategy
Wellington Convention Centre.	WCC	WREDA	Regional Destination Strategy
Kāpiti Gateway – a regional, national and international attraction that leverages the unique environment of Kāpiti Island.	KCDC	Iwi, DOC, WREDA	Regional Destination Strategy
Wellington Indoor Arena – a 12,000 seat indoor sports and entertainment facility located in Wellington that keeps the whole region abreast of other centres. It could host up to 78 sport and entertainment events a year and would allow Wellington to compete for domestic and international events.	WCC	WREDA, Private sector	Regional Destination Strategy

#### Investment Required

The strength of this area lies in the coordinated approach to destination across the region. Partnerships and private investors will be required to enable many of the projects to happen.

#### Return on investment

- Wellington regional becomes a recognised national destination
- Wellington's reputation as an events centre is significantly enhanced
- Wellington's lifestyle values are seen locally to have significantly lifted

## **Outcome: Strengthening our resilience and reducing environmental impact**

Resilience is all about the capacity to respond to and quickly recover from adverse events. The principle of this plan is prevention. This involves redesigning and strengthening critical infrastructure to minimise damage and enable quick recovery.

### **Outcome sought**

Be seen as a region that is well placed for sustainable future growth.

### **Background information**

The threats to Wellington have become very real in the last few years with the series of serious earthquakes the region has experienced. This has highlighted the vulnerability of infrastructure, including buildings. In addition, there are threats of other types of event, such as floods and tsunamis.

The key to this area is in the art (and speed) of the recovery. As Wellington becomes a more concentrated economy it becomes more vulnerable. A major disruption in a fast-moving tech-based economy could have serious consequences for its ability to recover and regain competitiveness. A significant amount of time out of action could result in loss of momentum and other cities occupying Wellington's ground.

The Wellington Lifelines project details how investing in infrastructure resilience will reduce the national economic impact of a large Wellington earthquake by more than \$6b. In addition to the avoided economic losses, there will be significant social benefits achieved through Wellington's communities surviving and thriving after a major earthquake.

Many of the resilience projects are already on long term asset plans and have funding earmarked. The Lifelines study identifies that if the interdependent infrastructure projects are delivered in a priority order and accelerated, there will be significant benefits to Wellington and New Zealand's economy when an earthquake occurs.

The recent Kaikoura and Canterbury earthquakes demonstrated the need to build resilient infrastructure in our cities. Lifeline infrastructure organisations are key service providers to our cities and regions, and have a major role to play in minimising the impacts of hazard events.

Resilience in terms of disasters is not the only focus that we have as a region. The very real impact of climate change and water quality reliability that will sustain a growing population must be considered.

21 percent of all land in the Wellington Region (171,000 out of 813,000 hectares total regional area) is prone to erosion, currently in pasture and with no erosion risk treatment, i.e. trees. With current Greater Wellington work programmes around 500 hectares of the 170,000 hectares of erosion prone land is being treated – so it will take about 340 years to complete the erosion risk mitigation on high risk land across the region with existing work programmes.

The scope for riparian planting is also broad with thousands of kilometres of stream bank in the region that could potentially be planted.

The regional community and park visitors highly value the quality natural environments they find in the regions parks; it is a primary reason to visit, return and show them off to others. To support volunteer engagement and community stewardship, an Environmental Enhancement programme is run by the Regional Council which results in around 30,000 trees being planted across the parks network. While there

has been steady progress over time, at Queen Elizabeth Park alone there is an estimated planting “deficit” of almost 20 years before all the land that has been retired is planted.

### Opportunities

As a region we are well aware of the potential for disaster to strike at any time. The opportunity is for this to be mitigated by investing up front in areas that will enable a faster recovery after a disaster but also to ensure that as an economy we are future proofing our environment for the next generations.

### Actions/focus areas

The resilience programme has been developed by the Lifelines project and the contents of this section are largely drawn from that work and are set out in much more detail in the Lifelines report.

#### **FOCUS AREA 1: LIFELINES STAGE 1 (YEARS 0-7)**

Sequencing of the programme has been undertaken in such a way that resilience benefits were maximised through coordinated investments. The preferred programme assumes that all projects will be completed although in reality they will be implemented over many years.

In deriving the preferred investment programme, importance was placed on the number of interdependencies across lifelines. Road and fuel initiatives are the greatest enablers for other projects, and water, while critical itself, is most resilient on other lifelines. i.e. a resilient water distribution network may withstand the earthquake well, but it won’t function if electricity isn’t available to pump water.

Project	Lead Agency	Key partners	Linked projects/initiatives
<ul style="list-style-type: none"> <li>○ Seaview Wharf and Fuel Depot – this is Wellington’s primary source of fuel. The approach wharf is considered high risk and required seismic strengthening, together with the associated pipelines</li> <li>○ Central Park Substation – much of the supply of Wellington’s electricity comes through this substation. There is a requirement for mitigation around this sole risk situation which could be compromised by a natural event or sabotage.</li> <li>○ Water infrastructure – A viable alternative water supply achieved via the cross-harbour link</li> <li>○ New multi user ferry terminal and wharf strengthening – the impact of earthquakes on the port has been significant. Resilience requirements have emerged from these events to assist the Port recover quickly.</li> <li>○ Wadestown to Johnsonville – road access</li> <li>○ SH58 Haywards - improvements</li> <li>○ Taita Gorge - access and strengthening</li> <li>○ city/airport connection</li> </ul>	<p>CentrePort</p> <p>Electricity Companies</p> <p>GW, Wellington Water/Councils</p> <p>CentrePort, GW</p> <p>WCC NZTA HCC</p>	<p>HCC</p> <p>NZTA, WCC, Bluebridge, Interislander</p>	<p>Cross Valley Connection Petone to Grenada</p> <p>North/South multi modal spine, LGWM</p> <p>LGWM</p>

### **FOCUS AREA 2: LIFELINES STAGE 2 (YEARS 8-20)**

Project	Lead Agency	Key partners	Linked projects/initiatives
<ul style="list-style-type: none"> <li>○ Cross Valley Connection</li> <li>○ Petone to Grenada</li> </ul>	HCC HCC, WCC, PCC	NZTA NZTA	
<ul style="list-style-type: none"> <li>○ Rail seismic upgrades – including slopes and structures</li> </ul>	Kiwi Rail	NZTA	
<ul style="list-style-type: none"> <li>○ Water infrastructure upgrades</li> </ul>	Wellington Water		

### **FOCUS AREA 3: 1 BILLION TREES**

Project	Lead Agency	Key partners	Linked projects/initiatives
<p>Development of a long term regional plan for planting of trees to support our environment taking an integrated approach:</p> <ul style="list-style-type: none"> <li>○ Collaborative learning: The opportunity to link stakeholders from across a catchment including regional council, catchment communicates and industry partners.</li> <li>○ Integration of processes: The linking of natural processes with social processes. For example, the effect of increased planting within a catchment may reduce flood risk and increase community resilience.</li> <li>○ Building human capital: The opportunity for increased employment through planting and enabling of communities to take action to meet water quality and quantity limits.</li> </ul>	GW	All Councils Iwi PGF MPI	

### **FOCUS AREA 4: WATER**

Project	Lead Agency	Key partners	Linked projects/initiatives
Development of resilient water systems for the Wairarapa Community Water Storage Scheme	Wairarapa Councils Water Wairarapa Ltd	GWRC  PGF	

## Delivery of the Plan and next steps

The Wellington Regional Investment Plan has a long term focus, over 30 years, to support a vision of being a progressive thriving region.

Discussion is already progressing on how we work together with partners (central government and iwi) on the development of an integrated growth management plan which extends this Plan to provide a greater spatial understanding of the region.

Some projects will happen through existing vehicles like the Wellington Regional Economic Development Agency (WREDA) or individual councils while others, like LGWM, will require a purpose led function set up due to the partnership model required to deliver.

### Implementation and investment partners

Making this plan work will require strong partnerships across multiple areas and organisations. Of key importance will be:

- Central government
- Local government
- Iwi
- The private sector
- Communities across the region

### Forums

- Mayoral
- CEO

### Funding

To achieve the outcomes desired throughout this plan it is essential that funding comes from a variety of sources. Local government cannot on its own drive the changes required. Partnerships across central government, industry and local government will be essential.

### Monitoring and Reporting

Measuring progress and identifying changes in the environment is necessary to ensure that we keep on track with the development and implementation of the plan. It is essential that the regions leaders continue to support and build upon what has been started and that partnerships continue to be developed in the right areas.

Keeping partners and the region apprised of momentum and where issues arise is critical to successful buy in and ongoing support.

## Appendix 1- About the Wellington Region

### *Economic and population forecasts*

The outlook for the region economy and population is prepared with the use of an economic model developed at the Greater Wellington Regional Council<sup>6</sup>. The model uses a mix of principal component and regression techniques to link key macroeconomic indicators (e.g. inflation, interest rates, unemployment, the exchange rate, business profitability etc.) to prospects for individual industries. The approach produces forecasts for individual industries that account for the recent performance of the industry, the impact of key macroeconomic influences on performance in that industry, and is also constrained to ensure that the sum of production in all industries equals forecasts of overall economic activity. Forecasts of employment in individual industries are derived from the industry output forecasts and industry specific forecasts of labour productivity.

The model is structured around providing information about economic output and employment in 56 industries in 14 regions around New Zealand. Further disaggregation allows investigation of implications for the eight TAs within the Wellington Region as well as separating Christchurch City from the rest of Canterbury.

The economic forecasts presented here are based on a set of central projections for key national statistics including Statistics New Zealand's central (50<sup>th</sup> percentile) national population projections<sup>7</sup>.

Population projections for areas within the Wellington region are produced that are consistent with the economic outlook. In particular they account for the projected number of jobs in the region, expectations for employment rates and the number of children in the region (consistent with national trends). The spread of this population around different parts of the region are based on trend analysis of the propensity for people to live and work within the same TA within the region. In other words the population projections account for employment prospects in different parts of the region, the propensity for workers to commute around the region for work, and the associated proportion of non-working residents in each TA (e.g. children, caregivers, and the retired).

### *Māori in the Wellington Region*

**Table 2: Share of the population that identify as Māori in the Greater Wellington Region**

<b>Territorial Authority</b>	<b>Population</b>	<b>Share of population</b>
Kāpiti Coast District	6,198	13%
Porirua City	10,131	20%
Wellington City	14,433	8%
Lower Hutt City	15,876	16%
Upper Hutt City	5,337	13%
South Wairarapa District	1,254	13%
Carterton District	933	11%
Masterton District	4,170	18%
Wellington region	58,332	12%
<b>New Zealand</b>	<b>598,602</b>	<b>14%</b>

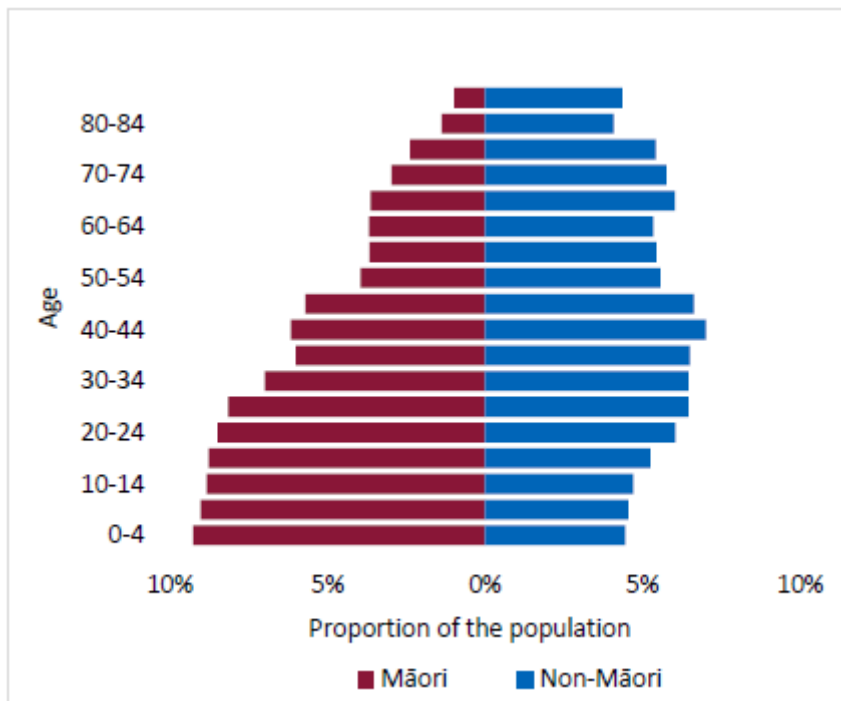
<sup>6</sup> Dave Grimmond, 'Wellington Region Economic Forecast Model: Method and Estimation Results' (Greater Wellington Regional Council, May 2017)

<sup>7</sup> <https://www.stats.govt.nz/information-releases/national-population-projections-2016base2068>



The Māori youth population is much larger than the Greater Wellington region average (Figure 6). At the last Census, 58 percent of Māori were under 30 years old, compared to 38 percent of the non-Māori population. Statistics NZ population projections for 2038 show that 53 percent will still be under 30 years old, which means the Māori share of the working age population will grow in the coming years.

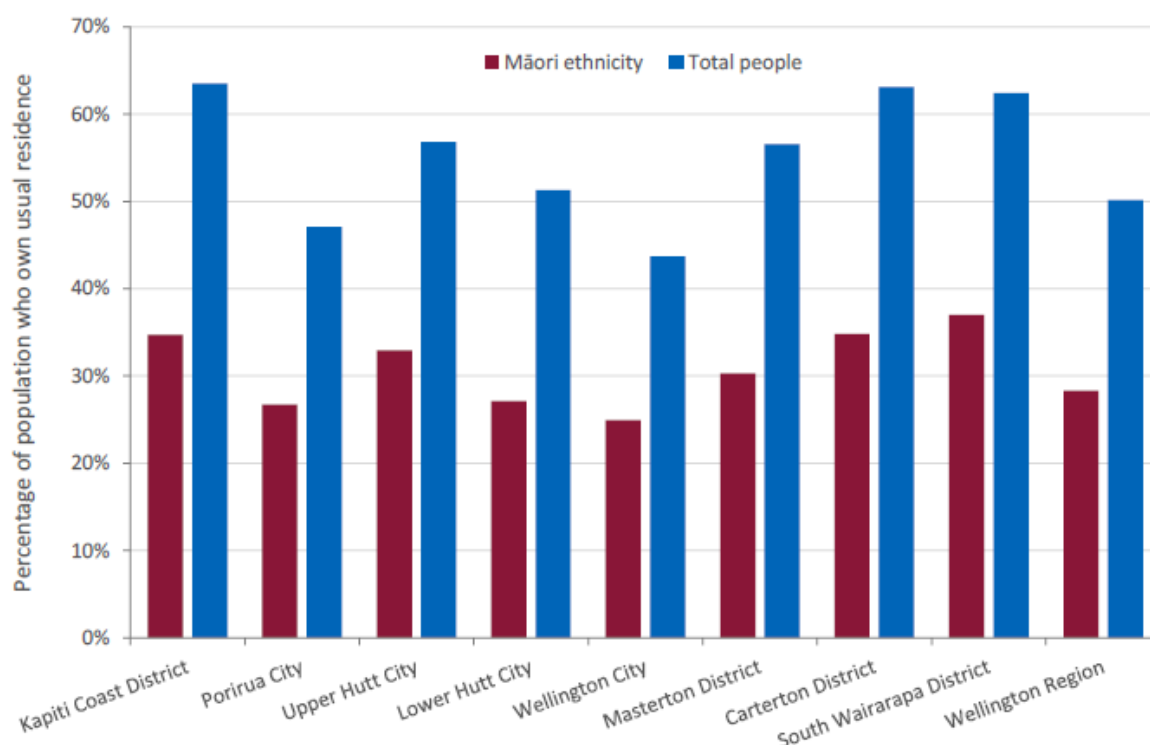
Figure 6: 2038 Population pyramid snapshot Māori vs rest of population in Wellington region



There is a current stark contrast between the proportion of Māori and non-Māori in high-skill jobs. For Māori, 30 percent are in high-skill jobs compared with 47 percent for non-Māori. Māori are relatively more concentrated in labouring, machinery operation and sales while non-Māori are relatively more likely to be managers or professionals.

In the Wellington Region, 28 percent of Māori own their own home, down from 29 percent in 2006. In comparison, the overall population of the Wellington Region has a 50 percent home ownership rate in 2013, as shown in Figure 2. For Māori and non-Māori, the Kāpiti Coast, Carterton and South Wairarapa Districts had the highest overall home ownership rates in 2013 across the Wellington Region.

Figure 7: Home ownership rates in the Wellington Region, Māori ethnicity and total population



For home affordability, Māori median household income in 2013 and 2017 has been compared to average house sale prices in 2013 and 2017 for the Wellington Region and the eight TAs within the region. By then dividing average house sale prices divided by median household income, a ratio can be estimated. This ratio can then be used to show if houses on average are becoming more or less affordable.

Table 2 shows that the Māori median household income across the Wellington region was \$51,400 and using Household Labour Force Survey (HLFS) data, it is estimated that in 2017 the Māori median household income would be \$55,800. This is a gain of \$4,400 or nine percent, across the four years.

Table 3: Ratio of average house sale price to median household income for Māori, 2013 and 2017

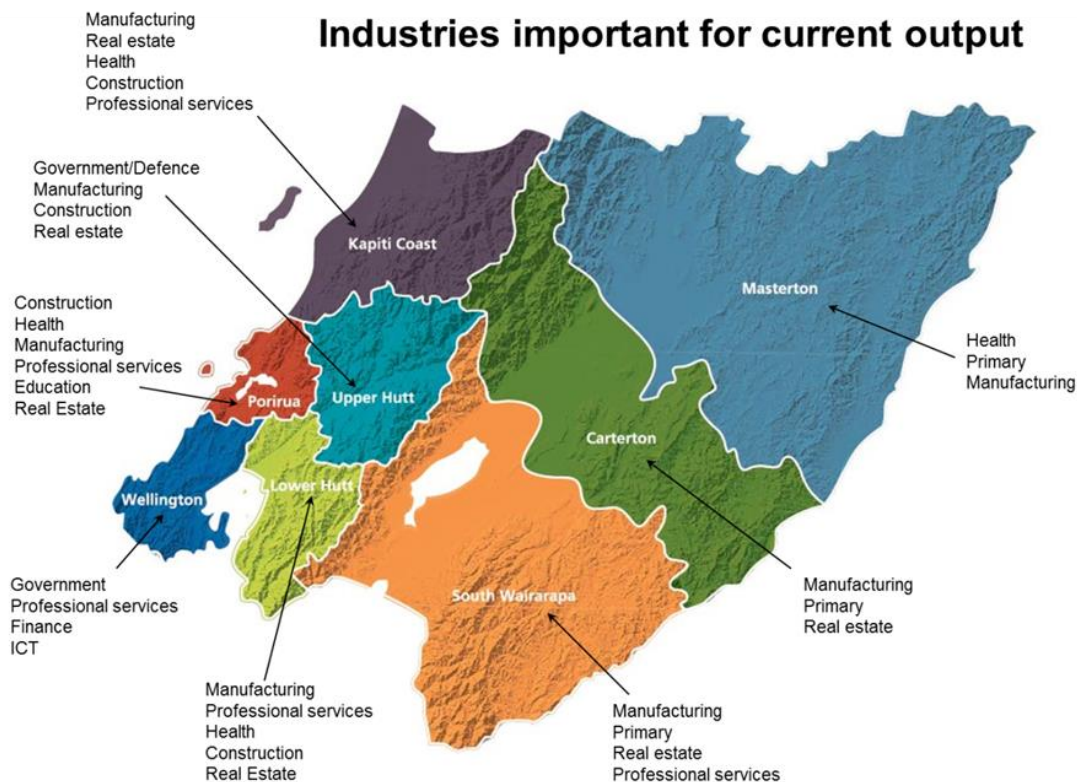
Area	Median household income		Ratio of average sale price to income		Change in ratio 2013 to 2017
	2013	2017	2013	2017	
Kapiti Coast District	30,300	32,900	13.5	15.2	1.6
Porirua City	40,500	44,000	10.1	12.3	2.2
Wellington City	54,600	59,300	10.2	11.1	0.9
Lower Hutt City	38,800	42,100	10.3	11.3	1.0
Upper Hutt City	40,600	44,000	9.3	10.2	0.9
Masterton District	27,700	30,000	10.4	10.1	-0.3
Carterton District	34,600	37,600	8.9	9.1	0.3
South Wairarapa District	31,100	33,700	11.0	11.4	0.4
<b>Wellington Region</b>	<b>51,400</b>	<b>55,800</b>	<b>8.8</b>	<b>9.4</b>	<b>0.6</b>

### Industry prospects

Figure 8 presents the industries that are currently of high importance to each territory within the Wellington region<sup>8</sup>. These industries were identified as industries that contributed more to the area’s GDP in the year to March 2017 than the service provided by owner-occupied dwellings. In practice this typically means industries larger than 7 percent of GDP. Some points to note:

- The industry mixes for the Wairarapa districts are reasonably typical for rural-based districts in New Zealand. The high importance of health in Masterton reflects the location of the hospital there.
- Likewise, the industry mixes for Lower Hutt, Upper Hutt, Porirua, and Kāpiti Coast are quite typical for urban centres in New Zealand. Note that the importance of government services in Upper Hutt is associated with the presence of the Trentham Military Camp. Also, the importance of health services to the Kāpiti Coast is unusual given its lack of a hospital, and probably reflects its higher age structure.
- The high importance of government, professional services, Finance and ICT for Wellington City is singular for a territorial authority area in New Zealand.

Figure 8: Industries important for current output



Looking forward which industries appear to have the best prospects in each of the region’s areas?

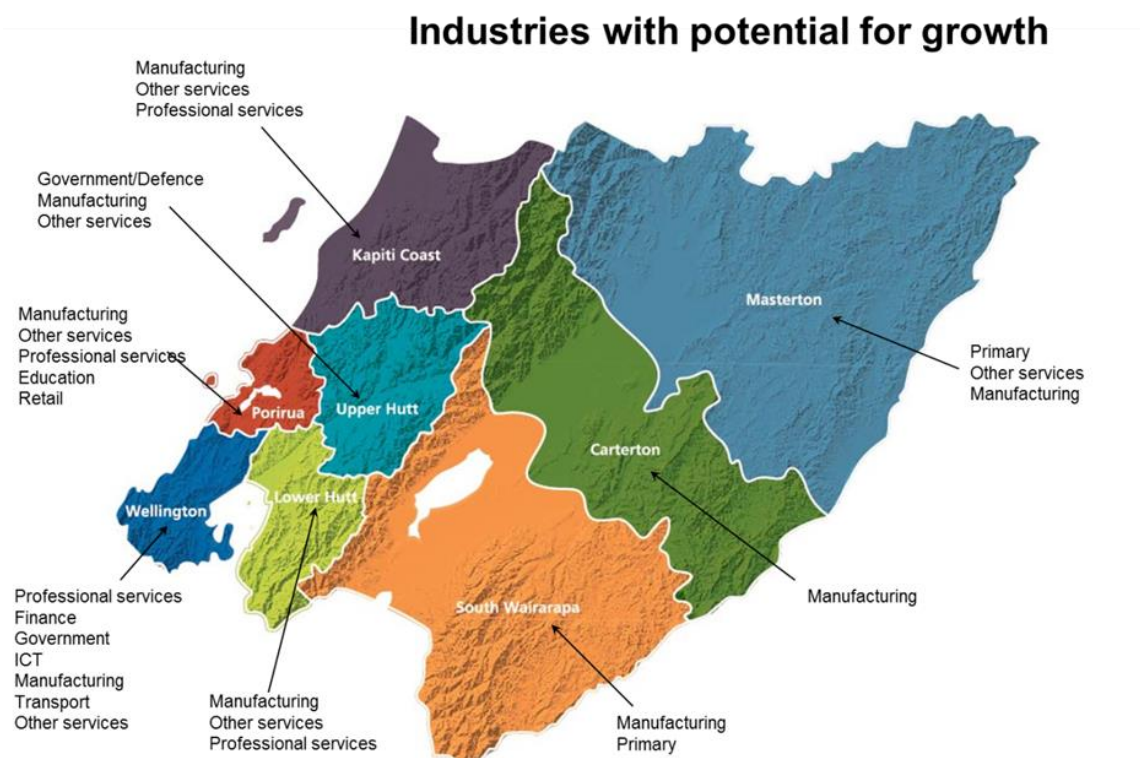
Industries with better growth prospects within the Wellington region are identified with reference to industries exhibiting a comparative advantage, weighted by their actual export propensity and their

<sup>8</sup> The analysis presented in this section is based on data from the Infometrics Regional Economic Profile

proportion of their areas GDP<sup>9</sup>. The results of this analysis are illustrated in Figure 9. This analysis highlights the importance of Wellington City to the region’s economic prospects. The range of industries in which Wellington based businesses exhibit comparative advantage is more extensive than the rest of the region (Professional Services, Finance, Government, ICT, Manufacturing, Transport, and Other Services). Their potential for growth also looks stronger when weighted by their export and output propensities.

Economic modelling undertaken at GW suggests that economic activity is likely to increase at similar rates throughout the region. But the analysis of industry growth potential indicates that Wellington City will remain the main engine room for the region’s economy; the region shares the benefits but relies on the performance of the Wellington CBD. However, it is important to note that success depends on the integration of the region: the ability for the CBD to take advantage of its strong prospects depends on Wellington having a region where people want to live and businesses want to locate in.

Figure 9: industries with potential for growth



These industries are identified at a high level, however will be impacted by a number of variables. Work on the Wairarapa Strategy identifies that while manufacturing will be a key growth area there is likely to be a change in focus to more artisan foods and honey. This is relevant for other parts of the region where we are likely to see areas such as ICT evolve.

<sup>9</sup> Comparative advantage is measured by the export location quotients of industries in the area (a location quotient greater than one implies a higher propensity for exporting than is the national average, thus a higher quotient indicates a better ability to compete internationally than other parts of New Zealand).

## Global trends relevant to prospects for the Wellington Region

### Climate change

The moves to-date to address climate change are not likely to have been sufficient to address an increase in climate change impacts in coming decades. Global temperature measures estimate that temperatures in 2017 were on average 1.2 degrees above pre-industrial temperatures<sup>10</sup>. Current global policy settings have the world on line to experience average temperatures in excess of three degrees above pre-industrial levels. Even with reductions in greenhouse gas emissions<sup>11</sup> to about a quarter of current rates by the 2050s, it might not be sufficient to keep temperatures below 2 percent above pre-industrial levels.

There is therefore a very real likelihood that the impacts of climate change (weather events, changes in rainfall patterns, sea level rises and increased ocean acidification) will intensify in coming decades. With New Zealand estimated at contributing less than 0.2 percent of global emissions<sup>12</sup> New Zealand remains dependent on the combined actions of all countries to significantly alter climate prospects. Policies promoting emission mitigation and sequestration in New Zealand will contribute to global efforts but are unlikely, on their own, to have any measureable impact on global outcomes.

The implication is that the emphasis in New Zealand necessarily needs to be on being resilient to the potential impacts of climate change. This is likely to entail investment in appropriate infrastructure. It may also include some potentially difficult decisions about managed retreat. That is, there will be situations where it will be prohibitively expensive to guarantee protection from the potential impacts of climate change. In such cases the responsible approach would be to facilitate the movement of people and assets to safer locations.

To manage the effects of climate change the Productivity commission has said that New Zealand (and the world) will be heavily reliant on technology advances and implementation. These are technologies that do not currently exist. New Zealand and Wellington in particular has the potential to use its technical prowess in developing and implementing mitigations and adaptive technologies.

### Population ageing

Population ageing involves two independent but concurrent forces:

- The life progression of the large baby boomer cohorts born in the decades following World War II
- The continued increase in life expectancy (at about three years per decade) resulting from improvements in health, diet and technology.

Nationally, the proportion of the population aged over 64 is expected to increase from around 15 percent currently to 25 percent by the 2050s. The Wellington region has a history of elderly migration (as reflected by the under-representation of older age groups in Figure 10). However, the Wellington region will still need to plan for increases in the proportion of older residents. That is, although the ageing population impact might be more pronounced in other parts of the country, it is still likely to have a strong impact in the Wellington region.

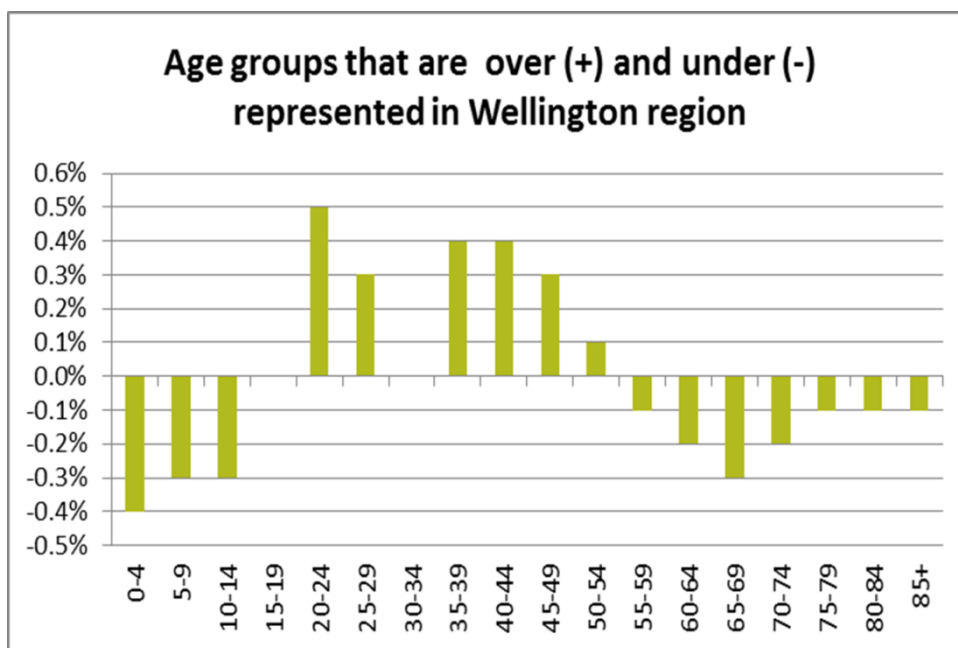
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<sup>10</sup> Hannah Ritchie and Max Roser (2018) - "CO<sub>2</sub> and other Greenhouse Gas Emissions". Published online at OurWorldInData.org. Retrieved from: <https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions> [Online Resource]

<sup>11</sup> Carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fluorinated gases

<sup>12</sup> [http://archive.stats.govt.nz/browse\\_for\\_stats/environment/environmental-reporting-series/environmental-indicators/Home/Atmosphere-and-climate/global-greenhouse-gases.aspx](http://archive.stats.govt.nz/browse_for_stats/environment/environmental-reporting-series/environmental-indicators/Home/Atmosphere-and-climate/global-greenhouse-gases.aspx)

Figure 10: Age groups over and under represented in the Wellington region



The increase in life expectancy means that there will at first be an increase in the numbers of active older residents. This will be accompanied by a slower paced increase in the demand for aged care services.

Population ageing is a global phenomenon, but with different timing and intensities in different countries. One potential implication is that New Zealand might find that it faces more intense global competition for young skilled workers. The increase in age structure may also mean that the labour market places a higher premium on physical skills than might have otherwise have been expected.

### Technology

Balancing the potential wage premium for physical work are the impacts of technology that will see the redundancy of many skills either through increased use of robotics, 3-D printing, automated devices, and artificial intelligence. In general, these advances will lead to improvements in wellbeing, but the transition will have uneven impacts on different people. The size and direction of the impact will depend on the extent that technology changes complement, replace or provide for new labour skills. People’s ability to adapt to a changing labour market will differ depending on individual circumstances and their innate abilities. Experience suggests that people with higher education attainment, adaptable skills, and job experience will be better placed to adapt to labour market challenges. The Wellington region economy looks well placed to cope with these technology challenges, given that it has a well-qualified workforce, a high share of professional workers and has a high proportion of its population in paid employment.

However, the growth in data processing and sharing capabilities that underpin the technology advances taking place highlight the importance of having the appropriate scale and resilience of region-wide infrastructure.

### Globalisation of services

One consequence of the digital nature of current and ongoing technology advances has been the increasing provision and demand for highly customised services and products. Increasingly this is about service, rather than product, delivery. Services have become over time an increasing proportion of the value contained in products. The digital revolution has gone further reducing the need for “things” to deliver the

services that people desire. For example, fewer people require cameras, DVDs, CDs, books. This further increases the importance of service delivery to the economy. The changing medium also increases the capability for remote delivery of services. For example, one can access financial services without having to visit a bank branch.

The logical outcome of these forces is an increase in specialisation and locational concentration of service providers. Increasingly one can service national and global demand for services from one location. An implication is that the requirement for local provision of services will reduce. The resulting increase in specialisation and international trade in services will enhance wellbeing and economic efficiency. Increased specialisation also means that the spread of services provided in any particular city is likely to become more distinctive and specific to that city.

The global competitiveness of Wellington's service industry places the Wellington region in a strong position to take advantage of this global trend. The prerequisite is that Wellington is able to provide the required infrastructure services (transport, digital infrastructure) and continues to attract and grow skilled workers and progressive organisations (i.e. liveability and a tailored education sector).

### Urbanisation

The global population is becoming increasingly urban based. In 1960 34 percent of the world's population lived in urban centres; by 2008 it reached 50 percent<sup>13</sup>; and is projected to reach 60 percent by 2030<sup>14</sup>. There are many factors that have supported the growth of urbanisation (e.g. agricultural productivity, industrialisation, and energy use) but at heart urban centres allow businesses and individuals to benefit from economies of scale and network economies – in particular deep labour pools.

Network economies, whereby the number of potential linkages increase at the square of the number of network members, mean that cities enjoy strong first mover benefits. The essence of this is that success begets success. Thus not only do we get people living in towns, but increasingly people congregate into the larger more successful cities. This means that city growth is path dependent – cities are located based on original settlement decisions and their current size can reflect their early success.

Geography, civic organisation, infrastructure, and individual success are also important. The implication for New Zealand location choices is that population growth over the next half century is likely to be concentrated in the major urban centres (Auckland, Wellington, Christchurch), with a slower pace of growth in provincial centres. Although digital advances will promote opportunities for remote working, the deep labour pools of urban centres will favour cities with effective central business districts.

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<sup>13</sup> <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?view=chart>

<sup>14</sup> [http://www.un.org/en/development/desa/population/publications/pdf/urbanization/the\\_worlds\\_cities\\_in\\_2016\\_data\\_booklet.pdf](http://www.un.org/en/development/desa/population/publications/pdf/urbanization/the_worlds_cities_in_2016_data_booklet.pdf)

## Appendix 2 - Supporting Information, Housing

### Foreseeable growth – where and when

Growth is expected across all of the Wellington Region over the next 20-30 years, however much of it will be concentrated in the City and Metro areas. Growth will require a mixture of densification and new Greenfield opportunities that will need to be supported by substantial infrastructure investment.

The estimated timeframes are based on a number of factors, including water infrastructure, roading and public transport. More intensive growth areas across Wellington City are heavily reliant on key transport projects leading the investment and therefore need to be seen as integrated development plans.

**Table 4: Foreseeable growth – where and when**

Years 1-3 (2018-2020)		Years 4-10 (2021-2028)		Years 11-30 (2029-2048)	
Areas					
<b>Kāpiti</b>					
Paraparaumu	190	Paraparaumu	133	Ngarara	750
Waikanae North	115	Waikanae Park	179	Waikanae North	332
Otaki	48	Waikanae North	177	Paraparaumu	132
Housing NZ	40	Otaki	78	Raumati	322
<b>Porirua</b>					
Kenepuru	300	Kenepuru	700	Eastern Porirua	1,500
Whitby	100	Whitby	370	Pauatahanui	450
Eastern Porirua	500	Eastern Porirua	1,000	Plimmerton farm	2,000
Aotea	330	Western Porirua	500	Pukerua Bay	550
CBD	150	Gray Farm	300	Takapuwhia	120
<b>Wellington</b>					
Strathmore	300	Taranaki/Adelaide Rd	785	Lincolnshire Farm	2,000
Tawa	200	Te Aro	2,000	Te Aro	2,066
		Newtown	326	Newtown (LGWM)	5,500
		Stebbins Valley	1,000	Taranaki/Adelaide Road (LGWM)	5,000
		Johnsonville	1,600		
		Kilbirnie	670		
<b>Hutt City</b>					
Intensification	900	Riverlink	1,300	Wainuiomata	1,600
Wainuiomata	40	Wainuiomata	80	Intensification	2,000
Kelson	80	Kelson	140		
Housing NZ	200	Stokes Valley	80		
Retirement Village	300	Intensification	2,000		
<b>Upper Hutt</b>					
Wallaceville	200	Wallaceville	500	Maymorn	220
Gillespies Road	200	Gillespies Road	560	Southern Growth area	1,000
Intensification	200	Brentwood	86	Gabites block	220
Other	250	Intensification	410	Intensification	1,500



<b>Masterton</b>	120	Masterton	250	Greytown	100
Ngaumutawa Rd	100	Greytown	170	Martinborough	120
Community Trust		Martinborough	100		
		Carterton East	200		
<b>Total</b>	<b>4,863</b>		<b>15,694</b>		<b>27,482</b>

#### Years 1-3 (2018-2020)

The developments in this timeframe are those that currently have the right zoning in place and have either approved developments or those that are going through approval. The key partnership tool for these developments is KiwiBuild as it can accelerate development.

#### Years 4-10 (2021-2028)

These areas are either zoned or partially zoned for residential and provide a mix of Greenfield and intensification opportunities, including the development of precincts. Many of these developments will require some form of infrastructure development to enable them to happen.

The completion of Transmission Gully will open areas in Kāpiti and Porirua and the completion of wastewater infrastructure in Porirua will provide growth there. All three partnership tools: KiwiBuild, social housing and UDA powers will be relevant to this period of development.

#### Years 11-30 (2029-2048)

Some of the growth areas in years 4-10 will continue into years 11-30.

Investment in significant roading projects like Petone to Grenada as well as the completion of mass transit through the city out to the airport will enable significant growth.

Substantial water infrastructure investment will be required to enable large scale Greenfield and intensification developments across the region. The key partnership tool will be KiwiBuild. The barrier to this development is the requirement for significant new infrastructure reticulation and capacity. This is not just three waters infrastructure, but roading, community and recreation.

**Table 5: Infrastructure development timeframes**

Years 1-3 (2018-2020)		Years 4-10 (2021-2028)		Years 11-30 (2029-2048)	
<b>Strategic road projects</b>					
<ul style="list-style-type: none"> <li>Transmission Gully</li> <li>Beltway cycleway</li> <li>Eastern bays cycleway</li> <li>LGWM (walking and cycleways)</li> <li>Ngauranga to Petone</li> </ul>	xx 7.3m 8.6m 460m 58m	<ul style="list-style-type: none"> <li>Otaki to Levin</li> <li>Silverstream bridge replacement</li> <li>Riverlink (flood protection, transport and urban form)</li> <li>Kāpiti east/west connector roads</li> </ul>	xx 25m 330m 19.3m	<ul style="list-style-type: none"> <li>LGWM (Basin)</li> <li>LGWM (Mt. Vic tunnel)</li> <li>Petone to Grenada</li> <li>Cross Valley Connection</li> </ul>	160m 500m 270m 65m
<b>Strategic public transport projects</b>					
<ul style="list-style-type: none"> <li>Rail track upgrade</li> </ul>	197m	<ul style="list-style-type: none"> <li>LGWM (Mass transit – CBD to airport)</li> <li>Multi User Ferry</li> </ul>	1.6b 475m	<ul style="list-style-type: none"> <li>Replacement of trains for the Wairarapa and Capital Connection</li> </ul>	330m

		<ul style="list-style-type: none"> <li>terminal</li> <li>Integrated ticketing</li> </ul>	60m		
<b>Wastewater projects</b>					
<ul style="list-style-type: none"> <li>Hutt main trunk expansion</li> <li>Porirua treatment plant upgrade</li> </ul>	<p>27m</p> <p>7.6m</p>	<ul style="list-style-type: none"> <li>Upper Hutt wastewater</li> <li>Seaview treatment plant trunk duplication</li> <li>Eastern Porirua treatment plant</li> <li>Paraparaumu treatment plant upgrade</li> <li>Wellington City Wastewater upgrade</li> <li>Miramar Peninsula capacity upgrade</li> <li>Homebush treatment plant upgrade</li> <li>Masterton raw water storage dam</li> </ul>	<p>25m</p> <p>6m</p> <p>??</p> <p>3.1m</p> <p>8.9m</p> <p>3.4m</p> <p>6.5m</p> <p>5.6m</p>	<ul style="list-style-type: none"> <li>Porirua treatment plant upgrade</li> <li>Karori outfall upgrade</li> </ul>	<p>34.5m</p> <p>38m</p>
<b>Water Supply projects</b>					
<ul style="list-style-type: none"> <li>Hutt reservoir upgrade</li> <li>Waikanae treatment plant upgrade</li> <li>Omāroro reservoir (new)</li> <li>Bell Road reservoir (replacement and capacity increased)</li> <li>Greytown new water bore</li> </ul>	<p>12m</p> <p>9.8m</p> <p>32.2m</p> <p>26.4m</p> <p>4m</p>	<ul style="list-style-type: none"> <li>Cross harbour pipeline</li> <li>Wairarapa water storage</li> <li>Waikanae treatment plant upgrade</li> <li>Kāpiti Reservoir upgrades</li> <li>Upper Stebbings Valley capacity upgrade</li> <li>Horokiwi capacity upgrade</li> <li>Miramar Peninsula capacity upgrade</li> <li>Carterton increased storage capacity</li> </ul>	<p>120m</p> <p>6.6m</p> <p>14m</p> <p>12.4m</p> <p>12.8m</p> <p>4.5m</p> <p>3.5m</p>	<ul style="list-style-type: none"> <li>Cruickshank Reservoir Dev</li> <li>Carterton new water supply</li> </ul>	<p>3.5m</p> <p>10.5m</p>

## Development Areas – Porirua

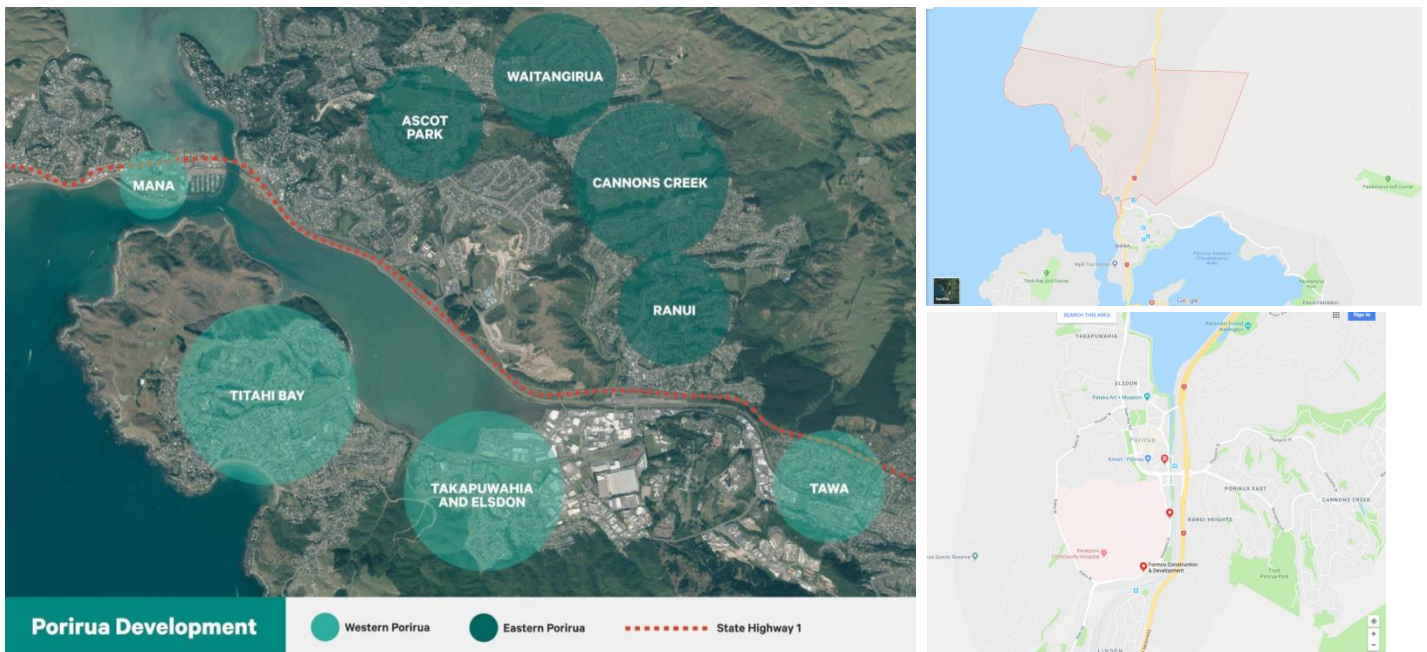
Porirua is connected to Wellington City through road and rail and will see changes with the opening of Transmission Gully in 2020.

It is likely that the area will have significant population growth over the next 30 years, but already suffers from overcrowding in areas. There is strong developer interest in the area and the Council is currently developing a Growth Plan.

The Government has already announced that over the next 25 years it will work alongside the community, the Porirua City Council and the local iwi Ngāti Toa Rangatira, in Eastern Porirua to:

- Replace old, cold and damp Housing NZ houses with warm, dry modern housing better suited to tenants' needs
- Create opportunities for home ownership by building affordable, market and KiwiBuild homes
- Create better designed local neighbourhoods, including upgrading parks and streets, to make it easier to get around and do business
- Think about the community's future schooling needs and create jobs for locals.

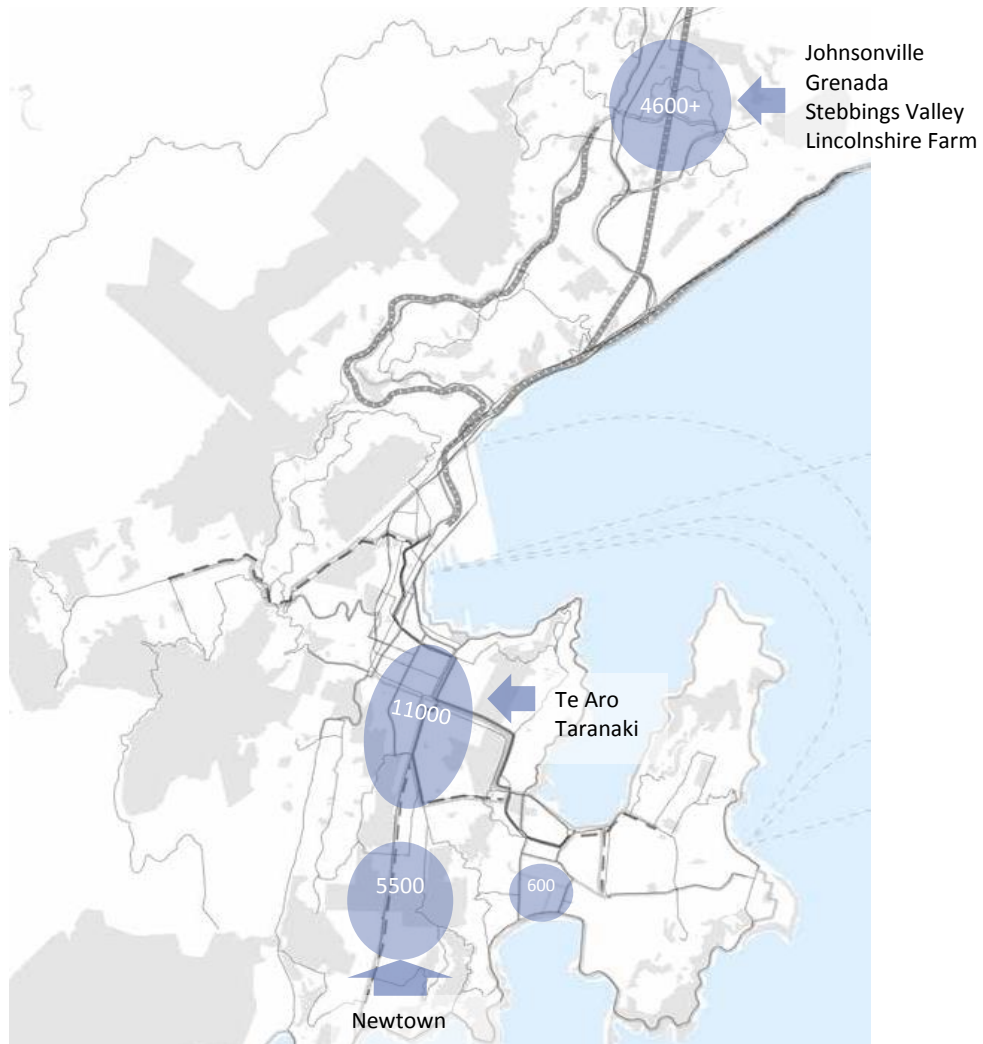
The Porirua area has feasibility growth of around 8,870 dwellings



Number of additional Households	
• Short term (could be KiwiBuild)	400
• Precinct	150
• Social – new	150
• Redevelopment (affordable housing)	2,500
• Greenfield – future urban areas	4,180
Number of additional people projected (2048)	23,170
Number of additional jobs projected (2048)	8,100
Number of additional jobs accessible within a 45min commute (2048)	94,300

### Development Areas – Wellington City

Wellington city is constrained by the nature of its physical location (hemmed between the harbour and hills) and this is exacerbated by the demand pressures of population growth. The opportunities for growth will all require significant investment. The Let’s Get Wellington Moving opportunity will catalyse urban development through the city centre providing a precinct approach connecting housing transport and business in a targeted growth area.



<b>Number of additional Households</b>	
<ul style="list-style-type: none"> <li>• Short term (could be KiwiBuild)</li> <li>• Precinct (with LGWM)</li> <li>• Precinct (no LGWM)</li> <li>• Social – new</li> <li>• Greenfield – future urban areas</li> </ul>	<p>3,381</p> <p>14,566+</p> <p>5,000</p> <p>500</p> <p>3,000+</p>
<b>Number of additional people projected (2048)</b>	57,570
<b>Number of additional jobs projected (2048)</b>	57,600
<b>Number of additional jobs accessible within a 45min commute (2048)</b>	94,300

## Development Areas – Kāpiti

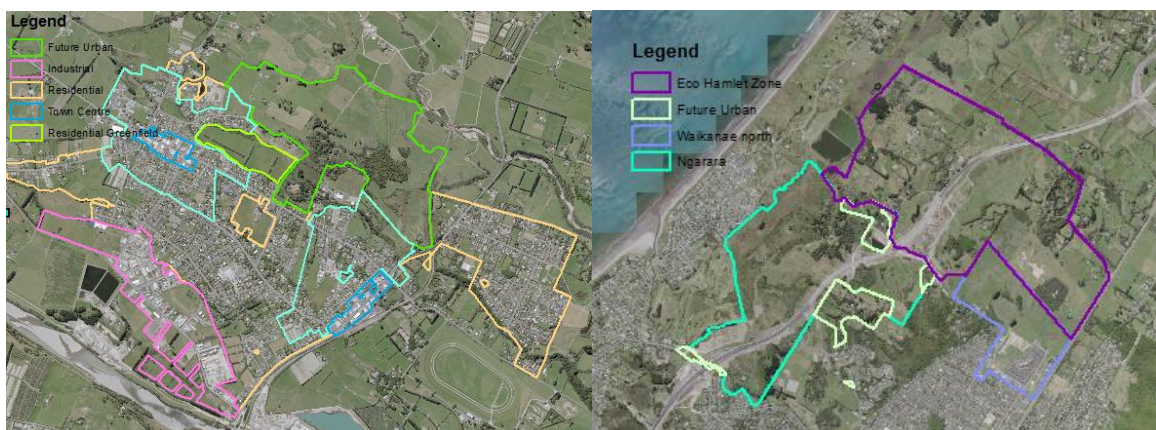
Kāpiti is connected to Wellington City through road and rail and will see changes with the opening of Transmission Gully in 2020.

The recent and on-going construction of the Transmission Gully and MacKay’s to Peka Peka Expressway projects have a number of parcels of Crown-owned land that is or could likely be surplus to the projects requirements and disposed of under the PWA and could offer opportunities for housing related purposes.

It is likely that the area will have significant population growth over the next 30 years.

### Otaki

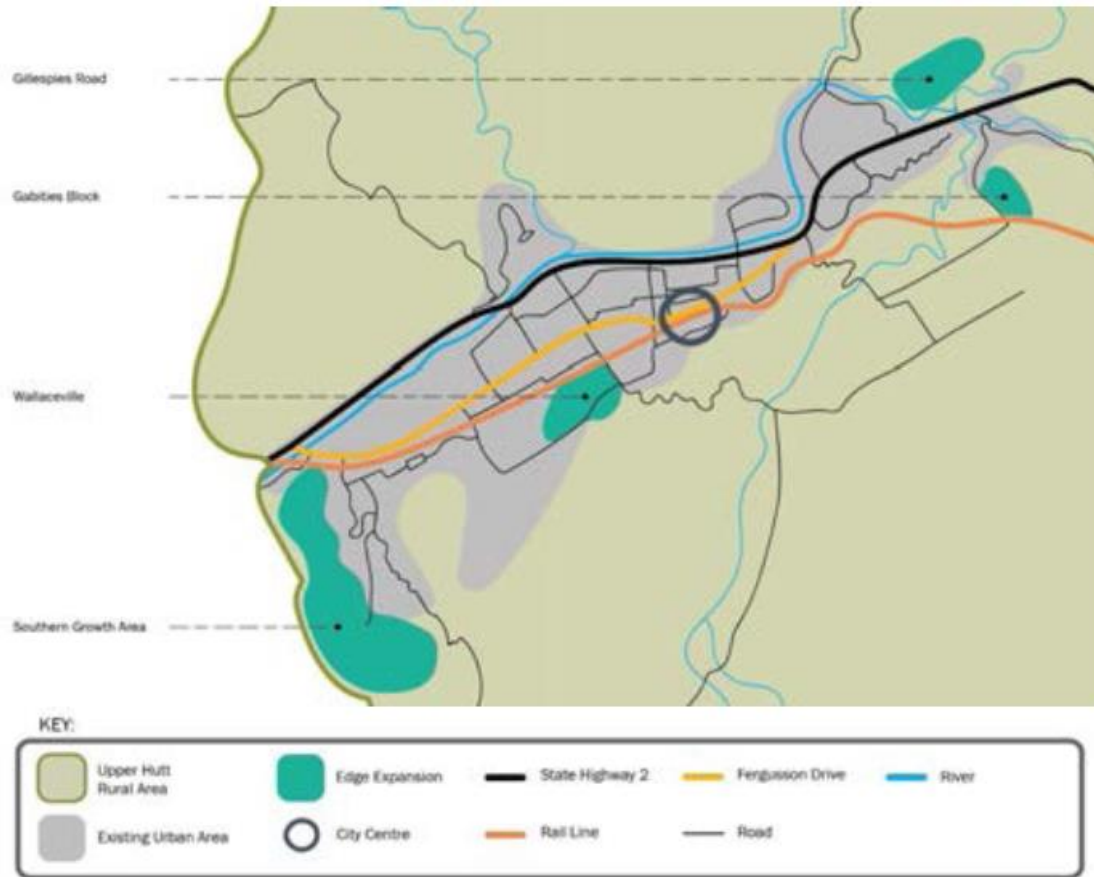
### Waikanae



Number of additional Households	
<ul style="list-style-type: none"> <li>• Short term (could be KiwiBuild)</li> <li>• Precinct</li> <li>• Social – new</li> <li>• Greenfield – future urban areas</li> </ul>	<p>350</p> <p>50</p> <p>40</p> <p>1,900</p>
Number of additional people projected (2048)	17,320
Number of additional jobs projected (2048)	6,400
Number of additional jobs accessible within a 45min commute (2048) Note: does not include Horowhenua opportunities	94,300

### Development Areas – Upper Hutt

In order to meet Upper Hutt’s projected housing demand it is necessary to utilise infill, intensification and some limited expansion of housing at the edges of the existing urban area. Plans currently are looking at possible growth of around 5,000 dwellings over a 30 year period.



Number of additional Households	
<ul style="list-style-type: none"> <li>• Short term (could be KiwiBuild)</li> <li>• Precinct</li> <li>• Social – new</li> <li>• Intensification</li> <li>• Greenfield – future urban areas</li> </ul>	<p>500</p> <p>50</p> <p>40</p> <p>2,360</p> <p>2,100</p>
Number of additional people projected (2048)	8,230
Number of additional jobs projected (2048)	4,200
Number of additional jobs accessible within a 45min commute (2048)	94,300

## Development Areas – Lower Hutt

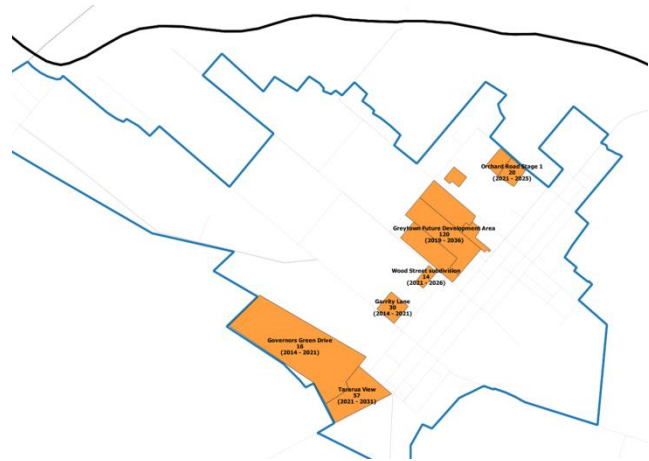


Number of additional Households	
<ul style="list-style-type: none"> <li>• Short term (could be KiwiBuild)</li> <li>• Intensification (5-25yr)</li> <li>• Precinct</li> <li>• Social – new</li> <li>• Greenfield – future urban areas</li> </ul>	1,420 4,000 1,300 100+ 1,900
Number of additional people projected (2048)	
27,120	
Number of additional jobs projected (2048)	
18,000	
Number of additional jobs accessible within a 45min commute (2048)	
94,300	

**Development Areas – Wairarapa**  
**Martinborough**



**Greytown**



**Carterton**



**Masterton**



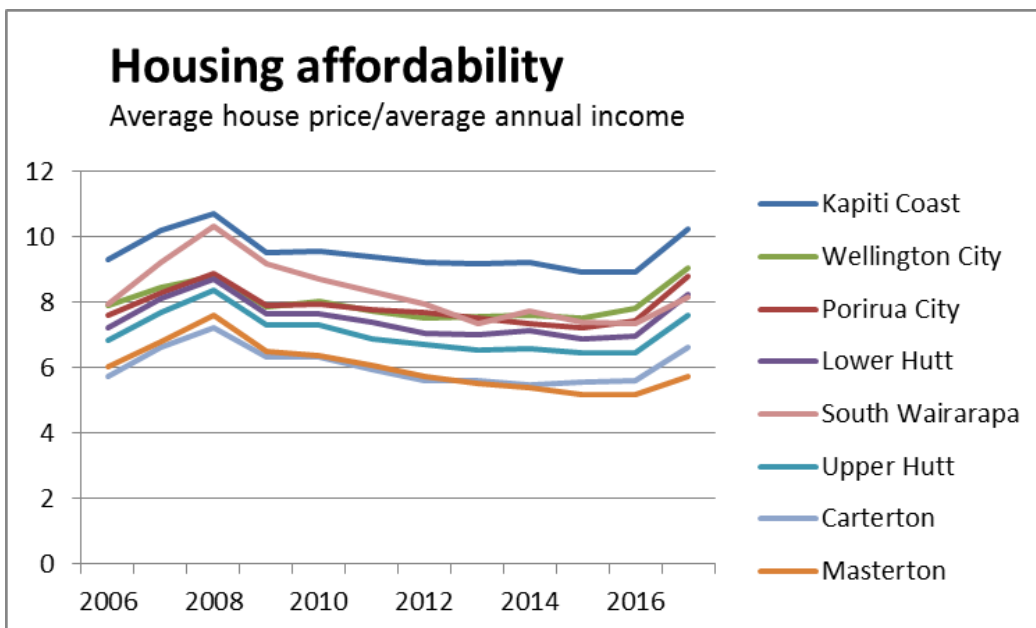
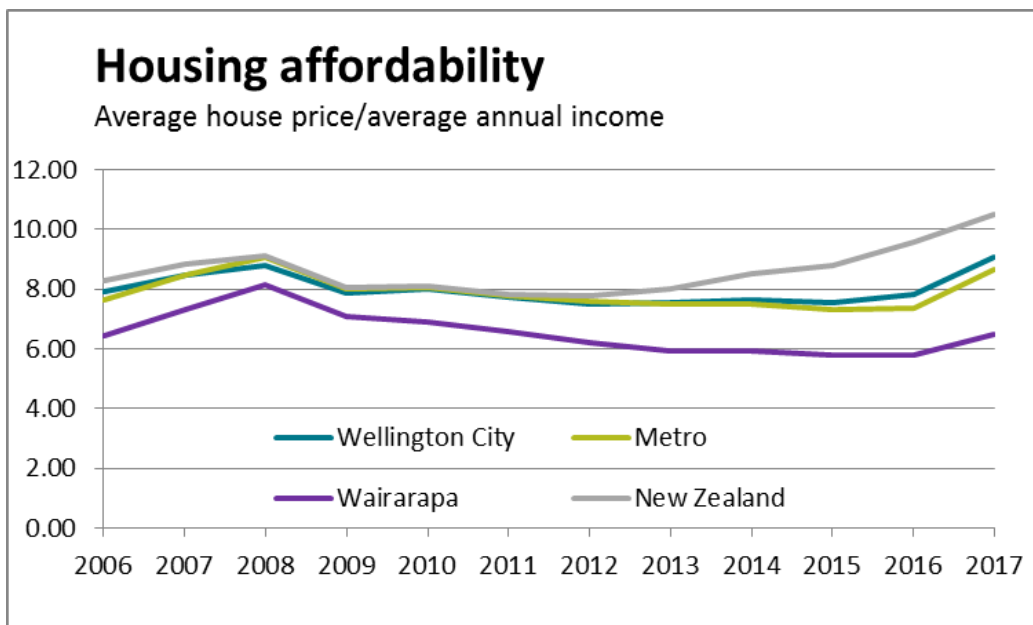
Number of additional Households	
<ul style="list-style-type: none"> <li>• Short term (could be KiwiBuild)</li> <li>• Precinct</li> <li>• Social – new</li> <li>• Greenfield – future urban areas</li> </ul>	<p>120</p> <p>0</p> <p>100</p> <p>940</p>
Number of additional people projected (2048)	10,290
Number of additional jobs projected (2048)	6,200
Number of additional jobs accessible within a 45min commute (2048)	6,200



### Housing affordability

Housing affordability (Figure 11) defined as the price of the average house in the area divided by the median income of residents in the area. An increase implies affordability has become more difficult. In general housing affordability has been easier in the Wellington region than in the rest of the country. However, a 30 percent increase in house prices in the region over the last two years has reduced the size of this advantage. Within the region houses have generally been more affordable in the Wairarapa than in the Metro area, which has been more affordable than in Wellington City. However, Kāpiti Coast is an outlier with evidence of less affordable housing. This is potentially due to the older age structure on the coast; incomes will decline with retirement, but higher wealth from lifetime savings will increase ability to buy more expensive houses.

Figure 11: Housing affordability



### Rental affordability

Rental affordability (Figure 12) is defined as the average weekly rent divided by the average weekly wage. An increase in the affordability measure implies renting takes up more of the average wage and so implies a decline in rental affordability. Higher wages in Wellington mean that renting has generally been more affordable in the Wellington region. However, renting on the Kāpiti Coast, in Porirua and in South Wairarapa has generally been less affordable than in the rest of the region.

Figure 12: Rent affordability

