

Planning for Growth

Issues and Opportunities Report

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EXECUTIVE SUMMARY

- Growth and change are big issues for Wellington. Population increase has outstripped the number of dwellings consented each year since 2013. This trend is set to continue. Current forecasts show that Wellington will have shortfall of up to 15,000 homes by 2047.
- The population is ageing and more people are living alone. By 2047 nearly 60% of all households will be singles and couples without children. The city therefore needs more smaller homes over the next 30 years.
- Employment is also expected to grow. The central city hosts the highest concentration of jobs in the region. Without extra investment, particularly in public transport, the city won't have enough transport capacity to meet the projected growth and this will impact negatively on the economic prosperity of the region as a whole. A growth strategy that directs new development to areas furthest away from the central city will lead to more pressure on the transport network.
- Future growth will place increasing pressures on already limited services, spaces and facilities from a range of competing needs. One of the biggest challenges is how to reconcile, manage and provide for these competing priorities as part of future growth.
- The Three-Waters infrastructure is already under pressure and there is insufficient capacity in some areas. Decisions on areas for growth and intensification must be supported by prioritisation of investment for the necessary infrastructure to service these areas. Future development will also need to meet stonger requirements to minimise water wastage and use, and not result in further degradation of water quality. Other services such as electricity supply must also be considered.
- As the population increases there will be less private open space and increased pressure on existing open spaces and facilities, particularly in the central city, town centres and inner suburbs. This will mean higher use of our existing open spaces which will flow on to higher maintenance costs. We will also need to plan and provide for new open green spaces to meet the needs of the growing city.
- For Wellington to accommodate the expected growth intensification within the urban area is inevitable. The central area and inner suburbs represent prime locations for higher density housing. The challenge will be to maintain valued character in these areas while enabling new development, and to protect and enhance existing parks and open spaces to support higher density housing and more people.

- Wellingtonians place high value on the contribution that heritage makes to the city. Heritage is not incompatible with higher density housing and is not a barrier to change. It is an asset that can support a broad set of outcomes for the city's future, if the integrity of heritage values is maintained.
- The scientific and engineering communities are continually improving our technical understanding of the City's natural hazards. Tsunami, flooding, sea level rise, liquefaction, slope failure and ground shaking, and their effects on people and infrastructure can now be modelled in detail, and we understand the risks more than ever before. These risks must be explicitly taken into account as the City grows, and conscious decisions about the acceptable level of risk must be made by communities.
- Our City Tomorrow confirmed that people want Wellington to be compact, inclusive and connected, greener, resilient, vibrant and prosperous. These five goals must underpin the strategy for how and where Wellington will grow.
- Whilst there are some difficult challenges ahead, there are also a range of options to examine and choose from. Implementing a range of options is likely to be the way forward to enable growth and address housing capacity in a manner that is consistent with the five overarching goals above.
- Examples from other cities show that if we do not sufficiently plan for and accommodate growth then the likely result will be problems such as increased housing unaffordability and homelessness, overcrowding and reduced living standards, population losses to other areas resulting in longer commutes, and increased congestion and greenhouse gases emissions.
- Planning and providing for growth, if done well, can bring significant benefits that cross over many areas and make Wellington a more sustainable and resilient city, and strengthen its reputation as one of the world's most liveable cities.

The current population of Wellington is around 216,000. Another 50,000 to 80,000 people are expected to be living here in the next 30 years. The city cannot meet this future demand unless it plans and provides for more housing.

The National Policy Statement (NPS) on Urban Development Capacity requires Wellington City Council to provide sufficient feasible residential and business land to meet the projected population and business growth over the next 30 years.

The Planning for Growth project responds to the NPS and seeks to identify where growth should take place, and what is needed to enable this growth to happen. It is closely linked to the 'Let's Get Welly Moving' programme which aims to deliver Wellington's future transport system.

The Planning for Growth project will lead into the development a new Spatial Plan for the city that will replace the 2015 Urban Growth Plan. This will set out the strategy for accommodating future growth. It will also guide decisions on the infrastructure investment that is required to support this growth. A full review of the District Plan will follow.

The new Spatial Plan is expected to be finalised in early 2020, and the new proposed District Plan to be notified in late 2021.

Planning for Growth crosses over a number of different topic areas as follows:

- Land Use and Housing
- Transport
- Infrastructure (Three Waters)
- Open Space and Natural Environment
- Climate Change
- Urban Design
- Heritage
- Community facilities and systems

An Issues and Opportunities paper has been prepared for each of these topic areas. Appendix A includes summary of the key points from these papers. Appendix B contains a table highlighting some of the overlapping issues, opportunities and potential conflicts that crossover the topic areas.

The purpose of this paper is to provide an overall background to the growth issues facing Wellington City, and to highlight some of the key challenges and decisions ahead for the Planning for Growth project. It will serve as an information source for the forthcoming community engagement process. It is important to note that this paper provides a high level overview of the key issues and challenges. It does not seek to cover all of the detailed issues set out within each of the different topic area papers.

➤ Population and Employment Growth

The population of the Wellington Region currently stands at around 500,000 people. It is forecast to grow by between 90,000 – 138,000 residents by 2047. Most of this growth will be in Wellington City.

The city's population is ageing and more people are living alone. By 2047 nearly 60% of all households will be single occupancy and couples without children. Smaller households are expected to make up 70% of our household growth over the next 30 years.

Employment is concentrated in the central city, with over 40% of the region's jobs and 63% of the city's jobs located in the central city.

Projections show the regional employment growing by between 15% and 20% over the next 30 years. These projections suggest that between 55% and 60% of future growth in employment is likely to be located in the central city, potentially increasing the number of jobs there from the current 94,000 to between 116,000 and 125,000 in 30 years' time.

➤ Housing Shortage

Population growth in Wellington has outstripped the number of dwellings being consented each year since 2013. This trend is set to continue.

Wellington City has been identified as a medium-growth Council under the Government's National Policy Statement for Urban Development Capacity 2016 (NPS-UDC). The NPS-UDC requires medium and high-growth councils to assess their residential and business land capacity and demand and to ensure they provide sufficient feasible residential and business land to meet projected population and business growth over the next 30 years.

The NPS capacity assessment for Wellington City is at an advanced stage and will be finalised in the coming months. The latest results show that:

- The population projections for Wellington City predict an increase of between 46,766¹ and 74,484² people by 2047.
- Residential demand and capacity modelling shows that the City will need 32,000 new homes over this period. Under the current planning settings there will be a shortfall of up to 15,000 homes.
- This shortfall equates to 2-3 more suburbs of comparable size to Karori (the total number of dwellings in Karori in 2013 was 5,586).

¹ Forecast id 2017-2047

² Statistics New Zealand High Series

KEY POINTS:

- The population is growing and we already have a housing shortage.
- Wellington City's population is expected to grow by between 50,000 – 80,000 by 2047.
- Under the current planning settings there will be a shortfall of up to 15,000 homes.
- The transport infrastructure does not have enough capacity to meet the projected growth.
- The water, stormwater and wastewater infrastructure is already under pressure and there is insufficient capacity in some areas. New infrastructure often requires additional land.
- Wellington City Council is required under the National Policy Statement to provide sufficient feasible land to meet the projected population growth.
- Examples from other cities that have not planned for growth have resulted in problems such as increased housing unaffordability and homelessness, overcrowding and reduced living standards, population losses to other areas resulting in longer commutes, increased congestion and greenhouse gases emissions.
- Planning and providing for growth, if done well, can bring significant benefits that cross over many areas and make Wellington a more sustainable and resilient city, and strengthen its reputation as one of the world's most liveable cities.

Appendix C contains a variety of facts and figures relating to growth, housing and transport that are relevant to the Planning for Growth project.

3- VISION AND PRINCIPLES

Over the last decade Wellingtonians have consistently expressed a preference for compact urban form, sustainable transport and environmental sustainability. This is echoed in central government's Policy Statement on Land Transport, the Regional Land Transport Plan, Wellington 2040, the Wellington Urban Growth Plan 2014-43, and early community feedback on Let's Get Wellington Moving.

The Our City Tomorrow engagement carried out in 2017 confirmed that people want Wellington to be compact, inclusive and connected, greener, resilient, vibrant and prosperous. These five goals will underpin the strategy for how and where Wellington will grow.



4- KEY CHALLENGES AND OPPORTUNITIES

Significant undersupply of housing over next 30 years

Doing nothing is not an option

Intensification within the existing urban area is inevitable

There are a range of issues to consider

Future growth will place increasing pressures on already limited services, spaces and facilities from a range of competing needs. One of the biggest challenges is how to reconcile, manage and provide for these competing priorities as part of future growth, as well as having regard to other important issues such as natural hazard risk and protecting heritage.

Whilst there are some difficult challenges ahead, there are also a range of options to examine and choose from. Implementing a range of options is likely to be the way forward to enable growth and address housing capacity in a manner that is consistent with the five overarching goals referred to in the previous section.

Planning for Growth – Key Challenges

Living with Risk – Natural Hazards

- The scientific and engineering communities are continually improving our technical understanding of the City's natural hazards. Tsunami, flooding, sea level rise, liquefaction, slope failure and ground shaking, and their effects on people and infrastructure can now be modelled in detail, and we understand the risks more than ever before.
- These risks must be explicitly taken into account as the City grows, and conscious decisions about the acceptable level of risk must be made by communities.
- This is likely to constrain growth in some areas, and to increase the cost of development. Cost pressures will be exacerbated by difficulties accessing insurance, which will require asset owners to consider alternative choices when considering how to manage risk.

Our water, stormwater and wastewater infrastructure is under pressure and there is already insufficient capacity in some areas

- The network is vulnerable to earthquakes and risk of contamination.
- Parts of the network are in an aging and declining condition.
- The demand for water will exceed supply by 2040 and there is likely to be less water available in the future to use. A sustainable water supply is critical to a growing population.
- Future development will therefore need to be managed so that it minimises water wastage and use; does not increase stormwater volumes where there is insufficient capacity; does not result in further degradation of water quality; and incorporates more sustainable water design features. Land to locate new or upgraded infrastructure may be required.

Our transport infrastructure does not have enough capacity to meet projected growth

- Both population and employment growth means there will be an increasing number of people who travel to the CBD each day.
- This will place additional demands on an already stressed transport network. Capacity constraints are a major issue for the current transport system. During peak times the bus and rail networks are already near capacity. Based on forecast growth rates they will reach capacity in five years.
- The use of more efficient modes of transport than the private car therefore needs to be increased to cater for the expected growth. The most efficient way to increase the carrying capacity of the system is to improve public transport and encourage more walking and cycling by providing safe and attractive streets and other improvements to support these options. This is consistent with the legacy of compact urban form and a strong culture of walking, cycling and public transport use in Wellington.

More people will lead to increased pressures on already limited parks, open spaces and facilities

- As the population increases there will be less private open space and increased pressure on existing open spaces and facilities. There will be a need to identify what types of spaces the city will need to respond to growth, including opportunities for new parks, redevelopment of existing parks and increased levels of service. The natural environment will require ongoing protection.
- People need public space when living in apartments and multi-unit developments to maintain social connection and quality of life. The public realm that is so vital to successful and

attractive urban environments includes parks and open spaces and community facilities and these must develop and change over time to meet changing community needs and expectations.

- Buying land for new open space and building new community and recreation facilities requires significant investment and can be a challenging and long process. There is a shortage of green space in the central city and it may be necessary to buy land in this area. Land purchase around existing parks in inner city suburbs has potential to improve the network to cater for more people. Redevelopment of parks over time will improve their value to the city and residents.
- We need to better understand what types of open spaces and facilities are needed and where, and to plan and provide for a more flexible multipurpose network of open spaces and facilities that can support a range of functions. Increased maintenance costs will be required to support population growth and higher use of these spaces.
- In summary there are three types of response to a growing city and population that will be required across the parks and open spaces network: 1- purchase of land for new parks; 2- redevelopment of existing parks; and increased maintenance across all parks. This will need to be adequately funded but provides a return for investment across multiple areas including the natural environment, social outcomes, health and wellbeing, stormwater management, community resilience, disaster response and recovery, as well as contributing to the economic wellbeing of the city.

Providing for intensification and maintaining character

- There are limited options for greenfield growth that align with the compact city approach.
- A growth strategy that directs new development to areas away from the central city will lead to more pressure on the transport network, and an increase in carbon emissions.
- The inner suburbs represent a prime location for higher density housing with proximity to the CBD and public transport. These areas are also some of the most resilient land in the city with relatively flat and stable ground away from the impacts of sea level rise. However, large parts of these areas are also valued because of their streetscape character (where there are concentrations of buildings constructed prior to 1930). The District Plan restricts the demolition of those buildings, meaning that redevelopment of sites within these areas can be challenging.

- A stocktake commissioned by Wellington City Council has been carried out on the six pre-1930 character areas contained in the District Plan (Mt. Cook, Thorndon, Holloway Road, Aro Valley/The Terrace, Newtown/Berhampore and Mt. Victoria). Approximately 5,500 properties were individually assessed to determine their contribution to the character of the area in which they are located. The stocktake identified that the majority of the properties (78%) were of primary or contributory value to the character of these areas. 22% were found to be neutral or detractive. The overall breakdown is as follows:

<i>Character Contribution</i>	<i>Number/Percentage of Total Properties</i>		
	<i>Pre-1930</i>	<i>Post-1930</i>	<i>Total</i>
<i>Primary</i>	2213 (40%)	35 (1%)	2248 (41%)
<i>Contributory</i>	1849 (34%)	156 (3%)	2005 (37%)
<i>Neutral</i>	405 (7%)	488 (9%)	893 (16%)
<i>Detractive</i>	40 (1%)	306 (5%)	346 (6%)

- The stocktake work also assessed buildings or groups of buildings not currently listed in the District Plan that are potentially of outstanding character that could warrant further research and consideration for protection through the District Plan review process.
- If Wellington is to accommodate the expected growth then intensification within the existing urban area is inevitable. The need for more housing and for a resilient City will place these inner character areas under pressure. The challenge is to maintain valued character while enabling new development.
- There is generally a poor perception of the multi-unit development that has been built, and in some areas there is significant community opposition to enabling higher-density housing. However, well designed development that considers its context can achieve the outcomes of higher density development and maintaining character.

Planning for Growth - Key Opportunities

Planning for growth can deliver a number of benefits for the city

- Whilst there are some difficult challenges to provide for growth, there are also a number of potential options to address the issues, such as traditional engineering solutions, additional funding to fix and upgrade critical infrastructure pressure points, re-examining and changing our planning settings through a full review of the District Plan, and a wide range of innovative solutions to overcome the various problems.

- Implementing a range of options is likely to be the way forward to enable growth and address housing capacity.
- There is significant potential for growth in the Central City and some suburban centres. Development in these locations can support and enhance Wellington's current strengths as a compact, sustainable and liveable city.
- The most efficient way to increase the carrying capacity of the transport system is to improve public transport. For the central city, work on this is well advanced though Let's Get Wellington Moving.
- There are currently 50,000 people living within walking distance to the central city, and the number of people cycling has tripled since 2000. However, there is still significant potential for more walking and cycling by enabling growth in the right places and providing safe and attractive routes and other improvements to support these options.
- Well planned development and good urban design can offer significant benefits that cross over many of the planning for growth topic areas and make Wellington a more sustainable and resilient city, as well as strengthening its reputation as one of the world's most liveable cities.
- Planning for growth allows for conscious and informed decision-making on the allocation of land for infrastructure and activities to support growth and change. There is the opportunity to look at the public realm and how to ensure there is the right mix and allocation of space for all of the things that make a high quality functioning urban environment. For example, how will land be allocated for roads, three waters, parks, cycle ways, places for people to gather, and community facilities (such as community centres, libraries and recreation centres).
- Providing for higher densities in appropriate locations and facilitating the uptake of more sustainable modes of transport (walking, cycling, public transport and micro-mobility devices such as scooters) will reduce car travel, decrease greenhouse gas emissions, and improve health and wellbeing. Higher density also provides the opportunity to enhance connectedness within neighbourhoods and across communities.
- Reducing the volume of vehicular traffic and reallocating road space from vehicles to more pedestrian friendly spaces will enhance the amenity and vibrancy of the central city.
- A well planned and managed multipurpose open space network can support higher density living as well as contributing to multiple city-wide benefits: biodiversity, recreation and leisure, health and wellbeing, a sense of place and identity, opportunities to gather to build

community connections, build community resilience, and support effective response and recovery following an emergency event.

- Better integration of parks and infrastructure planning can deliver win-win responses to growth and development, such as the incorporation of more green transport infrastructure with sustainability benefits; increased biodiversity and habitat; and more permeable surfaces to help manage stormwater and water quality.
- Wellingtonians place high value on the contribution that heritage makes to the city. Heritage is not incompatible with higher density housing and is not a barrier to change. It is an asset that can support a broad set of outcomes for the city's future, if the integrity of heritage values is maintained. Retaining and reusing heritage makes good environmental sense.
- The vast majority of the city's food is grown outside the city limits. Wellington is therefore vulnerable to loss of food supply due to factors such as its earthquake risk and geography. Future growth and development provides the opportunity to provide a more sustainable food system in the city with co-benefits around climate mitigation, more water sensitive design, increased health and wellbeing, and enhanced resilience.

Land use and Housing

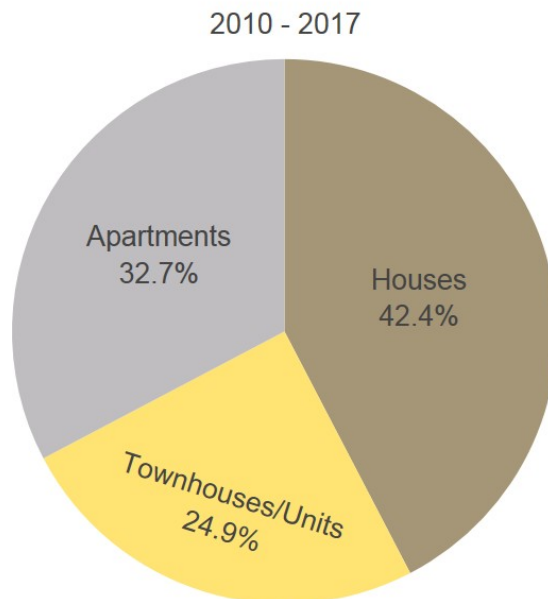
- Population growth in Wellington has significantly outstripped the number of dwellings being consented each year since 2013 and this trend is set to continue.
- A range of options is likely to be required to address housing capacity, such as:
 - Upzoning (increasing the density) around suburban centres;
 - Relaxing infill development controls;
 - Increasing building heights;
 - Removing on-site car parking requirements in the inner suburbs;
 - Reviewing and potentially reducing the pre-1930s character areas;
 - Identifying new greenfield growth areas;
 - Designing housing that is more resilient to natural hazards.
- Three waters infrastructure is under pressure and there is insufficient capacity in some areas. Decisions on areas for growth and intensification must be supported by prioritisation of investment for the necessary infrastructure to service these areas, and the space to build these assets where it is not currently available.
- A study of development trends in Johnsonville and Kilbirnie over the period 2003 – 2013 identified that the most significant barriers to new housing development related to:
 - Limited land supply / few vacant sites.
 - Difficult to find adjoining sites that can be amalgamated to undertake comprehensive residential development.
 - Removal of existing housing stock to facilitate comprehensive multi-unit development was not commercially viable. Piecemeal infill housing involves less risk and still provided an adequate financial return.
- There is generally a poor perception of the multi-unit development that has been built, and in some areas there is significant community opposition to enabling higher-density housing.
- Analysis of multi-unit consents from 2008 – 2018 shows that most multi-unit development has been taking place in the Inner and Outer Residential Areas, with only a small percentage taking place in the Medium Density Residential Areas. A 'typical' multi-unit development will be up to six units; contain only one type of dwelling; be 2 or 3 storeys high; have one to two bedrooms in

the Inner Residential Area and two to three bedrooms in the Outer Residential Area; with less than 16m² of private open space per unit.

- As shown in table and chart below, since 2010 houses have been the main dwelling type provided in Wellington. However, it is anticipated that this change with a shift to more apartments and townhouses being built as part of the future growth.

Number of New Dwellings Issued Consent by Type (2010 - November 2018)					
Year	Houses	Units	Apartments	Retirement Village Units	Total
2010	275	119	165	3	562
2011	220	105	150	0	475
2012	225	76	200	0	501
2013	254	116	251	2	623
2014	241	122	147	34	544
2015	279	196	165	0	640
2016	270	130	305	34	739
2017	290	271	203	99	863
2018 (end of November)	297	331	370	0	998
Total	2351	1466	1956	172	5945

Dwelling Type Split



Central Area

- Since 2004 the majority of new consented dwelling have been in Te Aro. The Central Area is set to continue to be the City's highest growth area, and there is still a significant opportunity for growth in Te Aro.

- With more people living in the CBD there needs to be sufficient provision of accessible outdoor space within the central area, and possibly also a requirement that new apartments are provided with an outdoor space, either private or shared. Existing open space will need investment for improvements over time to meet the needs of the changing urban environment and the people who live there. The public realm (including parks) will cost more to maintain with increased use.
- Given the future anticipated growth in apartments and forecast increase in the number of families and shared living situations in the central city, there should also be an emphasis on increasing the size of apartments and number of larger apartments.

Inner Suburbs

- The inner suburbs are another prime location for higher density housing with their proximity to public transport, services, and employment and their location on relatively flat and stable ground away from the impacts of sea level rise. However, some of these areas (Newtown, Berhampore, Aro Valley, Thorndon, The Terrace, Holloway Road, Mt Cook and Mt Victoria) are also valued because of their character. The District Plan restricts demolition and alteration of buildings constructed prior to 1930 in these areas.
- The requirement to provide more housing and for the City to be resilient will place pressure on these character areas. A re-evaluation of these character areas is underway and this will help inform decision-making about the continued protection of these areas.

Greenfield land

- There are limited options for greenfield growth that follows the compact city approach. The two main greenfield areas that have been identified for development each have their own problems as follows:
 - Lincolnshire Farm accounts for over half of the zoned greenfield land available. However, the Petone to Grenada link road proposal means that development of this area may be delayed until a decision is made on the road alignment.
 - Upper Stebbings has been signalled as a growth area since the early 2000s. A structure plan is currently under development for this area. Rezoning is needed before development can proceed.

Centres

- The centres provide significant potential to provide for additional housing. However, the level of development needs to be appropriate to each centre, local transport systems, Three Waters infrastructure, and parks and community facilities, as well as achieving good urban design and amenity outcomes.

Business Areas

- There are 27 Business Areas split across Business 1 and 2. Business 1 covers mixed use areas. Business 2 are predominantly industrial areas where residential is not anticipated or provided for. Analysis of consenting activity within the Business Areas between 2014 – 2018 shows that there has been significant residential development within the three Business 1 areas of Takapu Island, Fraser and Greta Point. There is another significant residential development currently at the consenting stage in the Shelley Bay Business 1 Area. The Rongotai South Business 1 Area is also undergoing change with a number of demolished buildings and warehouses being re-purposed as office spaces. Business 2 is still primarily commercial and industrial and development activity is relatively low.

Transport

- Wellington is expected to grow significantly over the next 30 years, both in residents and jobs. This will place additional demands on an already stressed transport network. Some key transport statistics include:
 - On a normal weekday, some 82,000 people travel to or through the CBD during morning peak (7 am to 9 am); 50% travel by car, 35% use public transport, and 16% walk or cycle.
 - Over the past 17 years there has been a decrease in people using a car for this trip, and increases in public transport usage, walking and cycling.
 - In the past 12 years the modes with the biggest increase were walking (34%) and cycling (53%).
 - Over the last 10 to 15 years, peak period (7am to 9am) traffic on major roads has remained broadly unchanged, with most growth in car trips in the morning occurring between 6am - 7am.
 - On average, 15,000 people arrive at the railway station daily between 7am to 9am (weekdays); 90% of them then walk to their final destination.
 - Inner-city population has almost doubled between 2001 and 2013, and most of these people (80%) walk to work.
 - During the morning rush hour more than 11,000 people come into the CBD on foot.
 - Every weekday, between 7 am and 9 am, 12,000 bus passengers travel along Lambton Quay. Bus speeds average 8 to 10 km/h during this period – only slightly better than the average walking speed of 5 km/h.

- An exception to our high rate of public transport usage is the near 50-50 split between cars and taxis for people going to and from the airport. Public transport currently accounts for less than 10% of trips to/from the airport.
- The central city hosts the highest concentration of jobs and productivity in the region. Without extra investment, the central city won't have enough transport capacity to meet the projected growth and this would impact negatively on the economic prosperity of the region as a whole.
- Capacity therefore needs to be increased to cater for the expected growth. The most efficient way to increase the carrying capacity of the system is to improve public transport. This is consistent with the legacy of compact urban form and a strong culture of walking, cycling and public transport use in Wellington.
- Residents in suburbs close to the central city tend to commute by walking or cycling, while the prevalence of driving generally increases with distance from the city centre. A growth strategy that directs new development to areas furthest away from the central city will therefore lead to more pressure on the transport network.
- Issues with the current transport system that need to be addressed include:
 - Buses are caught up in traffic congestion so service efficiency and reliability is severely compromised. Many through journeys use the same routes as commuter journeys (e.g. Vivian Street and the waterfront quays), compounding the capacity problem at peak times.
 - Traffic congestion also impacts negatively on amenity in the central city, and on the safety and convenience of walking and cycling.
 - During peak times both the bus and rail networks operate near capacity. Based on forecast growth rates they will reach capacity in five years.

Car travel

- The central area and inner suburbs have low and decreasing rates of car ownership and high rates of commuting by walking, cycling, and public transport. In 2013 the total population of the central area and inner suburbs was 57,000. However, the majority of Wellington residents live in the outer suburbs (2013 population = 140,000). Car ownership is highest and growing in the outer suburbs. On average car travel is three times higher in outer suburbs compared to the central city.

Public transport, walking and cycling

- The number of people commuting to the city by public transport has grown by 45% since 2000. Car commuting has dropped from 50.5% of commutes in 2001 to 43.7% of commutes in 2013.
- Over 80,000 people per day commute to the central city from elsewhere in the city and the wider Wellington region. Both population and employment growth mean that there will be an increasing number of people who need to travel to, within, and from the central city each day.
- There are currently about 50,000 people living within half an hour walk of the central city. This suggests that there is potential for even more walking if supported by adequate infrastructure and amenity.
- The number of people commuting by bike has nearly tripled since 2000, but there is still an unmet demand for cycling primarily due to lack of infrastructure. Lack of safe cycling infrastructure is the key barrier to people cycling more often.
- Growth needs to be accompanied by safe and attractive streets to support and promote walking and cycling. Streetscape improvements can also provide environmental quality and stormwater management improvement opportunities and contribute to the character of the city and our 'green' credentials.
- Land transport accounts for 35% of the city's greenhouse gas emissions. Changes in the vehicle fleet and technological change will bring benefits from reduced emissions. Further reductions can be achieved through reducing the need to travel by locating residents within walking or cycling distance of work and local services; and by encouraging the uptake of walking, cycling and public transport through improvements to these options.
- There is strong evidence that people who walk and cycle for journeys have better health outcomes than people who do not use those modes, or who use them less frequently. Increased exercise associated with active transport modes also results in improved mental health. Travel through green spaces increases these outcomes even further.

Let's Get Wellington Moving (LGWM)

- LGWM is a joint initiative between WCC, GWRC, and the NZTA. It is focussed on increasing the capacity of the transport system between Ngauranga and the airport. The objectives are to deliver a transport system that: enhances the liveability of the central city; supports growth; reduces reliance on the private vehicle; improves safety for all users; and is adaptable to disruptions and future uncertainty. An announcement is expected in 2019 on central government's investment commitments to the next stage of LGWM.

Three Waters Infrastructure

- There are infrastructure issues for many parts of the City. There will be a capacity tipping point when the network can no longer cope and requires major upgrades to enable new development to take place. Sea level rise is also a factor that impacts on these services and growth potential.
- Greenfield development is easier to design and manage than infill development. Infill developments are more difficult as they connect to existing services and rely on there being spare capacity in the network for the additional load.
- There will not always be a feasible solution for all Three Waters constraints. While a solution may be possible, it may not be affordable. Solutions are therefore likely to be a combination of engineering solutions, changes in behaviour, and more modern sustainable approaches such as Water Sensitive Urban Design.

Water supply

- Water for Wellington City is sourced from three primary sources: the headwaters of the Hutt River; the Wainuiomata and Orongorongo rivers; and the Waiwhetu aquifer.
- Specific to the implications for growth, the ability to take water from these rivers is limited by consents that require minimum flows to be maintained so that the ecological health of rivers is sustained. Water extracted from the Waiwhetu aquifer is also limited by consents which are intended to minimise salt water intrusion risks, as the aquifer extends beneath the harbour.
- Three main problems are that: 1) The demand for water will exceed supply by 2040. 2) The network is old and vulnerable to earthquakes and the risk of contamination and 3) There may be less water available in the future for us to use.
- Interventions will be required across all three problem areas to reduce water use and water loss. A programme of works to ensure a sustainable water supply is critical to a growing population. Additional land may be required for new infrastructure.

Wastewater

- Wastewater needs to be treated and disposed in an appropriate way to minimise risks to human and environmental health.
- Key problems are that many parts of the network:
 - have limited capacity for additional flows from new development (the Karori wastewater treatment plant is already at capacity);
 - are in aging and declining condition; and

- are prone to overflows of untreated wastewater, which is worsened by cross connections where stormwater downpipes are incorrectly connected into the wastewater system.
 - The topography and geography of the city means wastewater/stormwater over flows often end up in streams and the harbour with environmental impacts and impacts on the recreation value of those spaces.
- The NPS-Freshwater Management and the Proposed Natural Resources Plan place increased protection on the water quality of streams and harbours from the adverse effects of wastewater overflows, so Council must take action, including increased investment, to restrict or better manage overflows of untreated wastewater.

Stormwater

- The stormwater network comprises pipes and channels across the region which discharges into open drains, watercourses, and the harbour. Preventing buildings and land use from impeding overland flow paths and storage areas is important for managing flows and protecting people and property.
- Much of the network has been designed to carry only low to medium intensity rainfall events. However, increasing storm intensities and predicted sea level rise and will cause more frequent flooding and will impact on the ability of stormwater to freely discharge into coastal receiving waters.
- Many of the streams and flow paths are part of public parks and open spaces. Storm events and stormwater flow is increasingly impacting the natural environment and recreation facilities in these areas.
- Stormwater quality can be harmful to the receiving waters as rainfall picks up sediment, contaminants, petrochemicals and metals such as zinc, copper or lead. Stormwater from greenfield development in particular can result in excessive discharges of sediment.
- Legislation influences the way we manage stormwater. The NPS-Freshwater Management and Proposed Natural Resources Plan (PNRP) have introduced new and more stringent provisions for the protection of water quality, including new consent requirements for all stormwater discharges.
- Future development will therefore need to be managed so that it doesn't increase stormwater volumes where there is insufficient capacity, and also that it does not result in further degradation of water quality. However, regulatory tools that require water sensitive urban design for new development are currently lacking.

Problem areas

- There are known issues for water supply, wastewater or stormwater services in the areas of Tawa, Northern Wellington, Woodridge, Karori, Khandallah, and Island Bay and the Central City. Future growth in these areas will need to be supported by sufficient funding to rectify these pressure points.
- Areas that have been identified for potential intensification where there are known infrastructure issues are:
 - Upper Stebbings: the Lower Stebbings network was designed by the developer to only support the Lower Stebbings area. Should a zoning change occur to enable the development of Upper Stebbings then a developer agreement will likely be required to service the whole area.
 - Kilbirnie: is low lying and susceptible to flooding, particularly during high tide periods. Sea level rise is a key factor limiting the ability of growth here. There is currently only a medium 20 year solution / investment in stormwater management for Kilbirnie.
 - Johnsonville: has low lying areas that are susceptible to flooding. There are also localised wastewater constraints in the sewer network.
 - CBD/Aro St/Newtown: are susceptible to flooding. There are also wastewater constraints but some of these will be mitigated due to current and planned projects. In the longer term, sea level rise will restrict the ability to drain flood water in the low lying CBD. Stormwater planning will be a critical issue to enable growth in this area.

Open Space and Natural Environment

- Wellington has a strong natural environment setting that is important to the character and identity of the city and the quality of life for the people who live and work in Wellington.
- As the population increases there will be less private open space and increased pressure on existing open spaces. We need to establish what types of open space are needed and where, and what areas need protection from the impacts of development. The existing parks will need to be developed and improved over time to meet changing urban form and the needs of the growing communities. Maintenance of parks will increase with increased use.
- Purchase of new land for open space is expensive and difficult. For recreation, improved management, maintenance and redevelopment of existing parks can cater for increased recreational use. There will be a range of options for provision of open space and recreation to a

growing population that will include a mix of new land and facilities, redevelopment of old, and increasing levels of maintenance and provision of programmes.

- A well planned and managed multipurpose open space network can support higher density living as well as contributing to multiple city-wide benefits: biodiversity, recreation and leisure, resilience, health and wellbeing, and sense of place and identity.
- There is an opportunity to better integrate parks and infrastructure planning to provide win-win responses to growth and development, such as the incorporation of 'green infrastructure' with new transport infrastructure e.g. tree planting in connection with new cycle ways with multiple benefits relating to more attractive and usable transport infrastructure; better health outcomes; sustainability benefits; increased biodiversity and habitat; creating more food resilience for the city through urban growing spaces; and more permeable surfaces to help manage stormwater and water quality.
- Road reserve represents one of very few options to find Council owned and underutilised land. From a parks and open spaces planning perspective, road reserve provides a land area for alternative uses that can achieve outcomes such as habitat and biodiversity enhancement, stormwater management, city amenity and character, and social and health outcomes for people who use these spaces.
- Wellington has yet to see green roof technology become standard practice and this could provide part of the solution to the provision of green open space. Climatic conditions in Wellington will be a consideration in application of these in a local setting.

Climate Change

- There is a global commitment to avoiding more than 2 degrees celsius of climate warming. However, we are currently tracking for 3-4 degree Celsius rise by the end of the century.
- In the absence of substantial change there will be the continued impacts of climate change - sea level rise, drought, more severe rainfall and storm events, and potential biodiversity impacts that have not been fully explored.
- Half of New Zealand's emissions come from the agricultural sector. For Wellington, around 60% of the emissions are from transport (about a third is from the airport but a large proportion is from road transport). The other major contributor is energy use from buildings.

- There are benefits from the compact city approach to reduce emissions: less journeys to work by car; and more apartments and townhouses, which have lower energy use and generate less carbon than standalone houses.
- The inner residential area has some of the lowest-carbon areas of the city to live and therefore the greatest potential for growth that limits carbon output. However, further development in these areas is limited by the blanket character protection. The challenge is to maintain important character while enabling new development in a lower-carbon living environment.
- From a sustainable transport point of view, it would also make sense to remove the minimum parking requirement to create a more permissive development environment that does not focus on the car.
- Wellington City Council has a Low Carbon Capital Plan that expires in June. Council will soon be consulting on 'First to Zero - Wellington's blueprint for a Zero Carbon Capital'. This provides the opportunity to invite the community to have a conversation about climate issues, the plan's goals and activities, and the challenges we'll face going forward. The Planning for Growth project is closely linked to the First to Zero consultation and its outcomes.

Urban Design

- Urban design is not an outcome as compared to the other topic subjects such as infrastructure and housing. It is a process, with the desired outcome being good quality environments for people to live, work and play.
- Urban design is now a well-established and accepted part of the development process in Wellington.
- Key issues for the delivery of good urban design and quality outcomes include:
 - Ensuring that the design of our built form and public space recognise and respond to what makes Wellington unique.
 - Creating adaptable buildings and spaces that enable change and support variety, vibrancy, chance exchange, safety and choice.
 - A refocus for our streets from movement to places.
 - Sustainability needs to be at the heart of design, for example incorporating water sensitive design and opportunities to green the city wherever possible.

- Good urban design can offer significant benefits that cross over many of the Planning for Growth topic areas:
 - It can help to support and enable higher density development.
 - Increase the economic competitiveness of cities by making them more efficient places to work and do business in.
 - Provide safer and more socially inclusive cities, with less crime and other social problems.
 - Help to provide healthier homes that are warmer and more useable, and healthier lifestyles through areas being more attractive for walking and cycling, and for health and leisure.
 - Address issues such as climate change and biodiversity through more efficient use of resources like land and water.
 - Te Aranga design principles are a set of outcome-based principles founded on Māori cultural values. These values provide a means of asserting identity of self and place, and enhancing the overall presence, visibility and participation of mana whenua in the design of the physical realm.

Heritage

- Wellington’s heritage, along with its cityscapes and landscapes, people and built form are all part of what defines its identity, makes the city unique, and contributes to our reputation as one of the world’s most liveable cities. Wellingtonians place high value on the contribution that heritage makes to the city.
- Wellington City Council already recognises the public good value of heritage and character through its protection in the District Plan and through incentives for conservation and earthquake strengthening.
- Many of our heritage buildings have national and international significance, while others have local significance. There are:
 - Over 600 protected heritage buildings in the District Plan;
 - A further 35 heritage areas, 144 Māori significant sites, 248 contributing buildings in heritage areas and 44 objects are protected in the District Plan;
 - 8 inner city suburbs exhibiting historic patterns of settlement are special character areas in the District Plan; and

- 103 places in Wellington City have Heritage New Zealand Category 1 designations.
- The identification, protection and appropriate reuse of our built heritage will be crucial to preserving the city's identity and quality of life. Rather than being a barrier to change, built heritage should be considered as an asset that can support a broad set of outcomes for the city's future.
- Features of the natural environment are also important to the heritage of the city. Examples include the Wellington Town Belt, Otari-Wilton's Bush, and numerous heritage trees around the city.
- Key considerations for managing Wellington's heritage in light of growth pressures include the following:
 - Heritage buildings are unique and any loss of heritage is irreversible. Meeting future growth pressures should not compromise the ability of future generations to enjoy the heritage benefits we enjoy.
 - Heritage has statutory recognition as one of the country's nationally significant natural and physical resources. Council has a statutory obligation to protect this heritage.
 - Heritage is a broad concept that encompasses buildings, areas, contexts and curtilage, korero, wāhi tapu, intangible heritage, story-telling, future heritage, archaeology and cultural landscapes.
 - Providing for the kaitiakitanga of Māori heritage and values through engagement and partnerships with tangata whenua is crucial to our development as an inclusive city.
 - Wellington's heritage creates social, economic, cultural and environmental value. Heritage buildings and areas perform a unique role in underpinning well connected and strong communities. For example, the Cuba Street heritage area represents a model of economic revival based on the adaptive reuse of heritage buildings for niche businesses, innovative start-ups and 'point of difference' economic and visitation attractors.
 - Denser urban growth needs to focus on the quality of the built environment and not just its capacity. Good urban design is consistent with principles of heritage protection and adaptive reuse.
 - Heritage is not incompatible with higher density housing. Heritage can evolve and change to meet current needs such as demand for higher density living and new requirements for

seismic strengthening. The current District Plan provides for the retention of public heritage values, but also recognises the need for heritage to change and evolve.

- Retaining and reusing heritage items makes good environmental sense. Building reuse almost always offers environmental savings over demolition and new construction.

Community facilities and systems

- Community spaces and facilities are crucial in ensuring that our communities are more connected, inclusive and resilient. There is a city wide network of 25 centres across Wellington. Many old community buildings are not fit for purpose.
- There are also a number of privately owned and managed community spaces and facilities e.g. private schools, churches and sports clubs.
- Further intensification will increase pressures on these spaces and facilities, particularly in the central city where intensification has already put pressure on limited spaces.
- We need to look at new ways of providing community spaces and facilities. This could include exploring opportunities for shared public and private use, and innovative solutions to enable more flexible multi-use spaces and buildings. Public space plays a key role in high quality city living environments.
- Wellington has a very high level of library usage per capita compared to the rest of New Zealand. Some facilities are underutilised for their size (e.g. Wadestown Library). Other facilities are heavily used for their size (Island Bay Library).
- The Central Library is undersized for the current population base. It also requires earthquake remediation work.
- Over the last 30 years, the business of libraries (and community facilities generally) has mirrored changes in society, technology and the economy, resulting in changing customer expectations and multiple new lines of business e.g. wifi provision. These changes impact how we provide services across the city.
- In the context of Planning for Growth, this particularly impacts the suitability of our current physical buildings and supporting infrastructure (for example, overall footprint and capacity, flexible spaces, acoustics, accessibility). This also relates to other community facilities such as community centres and recreation centres.

- A new Library Strategic Plan is forthcoming which will look to identify priorities. While libraries are generally within the definition of “core” services under the Local Government Act 2002, there are no statutory requirements around the buildings or provision of services, except to provide free membership.
- Public transport routes and any major changes to public transport are likely to have flow on effects to how Wellingtonians use libraries and other community facilities, and which ones they use.
- The locations and types of libraries the city needs depends on and aligns with the goals for a resilient, inclusive, compact and connected city.
- There is an opportunity to consider how provision of libraries, community centres and recreation facilities can overlap and complement to provide a network of spaces that meet changing community needs.
- The vast majority of the city’s food is grown outside the city limits. Wellington is therefore vulnerable to loss of food supply due to factors such as its earthquake risk and geography. The Planning for Growth process provides an opportunity to explore options for incorporating a more resilient and sustainable food system in Wellington. The benefits of a sustainable and resilient food system for Wellington include:
 - Community resilience: a sustainable and resilient food system enhances community resilience by providing a buffer in the case of an emergency, and fostering independence and community connectedness. Currently Wellington’s food wholesalers are clustered at Granada North. However, over half of the city’s population (100,000) lies south east of the Wellington fault line and could potentially be cut off from this area in a major earthquake.
 - Increased access to healthy and affordable food for all Wellingtonians: the cost of healthy food has continued to increase in Wellington, which puts greater pressure on low income households to choose cheaper less nutritious options. “Food deserts” have been identified in many cities around the world as places of lower access to fresh healthy food (such as fresh veggie markets), and conversely “food swamps” are oversaturated by less healthy options such as fast food outlets.
 - Reducing the environmental impacts of the food system: the food system is a significant contributor to New Zealand’s carbon footprint. The conventional production of food is also associated with a range of adverse environmental outcomes including pollution of waterways, reliance on phosphate fertilisers, deforestation, loss of habitat, and biodiversity. It is estimated that we waste a third of all the food we produce.

- Greater intensification consistent with Wellington’s compact form provides opportunities for more efficient food distribution, and a growth pattern which facilitates more growing and processing of food in the city reduces carbon emissions associated with transportation of food.

- Food is important to Wellington’s culture and economy: part of Wellington’s “Coolest Little Capital” reputation stems from its vibrant scene of cafes and restaurants, craft breweries, and coffee roasteries (many of which are demonstrating a growing commitment to sustainability). There are also strong mana whenua traditions around food as well as other cultures that have made Wellington their home.

- A sustainable and resilient food system for Wellington requires:
 - Easy access to fresh, healthy affordable food for all residents.
 - Shorter or more carefully designed food supplychains.
 - Opportunities for residents to connect with the food cycle, such as multipurpose communal “Social Food Spaces” in proximity to where people live.

APPENDIX B

TABLE OF OVERLAPPING ISSUES, OPPORTUNITIES AND POTENTIAL CONFLICTS

Issues	Overlaps, Opportunities and Potential Conflicts
<p>➤ Climate change and resilience overlaps all areas</p>	<ul style="list-style-type: none"> ➤ Providing for higher densities in appropriate locations and facilitating the uptake of more sustainable modes of transport (walking, cycling, public transport, electric cars) will reduce car travel and decrease greenhouse gas emissions. ➤ A more compact city means more apartments and townhouses with less energy use compared to standalone dwellings. ➤ A more sustainable food system in the city provides co-benefits around climate mitigation, allowing for more water sensitive design, increased health and wellbeing, and enhanced resilience. ➤ Retaining and reusing heritage items makes good environmental sense. Building reuse almost always offers environmental savings over demolition and new construction. ➤ The existing and future parks and open spaces network provides opportunities to manage the effects of climate change. ➤ An ecosystem services approach to urban design and planning will result in more resilient infrastructure and communities.
<p>➤ Improved transport options = better outcomes</p>	<ul style="list-style-type: none"> ➤ Reducing the volume of vehicular traffic and reallocating road space from vehicles to more pedestrian friendly spaces will enhance the amenity and vibrancy of the city.

<p>➤ Competing needs will lead to increased pressures on existing and sometimes already limited space</p>	<ul style="list-style-type: none"> ➤ Intensification will increase the range of demands on already limited services and spaces. For example: ➤ Intensification will place more pressure on public open spaces. There will be a range of competing demands on these spaces such as to provide: passive and active recreation opportunities; sustainable food opportunities; better water and stormwater management; biodiversity; and places of refuge in emergencies. These activities can also be mutually supporting if the spaces are appropriately located and designed and of sufficient size. There is a limit to the number of functions any one area can have before the values become compromised. Not all public park space for example can accommodate stormwater management infrastructure. There needs to be careful consideration of each space with no assumptions made. ➤ From a sustainable transport point of view, it is preferable to remove minimum parking requirements for some areas of the city. This is likely to increase the demand for on-street parking, which is in conflict with the desire to release more road reserve for open space, sustainable water management, amenity outcomes and walking, cycling and community gathering space.
<p>➤ Competing needs for funding</p>	<ul style="list-style-type: none"> ➤ Planning for Growth and the Spatial Plan will enable integrated planning and decision making to identify pressure points and inform investment decisions. It can also assist in identifying creative solutions. ➤ Investment in the public realm (streetscape, parks and open space, community facilities) will need to occur alongside increased housing density and population growth. There are three factors to consider; increased provision, higher quality spaces and places, and increased maintenance costs.

<p>➤ Need for more housing and heritage / character protection</p>	<ul style="list-style-type: none"> ➤ Integrating higher density housing into heritage and character areas is a key planning for growth challenge. ➤ We have a statutory obligation to protect heritage. However, the need to provide more land for housing and for a more resilient City will place the inner character areas under pressure, and a re-evaluation of the extent of the character overlays will need to be undertaken.
<p>➤ Intensification and quality urban design outcomes</p>	<ul style="list-style-type: none"> ➤ There have been concerns in relation to the quality of some existing apartment and infill developments. The potential removal / reduction of infill planning controls along with increased apartment development and infill housing will need to be balanced with some minimum standards of amenity and quality.

APPENDIX C

PLANNING FOR GROWTH – THE FACTS AND FIGURES

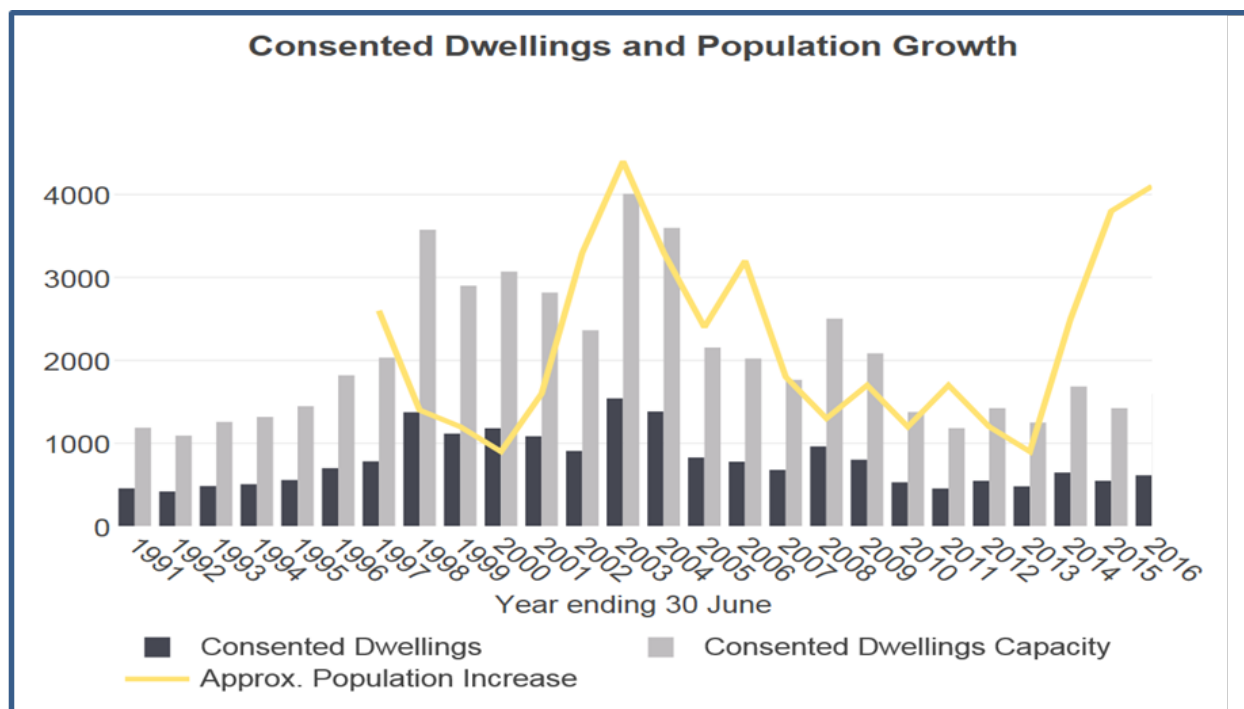
OUR POPULATION IS GROWING AND WE HAVE A HOUSING SHORTAGE

- The Wellington Region is forecast to grow by over 96,000 residents to around 583,000 by 2043.
- The fastest growing part of the region is Wellington City. Wellington City's population is expected to grow by around 53,000 by 2043 under a medium growth scenario and up to 81,000 under a high growth scenario.
- Population growth in Wellington has outstripped the number of dwellings being consented each year since 2013 and this trend is set to continue. Wellington will have shortfall of up to 15,000 homes based on the high growth forecast.

Population forecast in Wellington Region 2013 - 2043

Area	Population 2043 (forecast)	Pop increase 2013-2043	% increase 2013-43	% of region's growth
Wellington City	250,000	52,500	27%	55%
Hutt City	109,900	8,685	9%	9%
Porirua City	64,800	11,143	21%	12%
Kapiti Coast	63,700	12,986	26%	13%
Upper Hutt City	49,900	8,604	21%	9%
Wairarapa	44,727	2,353	6%	2%
Region	583,044	96,270	20%	100%

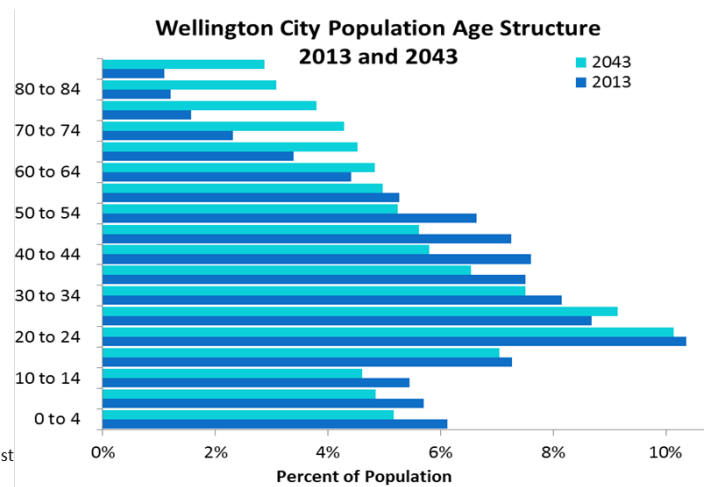
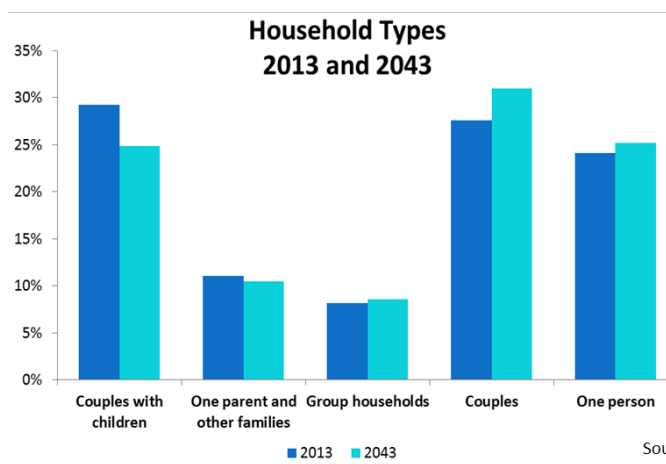
Source: ID Forecast



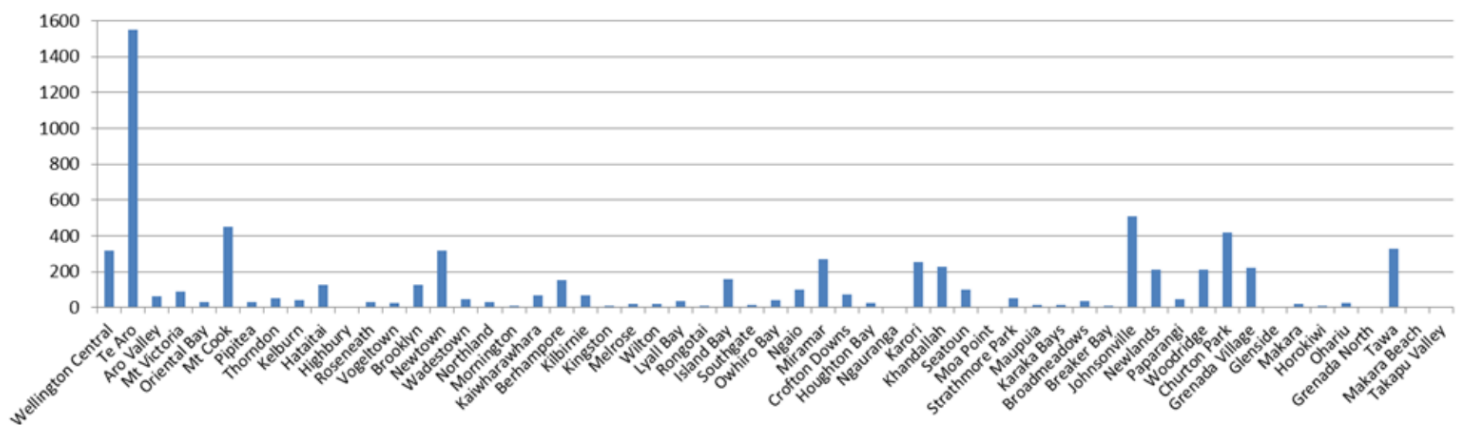
Source: WCC, using Statistics NZ data

OUR POPULATION IS CHANGING AND GETTING OLDER

- The city's population is ageing and more people are living alone.
- By 2043 nearly 60% of all households will be singles and couples without children.
- We will require different housing to the current predominantly family housingstock.
- Smaller households are expected to make up 70% of our household growth to 2043.
- The trend for more apartment development in the central city is expected to continue.
- TeAro has been growing at over three times the rate of the next fastest growing suburbs.



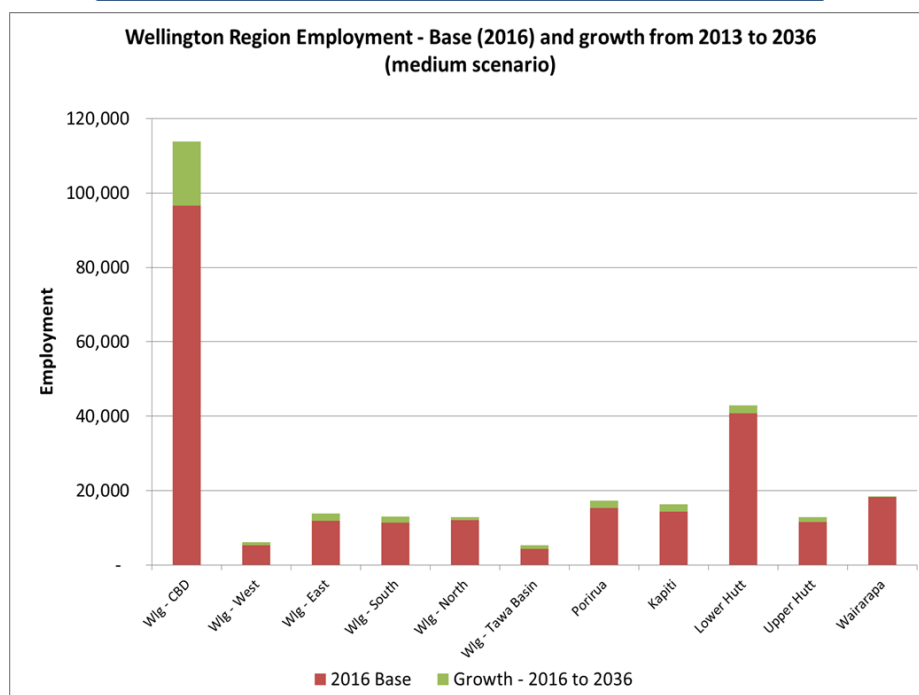
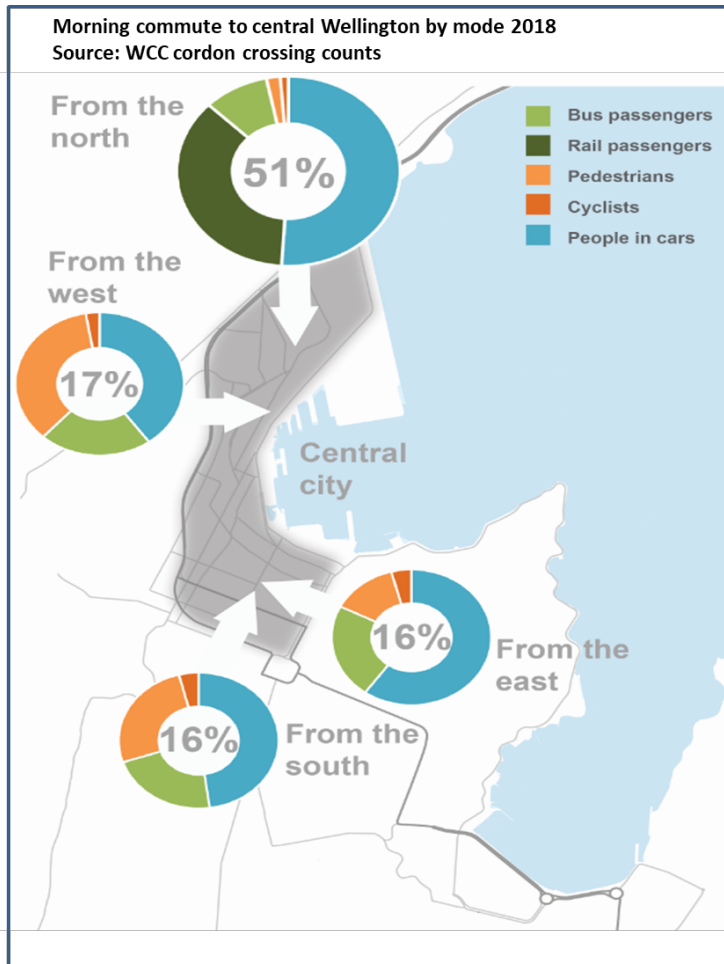
Consented Dwellings by Suburb (2006 - 2016)



Source: WCC, using Statistics NZ data

POPULATION AND EMPLOYMENT GROWTH = MORE PEOPLE TRAVELLING TO, WITHIN, AND FROM THE CITY EACH DAY

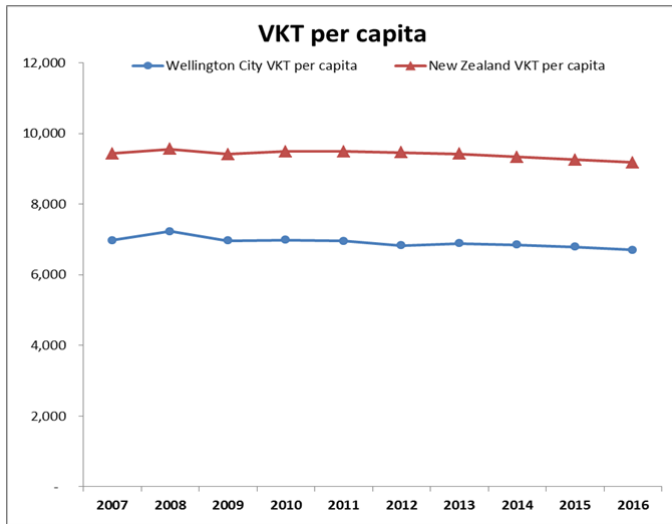
- Employment is concentrated in the central city. Over 40% of the region’s jobs and 63% of the city’s jobs are located in the central city.
- Currently over 80,000 people per day commute to the central city from elsewhere in the city and the wider Wellington region.
- Projections show the regional employment growing by between 15% and 20% over the next 30 years and that between 55% and 60% of future growth in employment is likely to be located in the central city.
- The number of jobs is likely to increase from the current 94,000 to between 116,000 and 125,000 over the next 30 years.



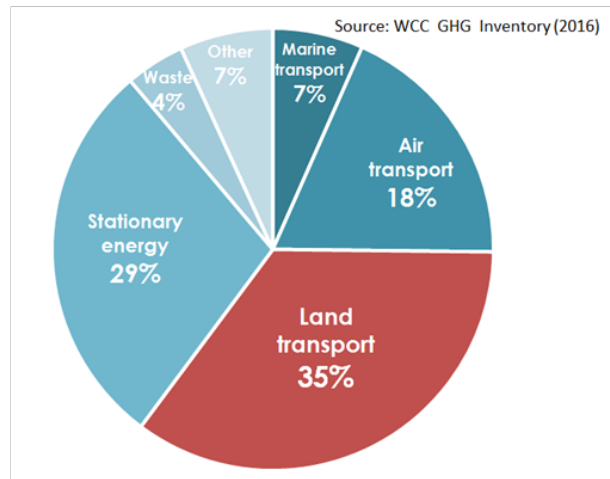
WELLINGTON HAS A STRONG CULTURE OF WALKING, CYCLING, PUBLIC TRANSPORT USE AND A LEGACY OF A COMPACT URBAN FORM

- Wellingtonians travel much less by car than the average New Zealander.
- On average car travel is three times higher in outer suburbs compared to the central city. Car ownership is highest and growing in the outersuburbs.
- A growth strategy that directs new development away from the central city will lead to more pressure on the transport network.
- Around a third of Wellington’s greenhouse gas emissions are from road transport.

Vehicle kilometres travelled 2007 to 2016

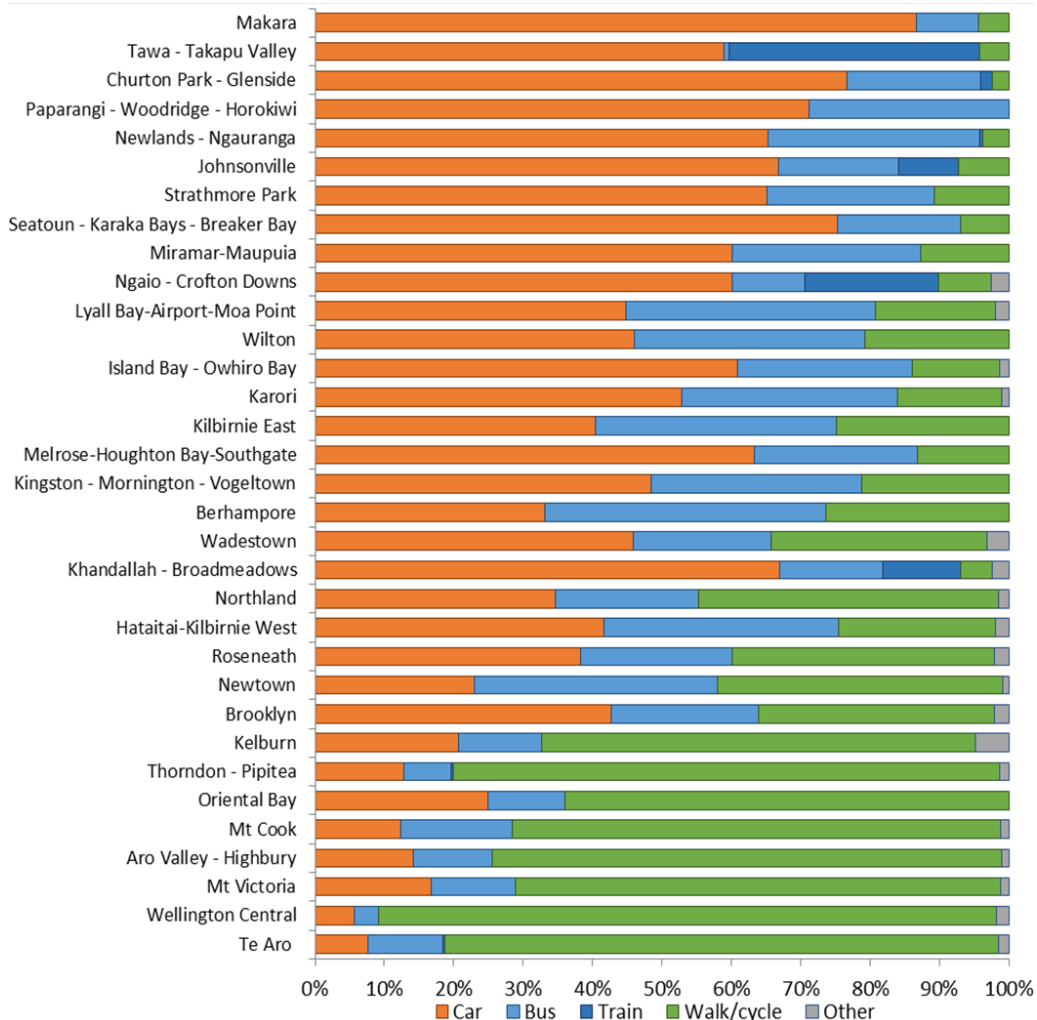


Wellington City greenhouse gas emissions

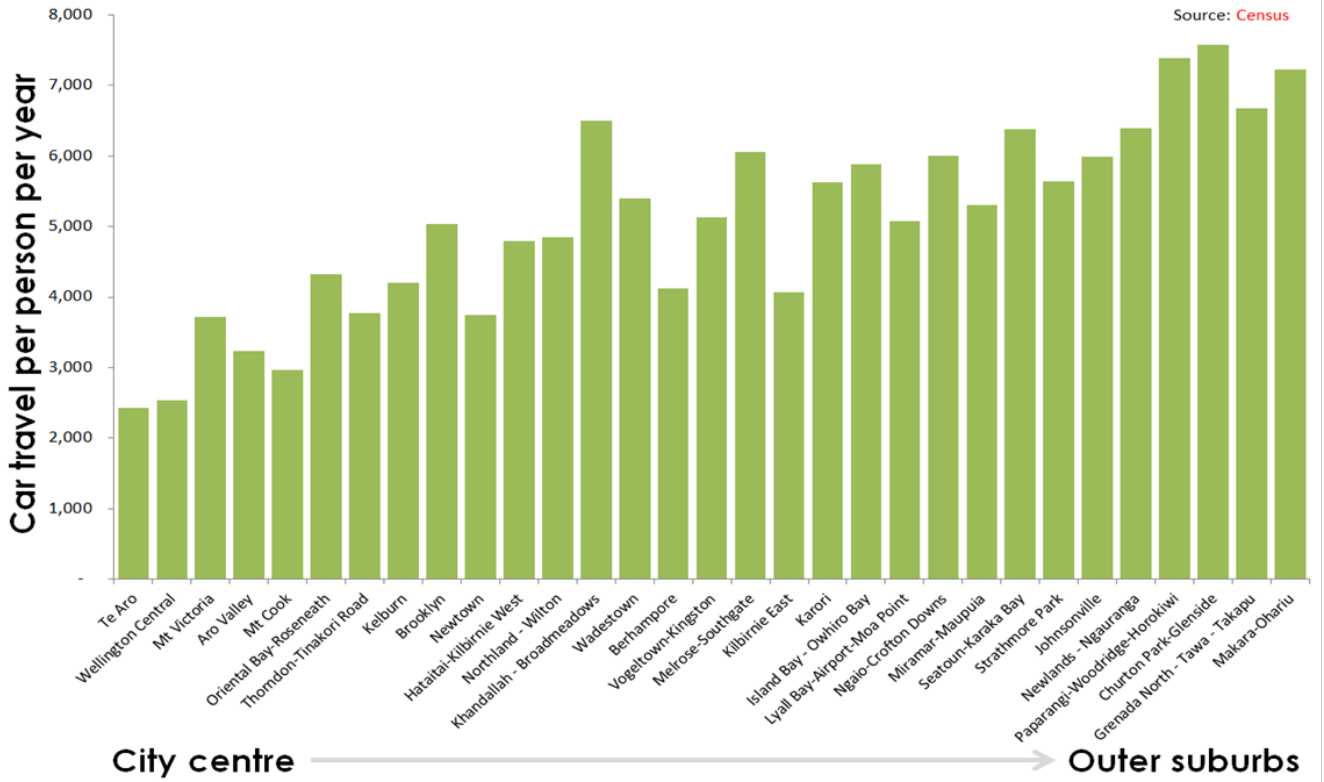


Commute mode by distance to CBD

Source: Census

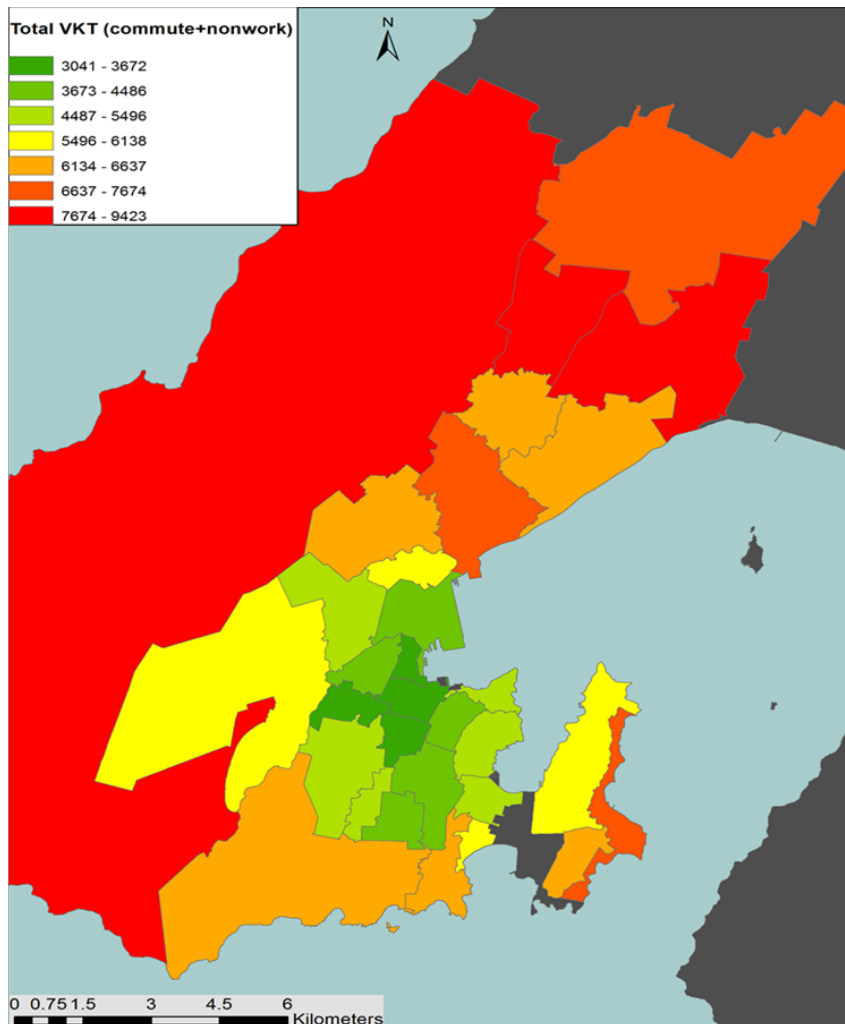


Individual car travel by distance to CBD



Individual car travel by distance to CBD

VKT = vehicle kilometres travelled



Source: Census

