



Wellington Strategic Spatial View

An NZ Transport Agency view on Wellington's future growth and development

March 2024

Disclaimer

NZ Transport Agency has endeavoured to ensure material in this document is technically accurate and reflects legal requirements. However, the document does not override governing legislation. NZ Transport Agency does not accept liability for any consequences arising from the use of this document. If the user of this document is unsure whether the material is correct, they should refer directly to the relevant legislation and contact NZ Transport Agency.

This document is intended for discussion purposes only and should not be mistaken for government policy.

Contents

EXECUTIVE SUMMARY	4
Context	4
Recent influences and trends affecting Wellington’s growth.....	4
Our view of Wellington’s future growth	6
Actions for NZ Transport Agency	6
Introduction	7
Background	7
Our role in Wellington’s growth and urban development	7
Geography.....	9
Wellington Regional Growth Framework.....	11
Council growth strategies and spatial plans.....	13
Resource Management Plans	13
Wellington’s Growth Models.....	13
Summary	17
Key Trends and Influences	18
Introduction.....	18
Recent growth trends	18
COVID-19 impacts	29
New legislation and policy shifts	31
A more proactive central and local government role in urban development.....	33
Our view of Wellington’s future growth.....	37
Strategic context and summary.....	37
Uncertainty about how fast Wellington will grow	38
Wellington could grow in a variety of ways and locations	40
Support more growth in accessible, central locations	42
Clear ‘all of region’ prioritisation and new approaches are needed to achieve regional goals .	45
Recommended actions.....	47
Action 1: Collaborate with partners to update growth strategies and align urban development outcomes	48
Action 2: Reduce risk from growth-related investments	49
Action 3: Improve growth monitoring and forecasting capability.....	50
Figures	51
References and Links	54

Executive Summary

Context

The purpose of the Wellington Strategic Spatial View is to provide a clear and coherent view of the Wellington Region's¹ future growth and development that helps to inform and guide NZ Transport Agency decision making and future work programmes. This view ensures the work we do, both collaboratively with our co-investment partners and as an agency, is well-informed, up-to-date, and takes us towards the broader transport and urban development goals we are seeking to achieve.

A rapidly changing context for growth and urban development in Wellington over the past two to three years means future growth may happen differently to what is envisaged by current forecasts and Wellington's long-term growth plans, including the Wellington Regional Growth Framework (WRGF) and council growth strategies and spatial plans.

As one of New Zealand's largest urban areas, the way Wellington grows and develops has national implications for achieving outcomes such as economic prosperity, improving housing supply, and emissions reduction. While NZ Transport Agency is typically not the primary urban development decision maker, our work can have significant influence across central and local government, and the decisions we make often influence urban development and form. NZ Transport Agency also seeks to support and enable partners to achieve urban form and transport outcomes where these are aligned with our strategic priorities.

Recent influences and trends affecting Wellington's growth

There are several key influences and trends affecting Wellington's growth, resulting in growth strategies and forecasts which may need to be reconsidered if they are to remain fit for purpose.

1. Changes to the planning system to make it more enabling of urban development and responsive to demand, as well as strengthening protection for the natural environment.
2. Changes in the rate of population growth, housing consenting and construction.
 - *Significant fluctuation in population growth.* The area has experienced a period of high growth between 2014 and 2020 which has since decreased rapidly, with the area having very low growth in 2021 and 2022. A significant increase for immigration across the country in 2023 has led to a period of relatively high population growth.

¹ For the purpose of the WSSV the Wellington Region refers to the Wellington Region plus Horowhenua District, which is consistent with the geographic extent to the Wellington Regional Growth Framework

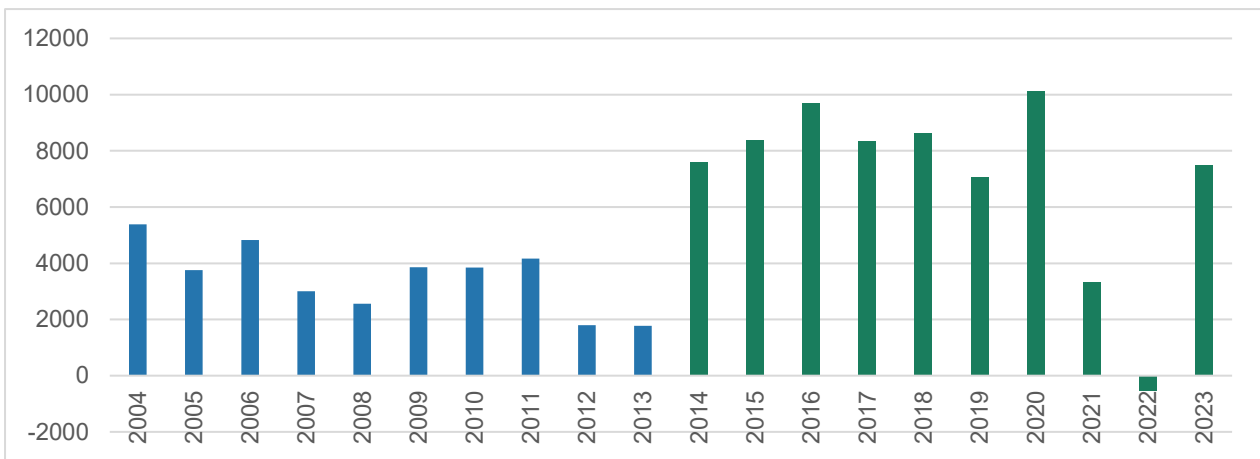


Figure 1: WSSV area annual population change 2002 – 2022 (to 30 June). Source: Stats NZ

- **Total housing construction has ramped up significantly in recent years.** In 2021 over 3500 building consents were granted for new dwellings, approximately double the number consented five years ago. Consenting activity has declined over the past 12 months but remains high relative to long-term historic levels.
 - **The impacts of the COVID-19 pandemic.** The long-lasting impacts for growth and travel behaviour remain uncertain but could drive future preferences in a way that hasn't been previously seen.
3. A lower share of the region's growth occurring in Wellington City and more in other council areas.
 - The percentage of the region's growth occurring in Wellington City has fallen to just over a quarter over the past decade compared to over 50% in the decade before.
 4. An ongoing shift to higher density types of housing, particularly townhouses and terraced housing.
 - Attached dwellings became the predominant housing type for the region in 2021. While this trend is expected of development in Wellington City, the increase in townhouses and terraced housing more recently has occurred largely in Lower Hutt.

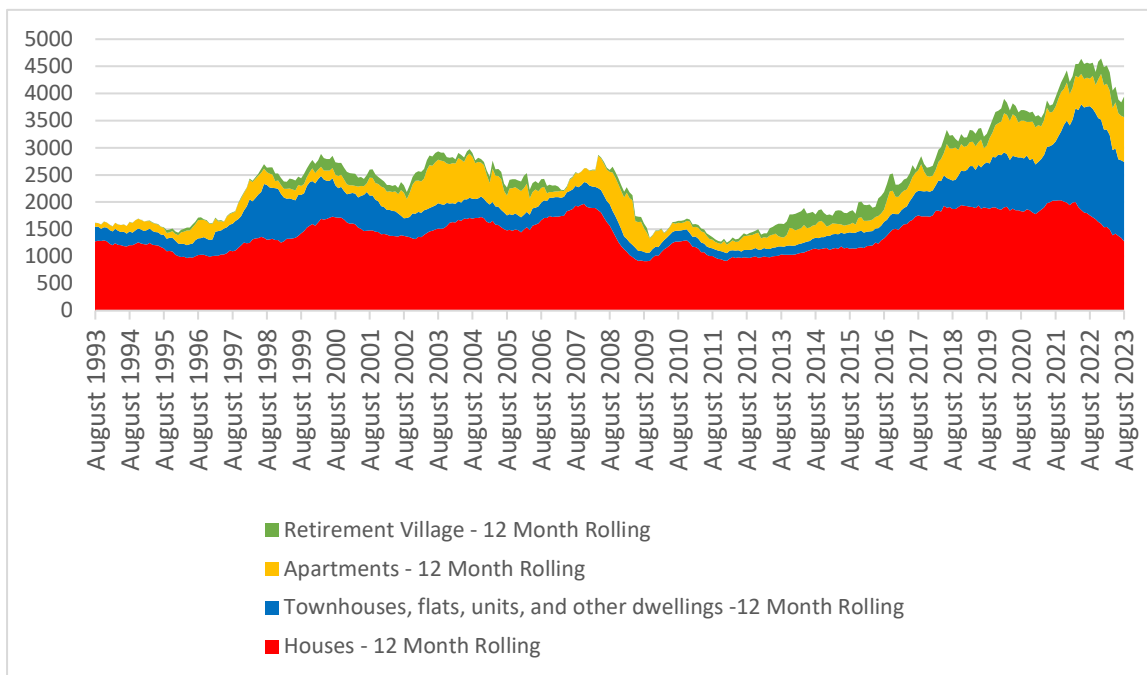


Figure 2: Residential Building Consents by Type, 12 Month Rolling Total 1993-2022. Source: Stats NZ

Our view of Wellington's future growth

Our view considers how we think the current strategies guiding Wellington's growth and urban development **could** change as a result of key trends and influences. We also consider how it **should** change to better align with our urban development role and position:

1. There is uncertainty and differing views about how fast Wellington will grow. We need to plan for a range of possible futures.
2. There is growing uncertainty about where and how growth will occur due to ongoing changes to planning regulation that enable more development across the region, along with changing behaviours and preferences. This creates several planning challenges which we will need to address with our partners.
3. The current trend of growth becoming more dispersed across the region poses challenges for achieving transport outcomes and emission reduction targets. We need to support more growth to occur in accessible locations that have better travel choices.
4. Clear regional alignment and prioritisation is needed to increase confidence to invest in strategic city and region shaping projects. New tools and approaches will be needed to manage the uncertainty about how fast, where, and how Wellington could grow in the future.

Actions for NZ Transport Agency

Changes to how Wellington grows and develops will affect our work programmes, from where we focus our planning effort to investment priorities, how we develop major projects, and how we collaborate with our co-investment partners. We have identified three key areas where we can act to directly respond to the challenges and opportunities outlined in the Wellington Strategic Spatial View.

1. Collaborate with partners to maximise the value of public investment in Wellington. Namely, we will:
 - Influence policy direction to better integrate urban development and transport
 - Support the development and implementation of Wellington's Future Development Strategy
 - Influence ongoing changes to Regional and District Plans
 - Encourage partners more directly involved in urban development to focus their development in highly accessible locations
 - Support the work of the Wellington Regional Leadership Committee.
2. Reduce risk from growth related investments by:
 - Considering a range of possible futures when developing and assessing the benefits of major programmes and projects
 - Shifting to staged programmes of scalable, agile activities
 - Increasing certainty of growth outcomes where we make strategic investments
 - Using the Wellington Strategic Spatial View to inform our investment decisions and encourage greater integration across all transport investment in Wellington.
3. Improve growth monitoring and forecasting capability by:
 - Developing more sophisticated approaches to growth forecasting
 - Improving our understanding of growth trends
 - Clearly identifying locations most suitable for future growth.

Introduction

Background

Wellington has a range of strategies and plans that set direction for how the region should grow. These include the Wellington Regional Growth Framework (WRGF) and draft Future Development Strategy (FDS), which outline at a high level how the region will grow and develop over the next 30 years, alongside growth strategies, spatial plans, and statutory resource management plans for each individual council.

Since the WRGF was published in 2021, there have been significant changes which impact on the way Wellington will and should grow and develop over time. These include both changes to observed growth and development patterns and trends, as well as ongoing changes to government direction.

To effectively participate in the work of the Wellington Regional Leadership Committee (WRLC), and support ongoing decision-making, NZ Transport Agency needs a clear and consistent up-to-date view on Wellington's growth and development. This need led to development of the draft Wellington Strategic Spatial View.

Our role in Wellington's growth and urban development

NZ Transport Agency is interested in urban development because urban form is a key factor that influences transport outcomes such as access, safety, mode shift, and emissions reduction. The layout of urban centres determines the distance people need to travel to access jobs, education and other essential services, and the transport options to make those trips. Improving how we plan land-use with an integrated transport system will make our communities safer and healthier places to live.

A complex range of factors and decisions affect how Wellington grows and develops over time. The location of places where people live, work, shop, get educated, and access recreation and other activities they undertake is the result of thousands of decisions made by different people, businesses and public agencies over very long time periods. Key decisions affecting growth and urban development include:

- Regulatory decisions that manage the scale and type of development and land-use which can occur in different locations. In Wellington these decisions are made by regional, city and district councils through various resource management plans. Urban form and land use regulation is also mandated through policy and legislative frameworks set by Central Government (most notably by the Ministry for the Environment and the Ministry of Housing and Urban Development).
- Investment and design decisions around the provision of infrastructure and services can be a strong driver to enable and shape urban development. These decisions are made by several organisations, including NZ Transport Agency, Greater Wellington Regional Council, District and City Councils, Wellington Water, Kāinga Ora, the Ministries of Health and Education and utility providers.
- The decision to develop land is undertaken by landowners and the development sector. This decision is informed by enabling regulation, infrastructure provision and market factors such as demand and the cost of development. More recently, Kāinga Ora is playing an increasing role in the delivery of urban development.

The NZ Transport Agency Board confirmed our 'role and position' on urban form and development in March 2022:

"We actively support, enable, and encourage quality, mixed-use, compact urban development that efficiently uses land, reduces travel distances, and lowers reliance on private vehicles to enhance people's lives".

NZ Transport Agency is typically not the primary urban development decision-maker, but our work can have significant influence across central and local government. This position will help guide decision-

making (by both ourselves and others) so that urban development better supports achieving the transport outcomes and priorities that have been set for us by government.

Our intervention hierarchy also highlights the important role of land-use planning in achieving key outcomes. The intervention hierarchy is used to shape the range of land-use and transport options available, in terms of their value for money, when responding to a challenge or opportunity. Integrating land-use and transport is the most cost-effective type of intervention for many problems and opportunities, and optimal responses will often include elements from other levels in the hierarchy:

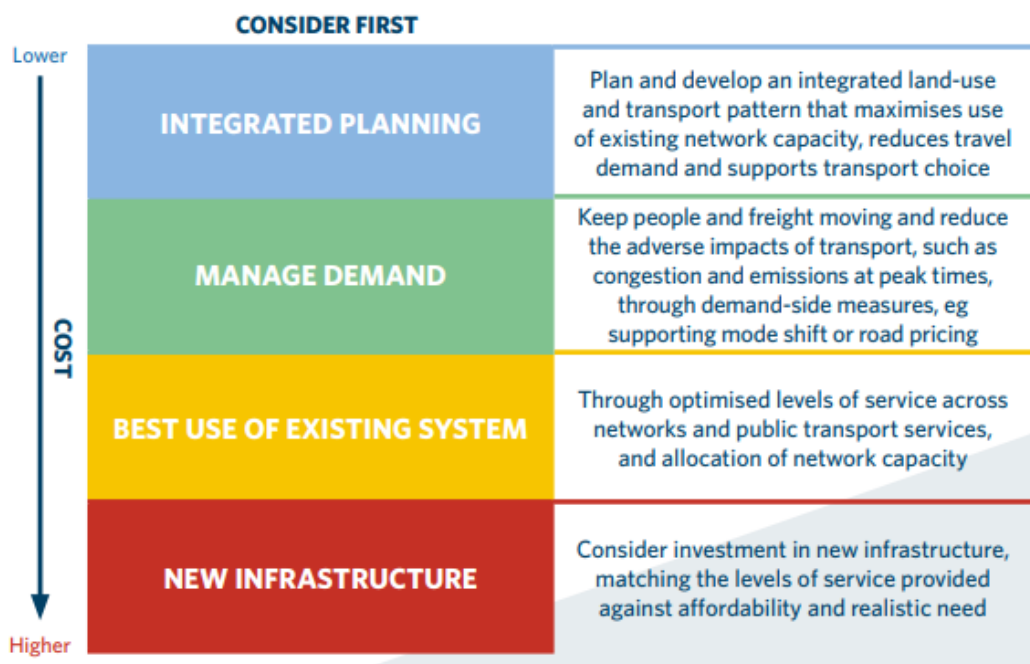


Figure 3 NZ Transport Agency intervention hierarchy from Arataki Version 2. Source: NZ Transport Agency

Having a clear view of Wellington’s future growth, supported by an agreed set of actions, is essential to inform robust NZ Transport Agency decision-making. This helps ensure our input into, and to improve, urban form, as well as transforming urban mobility and emissions reduction.

Arataki

Arataki is the NZ Transport Agency view of how the land transport system needs to function and change over the next 30 years. It outlines where effort should be focused for NZ Transport Agency and the wider transport sector to progress towards achieving Te Manatū Waka Ministry of Transport’s five Transport Outcomes:

- inclusive access
- economic prosperity
- resilience and security
- healthy and safe people
- environmental sustainability.

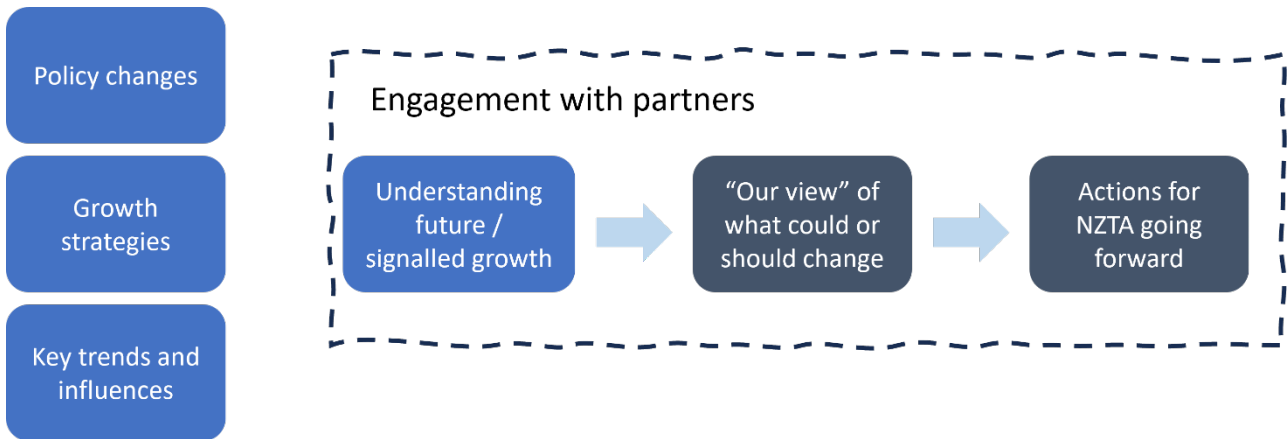
Arataki highlights that many of our transport challenges are inseparable from urban development. The Wellington Strategic Spatial View complements Arataki by providing more in-depth consideration of the urban development context for Wellington and what this could mean for how the land transport system will need to function and change.

Developing the draft Wellington Strategic Spatial View

The purpose of this project is to provide a clear and coherent view of Wellington’s future growth and development that helps to inform and guide NZ Transport Agency decision makers and future work programmes for Wellington.

This view has been created through a collaborative approach with experts and teams across NZ Transport Agency and key central and local government partners in the region. The diagram below outlines at a high-level the key components of this project:

Figure 4 Wellington Strategic Spatial View process diagram methodology



Geography

The area considered in this report is the Wellington Region plus Horowhenua District, which is consistent with the area included in the Wellington Regional Growth Framework and draft Future Development Strategy. Throughout this report, we refer to this area as 'Wellington' or 'the region'.

Other geographies are also used throughout this report to illustrate trends, growth patterns or due to limitations in the data available. These include:

- **Growth Corridors** - groupings of councils representing the growth corridors identified in the WRGF and carried through to the draft FDS. We have split the Eastern Corridor further into the Hutt Valley and Wairarapa due to the different characteristics of these areas.
- **Territorial Authorities** - the eight council areas of the Wellington Region plus Horowhenua District.
- **Tier 1 Urban area** - corresponding with the area defined in the National Policy Statement on Urban Development, comprising of the council areas of Wellington City, Lower Hutt, Upper Hutt, Porirua and Kāpiti Coast.
- **Statistical Area 2, Statistical Area 1** – roughly suburb and block scale areas defined by Statistics New Zealand for which various statistical and census data is available.

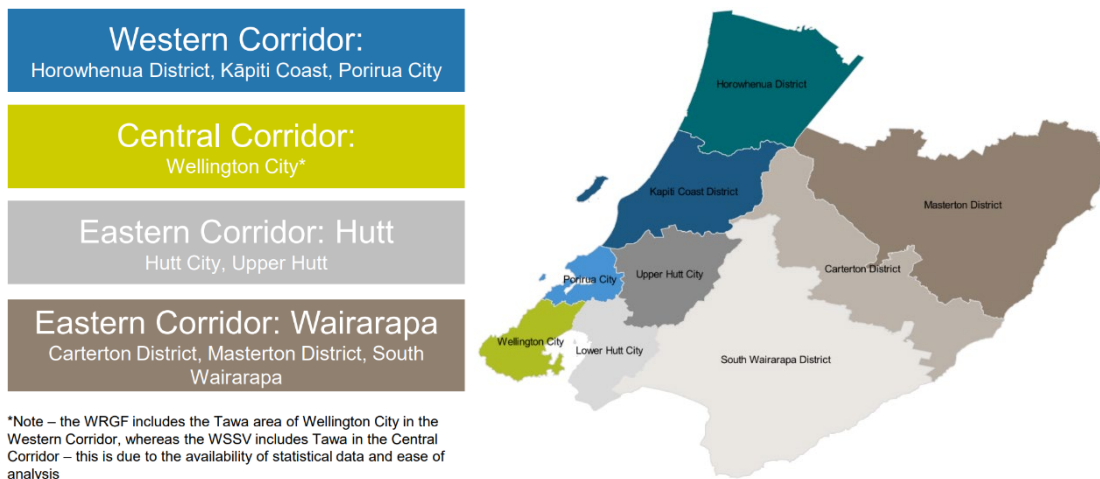


Figure 5: Geographic area included in the WSSV and Growth Framework Corridors

Wellington’s current growth strategies

Numerous council strategies, policies and plans set direction about how future growth in Wellington is planned and delivered. This covers roles and responsibilities under the Local Government Act and the Resource Management Act. The diagram below summarises the different components of this framework and how they work together.

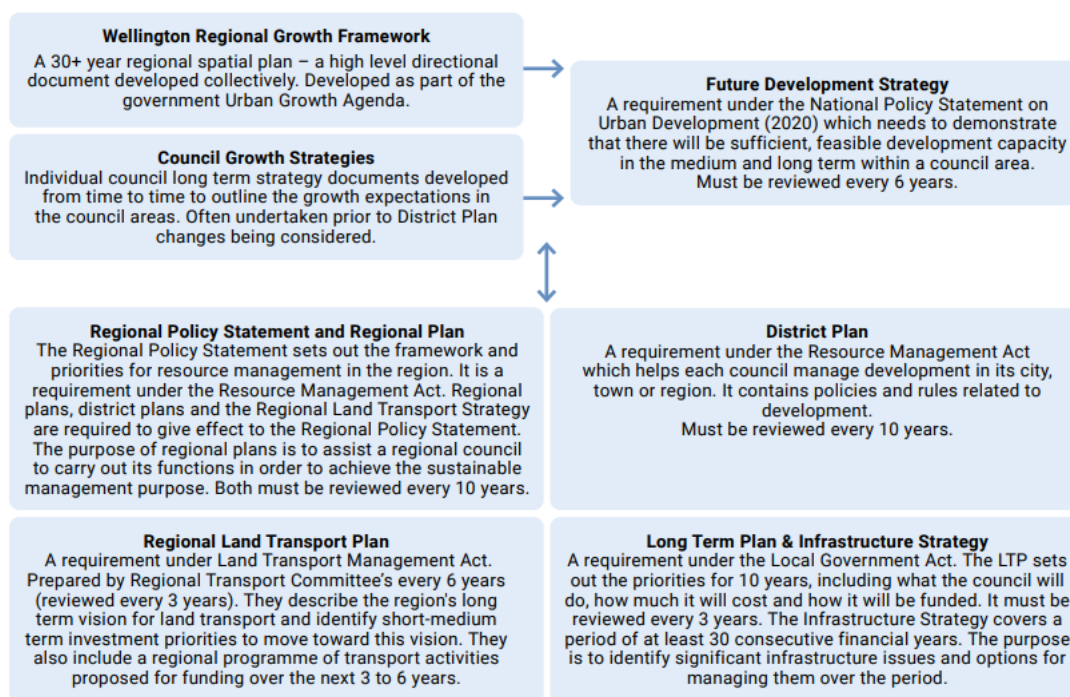


Figure 6: Relationship between Wellingtons growth strategies and council plans. Source: Wellington Regional Growth Framework

Wellington Regional Growth Framework and draft Future Development Strategy

The Wellington Regional Growth Framework (WRGF) is the region's current overarching growth strategy. It outlines a high-level framework for how the region could accommodate an additional 200,000 people and 100,000 jobs over the next 30 years. The WRGF was adopted in June 2021 and is intended to provide government, councils, and iwi in the region with an agreed direction for growth and investment. More recently the FDS, an update of the WRGF, has been drafted and will be finalised in early 2024. The FDS largely builds upon the direction of the WRGF to provide a view of how the region can accommodate population growth, while providing an updated strategic direction and prioritisation framework for urban development.

The FDS promotes a *corridor view* to accommodating future growth (see figure 8) that responds to the topography of Wellington, the current urban form and existing or proposed major transport networks. The strategy anticipates 82% of the region's growth will occur within the existing urban area and 18% will occur in future urban (greenfield) locations. Prioritisation criteria (figure 7) outline where effort to enable growth should be focused, which are defined spatially in the diagram below and maps (see appendix 1).

We will prioritise well designed developments for the urban environments in the region's towns and cities. The order of importance will be:

1. Areas of importance to iwi for development.
2. Areas along strategic public transport network corridors with good access to employment, education and 'active mode connections' such as walking, cycling, scootering and skateboarding.
3. Priority Development Areas.
4. Within existing rural towns around current and proposed public transport nodes and strategic active mode connections
5. Greenfield developments that are well connected to existing urban areas in our towns and cities and can be easily serviced by existing and currently planned infrastructure, including public and active transport modes, and where the locations and designs would maximise climate and natural hazard resilience and minimise emissions.

The strategy does not support urban development that does not meet these criteria.

Figure 7: Prioritisation criteria in the draft Future Development Strategy

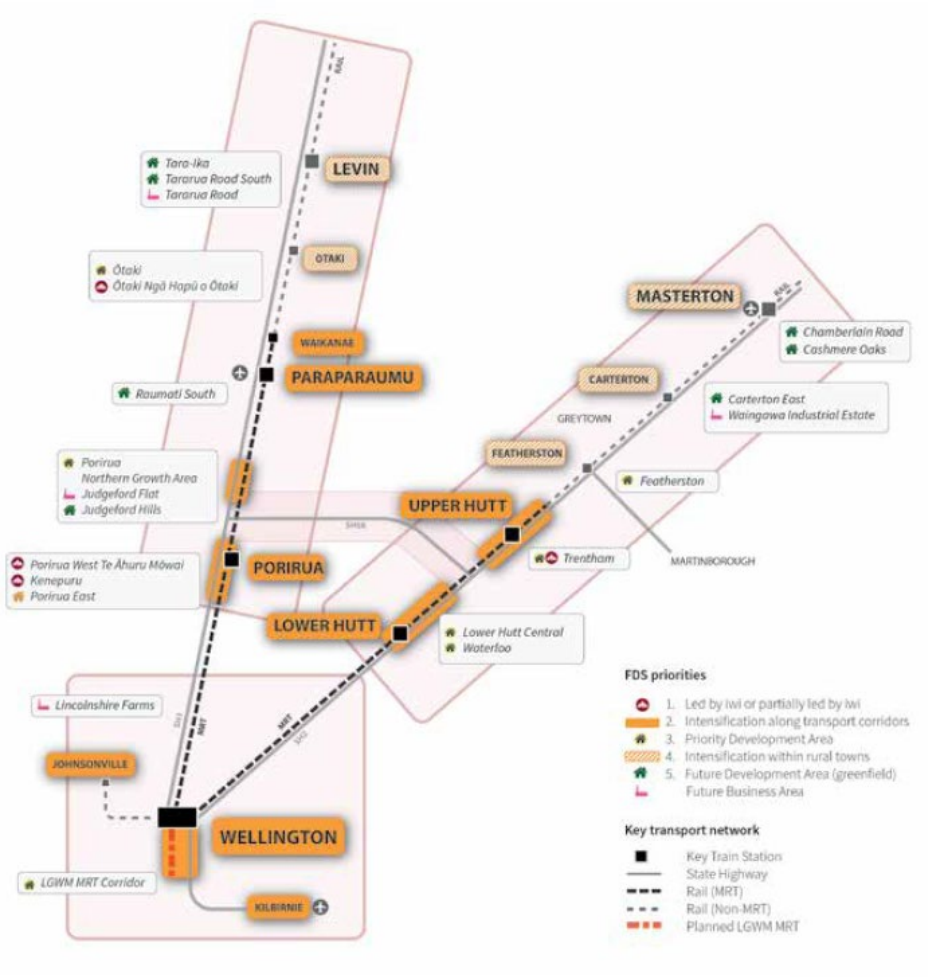


Figure 8: The 'Corridor View' of the draft Wellington Future Development Strategy

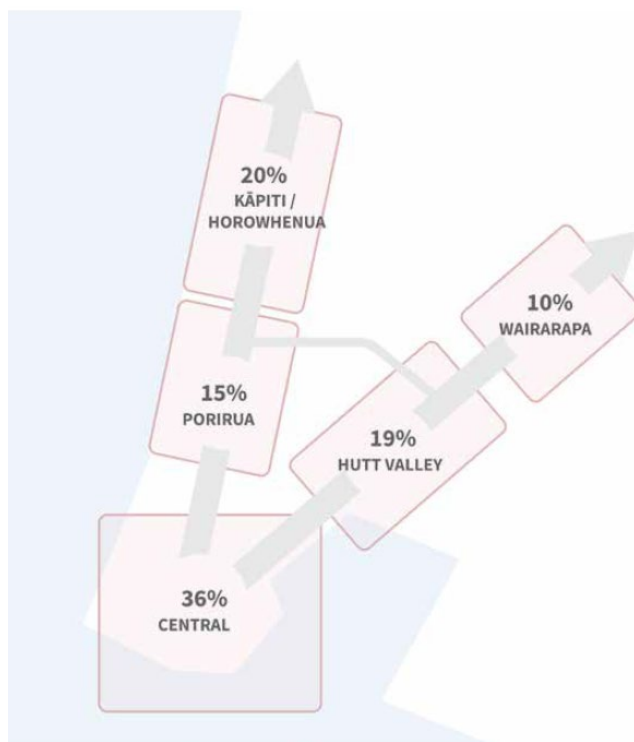


Figure 9: Distribution of population growth, years 1-30, in the draft Wellington Future Development Strategy

The FDS provides further detail on the expected distribution of growth, both over the entire 30-year timeframe of the strategy (figure 9) and within the first decade. More detailed information on the phasing of expected development suggests a higher proportion (28%) of growth in the first decade will occur in greenfield areas that are already plan-enabled and serviced, or where there is commitment to do so. More development is expected to occur within the existing urban area in the latter two decades, as major infrastructure initiatives such as Let's Get Wellington Moving and Riverlink come on-stream and enable more intensification opportunities. Over years 11 to 30 of the strategy only 12% of growth is expected to occur in greenfield developments and 88% within the existing urban area. The expected distribution of growth in the FDS suggests a lower share of growth will occur in the Hutt Valley than has occurred over the past decade (from 28%), a notable increase in the central area (from 27%) and small increases elsewhere.

Council growth strategies and spatial plans

In addition to the WRGF, each council in Wellington has its own strategy or spatial plan that provides further direction on growth management within their respective territory. These plans typically outline drivers of change (such as projected population and employment growth), a strategic framework (vision, objectives etc) and identify locations where growth and change are expected to occur (such as new greenfield areas for urbanisation) at varying degrees of detail. Some strategies include information on staging and sequencing, and associated infrastructure requirements to enable growth.

The vision, objectives, and aspirations of council growth strategies for the environment, urban form, and transport are generally consistent across councils and aligned with the direction of the WRGF and the draft FDS. There is considerable variability across technical aspects and underlying assumptions of the strategies and plans, including the growth projections used, planning horizon and level of detail on aspects such as staging, employment and infrastructure. Other aspects are not well aligned with the direction of the WRGF when considered in aggregate across the region. For example, council growth strategies and plans collectively provide capacity for around 65,000 new dwellings in greenfield development areas over the next 30 years, significantly exceeding what is anticipated by the WRGF and the draft FDS.

With the draft FDS providing more specific detail about the development outcomes expected in each council area there is now a need for council growth strategies and spatial plans to be revised to ensure regional alignment with the direction of the FDS, including the underlying technical information and assumptions.

Resource Management Plans

The Regional Policy Statement, prepared by Greater Wellington Regional Council, and District Plans for each territorial authority, prepared under the Resource Management Act 1991, control land use and development across Wellington. These plans contain objectives, policies and rules that direct where and what form new development can take.

New government direction, in particular implementation of the National Policy Statement on Urban Development, is requiring considerable changes to resource management plans across Wellington, including the Regional Policy Statement and the district plans of tier 1 councils. In general, these changes will result in the RMA plans becoming more aligned with the strategic direction of the WRGF and FDS

Wellington's Growth Models

Several growth forecasts, projections and models are used in Wellington that outline where and when household and employment growth is expected to occur to inform future planning work. These include:

- **Greater Wellington Regional Council / Sense Partners, March 2022** – used for the 2023 Housing and Business Capacity assessment under the National Policy Statement on Urban

Development, LGWM Detailed Business Case, Housing bottom-lines in the regional policy statement and district council plans, and council’s Long-term Plans and Infrastructure Strategies

- **.ID 2019 forecast** – used for the Wellington Rail Programme Business Case and the Let’s Get Wellington Moving Indicative Business Case. This has now been superseded by the Sense Partners forecast.
- **Wellington Regional Growth Framework** – uses a scenario of 200,000 people and 100,000 additional jobs over 30 years. Informs the options analysis phase undertaken when developing the growth framework.
- **Statistics New Zealand (Stats NZ) sub-national population projections** – used by various government agencies for planning purposes and developing national policy, including NZ Transport Agency for Arataki and Ministry of Transport for setting emission reduction targets.

Each forecast assumes different rates and distribution of growth at a regional, council and suburb scale and cover slightly different periods / timescales. These are summarised in the table below:

Table 1: Summary of growth forecasts

	Population 2018-2048	Households 2018-2043
Stats NZ: Sub-national population projections Dec 2022 medium projection	+79,000 ex. Horowhenua + 86,500 inc. Horowhenua	
Stats NZ: Sub-national household projections Dec 2022		+36,000 ex. Horowhenua +38,600 inc. Horowhenua
Sense Partners, 2022 50th percentile excludes Horowhenua	+189,759	+73,273
.ID forecast, 2019	+ 153,892 (2013-2046)	N/A
Wellington Regional Growth Framework, 2021 (includes Horowhenua)	+200,000 (by 2050)	+88,000 (by 2050)

The use of different forecasts and distributions of growth creates risks for NZ Transport Agency when assessing the benefits of projects, including double counting, and over or under estimating assumed growth and demand. We need to be conscious of which forecast is being used when assessing projects in Wellington and the limitations of comparing the benefits of one project or proposal relative to another if different forecasts are being used.

Sense Partners 2022 forecast

The most recent forecast is the Sense Partners’ 2022 forecast commissioned by the Wellington Regional Council. This is intended to provide a consistent, region-wide forecast for councils for forward planning (Housing and Business Capacity Assessments, Long-term Plan etc), and for the Wellington Transport Analytics Unit for transport modelling purposes.

As noted in table 1 and illustrated in figure 11, there is significant discrepancy between the Sense Partners’ 50th percentile forecast and the Stats NZ Medium Projection for the region.

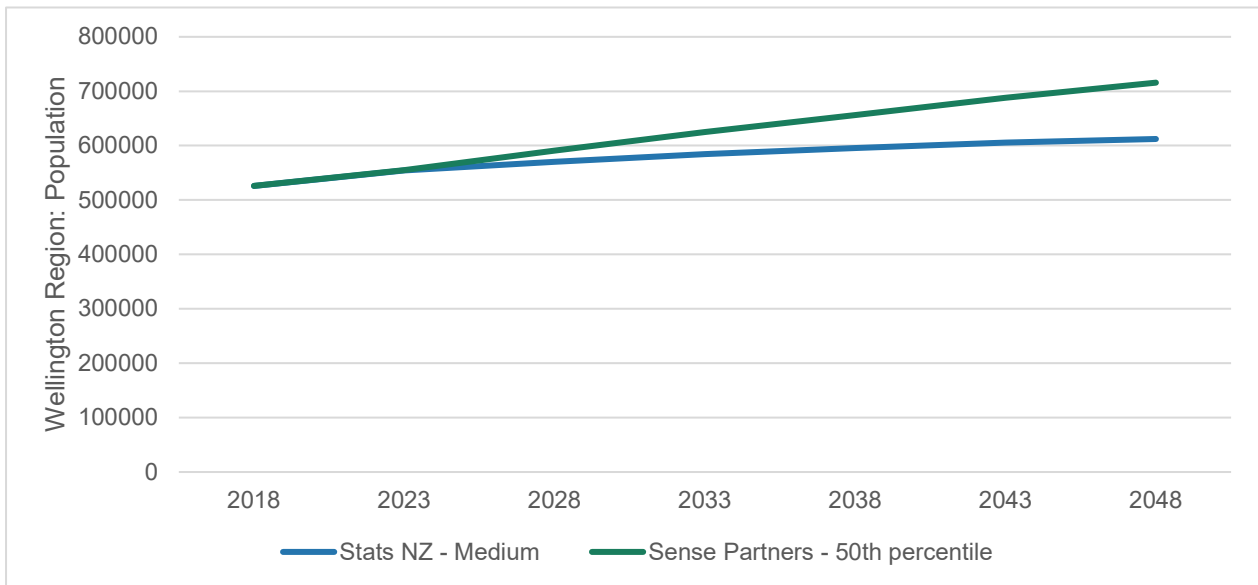


Figure 11: Wellington Region Population Forecasts – Stats NZ medium (2021) and Sense Partners (2022) 50th Percentile – 2018 to 2048

The Housing and Business Capacity Assessment explains this as being due to “The Sense Partners median projection includes positive net migration rates of similar magnitude to trends observed in the last 5 – 10 years (i.e., pre-Covid trends), an average of 0.7% per annum. The Stats NZ medium projection assumes a substantial decline in net migration, an average of 0.1% per annum”². The difference in migration assumptions between the Stats NZ medium projection, Sense Partners 50th percentile forecasts and historical migration levels for the Wellington Region are shown in figure 12.

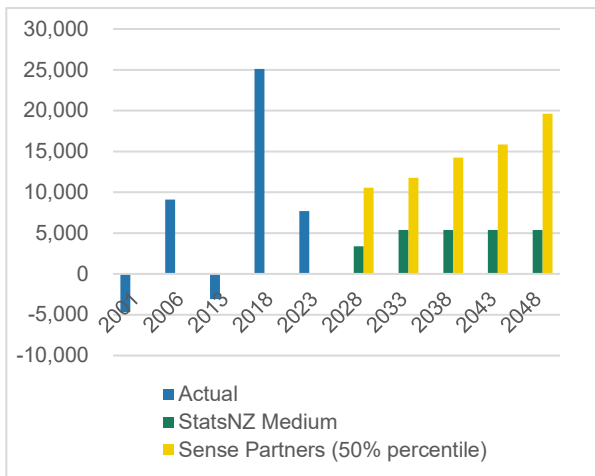


Figure 12: Actual and forecast net-migration to the Wellington Region. 5-year totals, 2001-2048

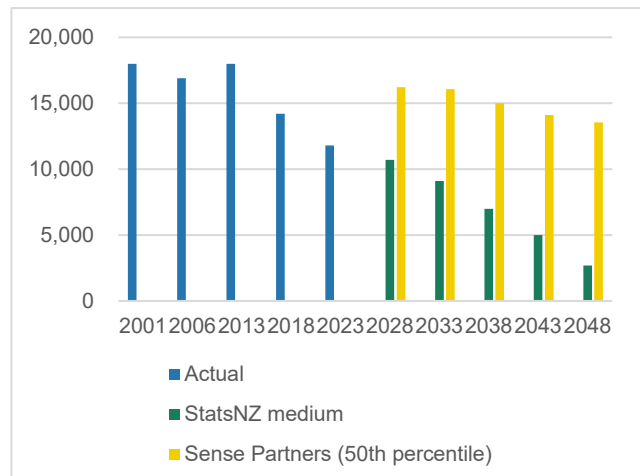


Figure 13: Actual and forecast natural population growth in the Wellington Region. 5-year totals, 2001-2048

² Wellington Regional Housing and Business Capacity Assessment May 2022, Page 14

The Sense Partners forecast also assumes more population growth occurs through natural increase (births minus deaths) than Stats NZ, a consequence of the assumed higher migration and larger population in the region.

The difference between the Stats NZ and Sense Partners forecasts highlights how dependent Wellington’s growth is on migration and how this could impact both the size and characteristics of the future population. If the Sense Partners view of the future were to eventuate, Wellington’s population would not only be larger but is likely to be younger and more diverse, which would affect demand for housing and transport. As figure 12 shows, net-migration to Wellington fluctuates significantly over the medium-long term, which highlights the risk and uncertainty for future projections being realised.

Wellington is the only Tier 1 urban area in New Zealand to use a forecast that exceeds the Stats NZ High Projection. Other cities forecasts’ range between slightly below Stats NZ Medium (Auckland), to Stats NZ High (Future Proof Waikato councils, some Greater Christchurch councils).

The Sense Partners’ forecast distributes future growth at both council and SA2 scale. The forecast’s distribution of growth at a council scale is relatively consistent with the growth trends of the past decade, with Wellington City and the Hutt Valley each accommodating just under a third of the region’s future growth. At a SA2 scale there are several inconsistencies between the amount of growth indicated in the model and the expected growth in known major developments in the region, such as the Porirua Northern Growth Area, Riverlink and Trentham Racecourse. This is significant for NZ Transport Agency, as transport modelling used to evaluate projects relies on detailed land use assumptions. These inconsistencies mean transport modelling based on the Sense Partners distribution may not reflect the likely future demand on the transport network in some areas.

These issues suggest there is a need to update and review the model to ensure it is fit for purpose, accurately reflecting likely development in the short-medium term (also accounting for changes in demand because of the NPS-UD), and the long-term direction of the FDS.

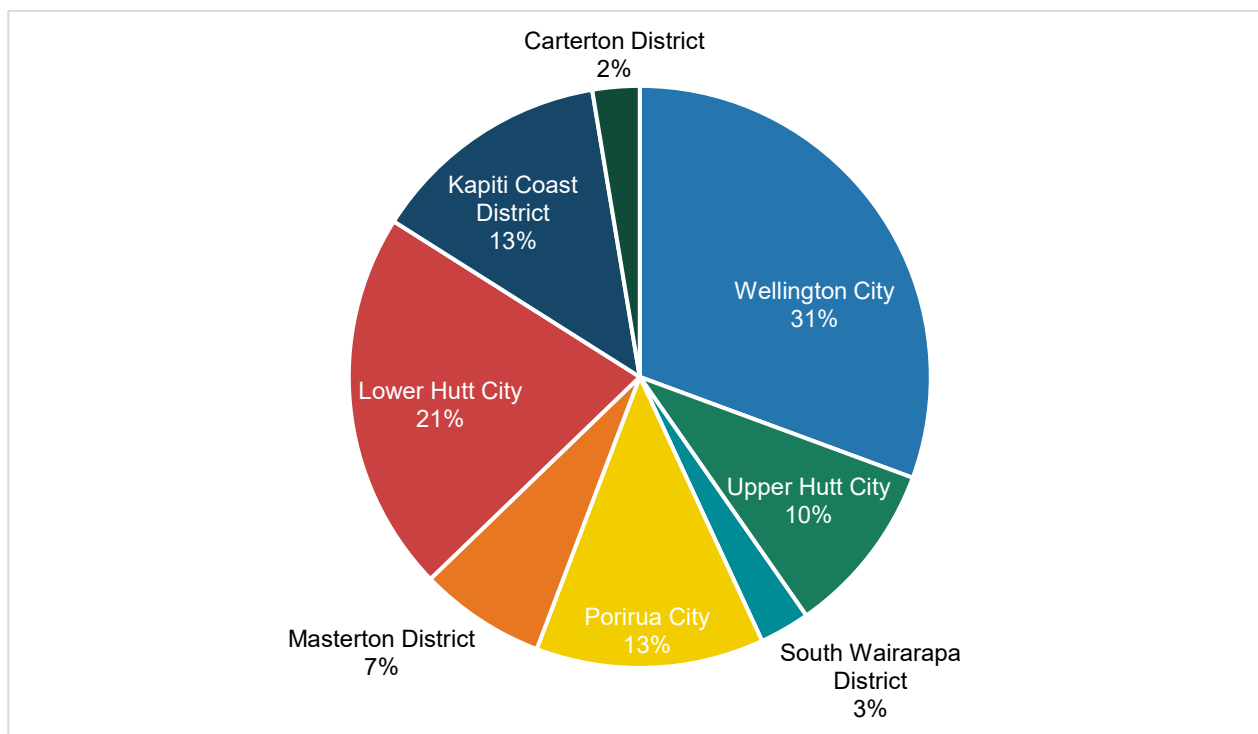


Figure 12: Share of Forecast Population Growth 2018-2048, Sense Partners 50th Percentile, 2022

Summary

Overall, key aspects of Wellington's current strategic growth planning framework are:

- The Wellington Regional Growth Framework promotes a 'corridor view' to accommodating future growth. It seeks to accommodate 200,000 more people and 100,000 more jobs with approximately 2/3 of growth occurring in urban renewal areas and 1/3 in new greenfield growth areas. The draft FDS broadly follows the direction set by the WRGF, although places less emphasis on greenfield growth in the long-term.
- Individual council growth strategies and plans are reasonably well aligned with the outcomes sought by the regional growth framework but are inconsistent in terms of technical aspects including growth projections used, planning horizon, amount of growth enabled, and level of detail. Clearer direction and greater detail in the draft FDS should assist to align council strategies and plans.
- Several growth projections, forecasts and scenarios are being used across Wellington to inform different strategic plans and investment decisions. There are considerable differences in the rate and distribution of growth between these. This creates risks for NZ Transport Agency when assessing the benefits of projects.
- The region is moving towards using a single growth forecast (Sense Partners 2022), which will assist in addressing the problems resulting from multiple forecasts. However, the Sense Partners' forecast is notably higher than those used in NZ's other large cities due to different immigration assumptions. This creates equity issues when comparing the benefits of projects in Wellington with elsewhere in New Zealand.

Key Trends and Influences

Introduction

The context of growth and urban development in Wellington has evolved over time with changes appearing in several key areas. These trends and influences show how future growth may change, and how strategies and policies may need to respond.

Key trends and influences discussed further below are:

- Significant fluctuation in the rate of population growth, with a period of very high growth between 2014 and 2020
- Population growth becoming more dispersed across the region over the past decade
- Recent growth trends including the significant increase in housing construction (although this has recently decreased), the ongoing shift to higher density housing types, and some key patterns of where growth is and is not occurring
- The impacts of the COVID-19 pandemic, including potentially more long-lasting implications for growth and travel patterns
- Significant central government policy shifts, particularly in relation to urban development, climate change, and partnership.

Recent growth trends

Growth is one driver of Wellington's challenges, including transport. But this also provides opportunities to reshape and transform the region over time, improving wellbeing and liveability.

Over the past decade there has been a significant shift in where population growth is occurring. The share of population growth outside of Wellington City has been steadily increasing resulting in more demand for amenities and services throughout the region.

Following population growth, the region has experienced a significant increase in building consents and construction. Furthermore, the type of housing being built is changing with attached dwellings outnumbering detached dwellings since 2021.

Employment across the region is growing gradually and the proportion of jobs in each corridor, measured by workplace location, is steady. This may present some challenges for travel demand when considering the location of population and housing growth.

Population trends

Wellington's population has grown steadily over the past two decades with notable fluctuations in annual growth.

Over 583,000 people now call Wellington home. The region experienced a period of particularly high population growth between 2014 and 2020, with the population growing by 59,800 people. Population growth declined significantly in 2021 and 2022 with the region experiencing the lowest growth of the past two decades in 2022, likely a result of changes to immigration because of the COVID-19 pandemic (Auckland has also experienced a similar decrease in population growth). Net-migration to New Zealand has since returned to very high levels over late 2022 and 2023, which has increased population growth back to levels similar to the 2014-2019 period. While short-term population projections remain highly uncertain, Stats NZ advise that in the long-term Wellington's population is expected to grow at a comparably low rate, increasing by around 63,850 people to reach 646,000 by 2048 (N.B these projections produced in 2022 are significantly less than anticipated in the WRGF, and council's own growth forecasts).

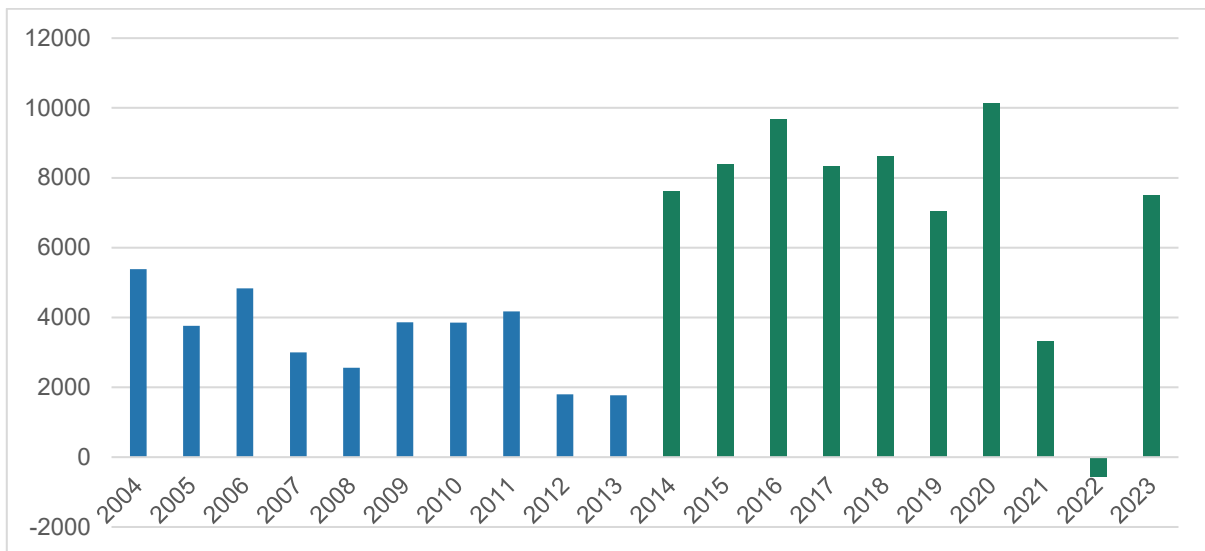


Figure 13 WSSV area annual population change 2003 – 2023 (to 30 June). Source: Stats NZ

The population of all council areas in Wellington has grown over the past 20 years with Wellington City growing more than any other council area over this period. The significant increase in population growth experienced between 2014 and 2020 has largely been accommodated outside of Wellington City, which has had consistent growth across the past two decades. Kāpiti Coast and Carterton District grew slightly more in the last decade, while in all other council areas population growth at least doubled in the last decade when compared to the decade before. The magnitude of growth in some of the smaller councils is particularly significant given the relatively small existing population in these areas.

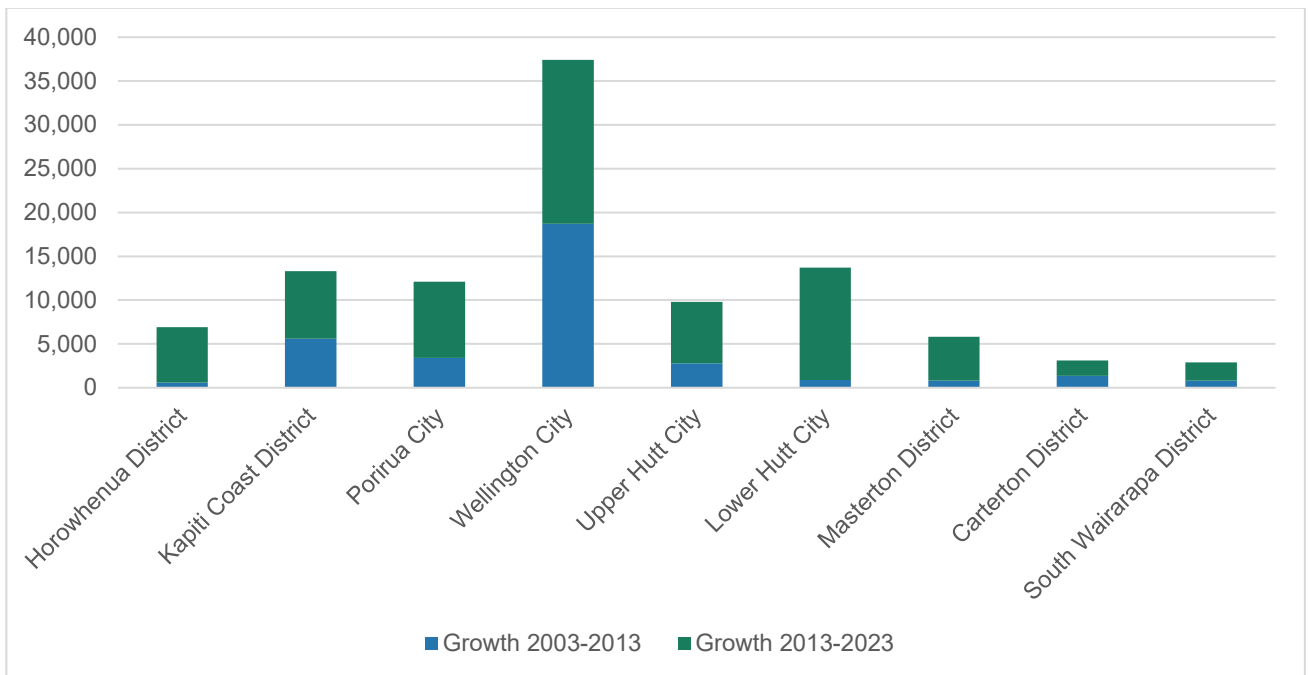


Figure 14 WSSV area population growth by council area. Source: Stats NZ

As the series of graphs on the next page show, Wellington’s population growth is becoming more dispersed across the region with an increase in people outside of Wellington City. The percentage of the region’s growth occurring in Wellington City has fallen to just over a quarter over the past decade compared to over 50% in the decade before. People living in outer areas are both more likely to drive to work and services than those who live in more central locations, and to also travel further to work and

other activities. The areas in central Wellington that offer greater public transport and active mode travel options have recently seen a decline in population. This trend of population growth occurring more in outer areas and decline in central locations is likely to result in greater use of private vehicles rather than public transport, and place greater demand on roading networks.

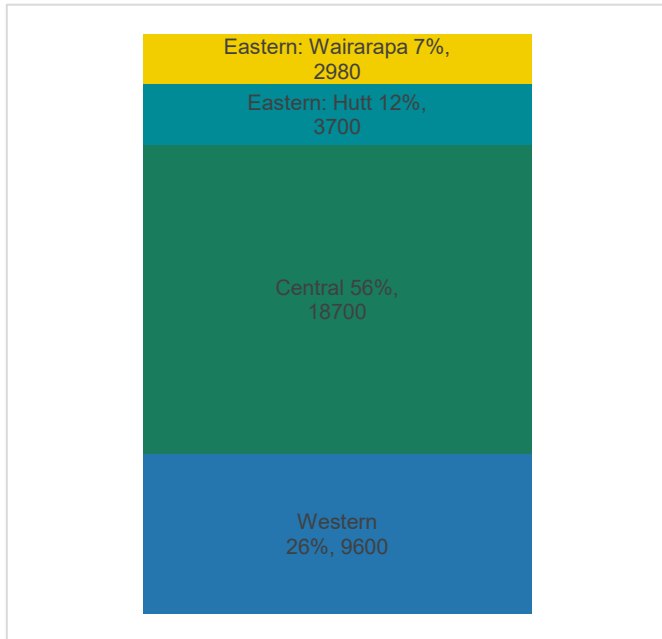


Figure 16: Population growth by WRGF corridor between 2003-2013. Source: Stats NZ

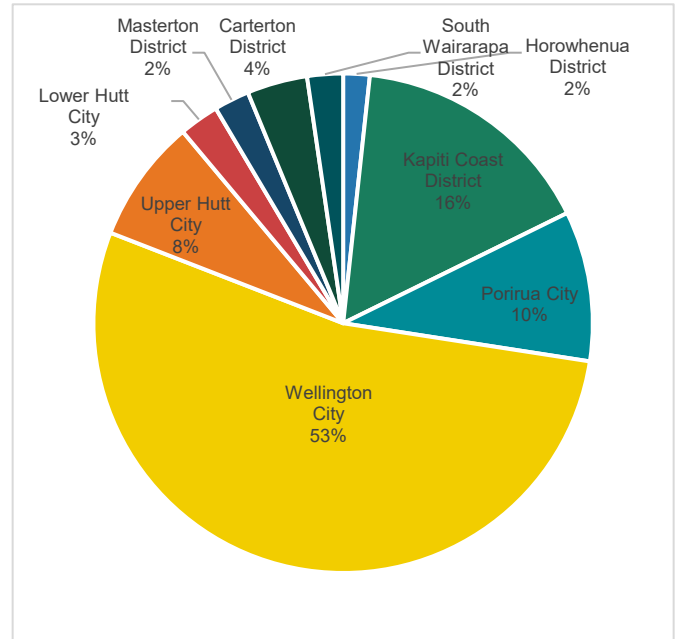


Figure 17: Share of population growth by council area 2003-2013. Source: Stats NZ

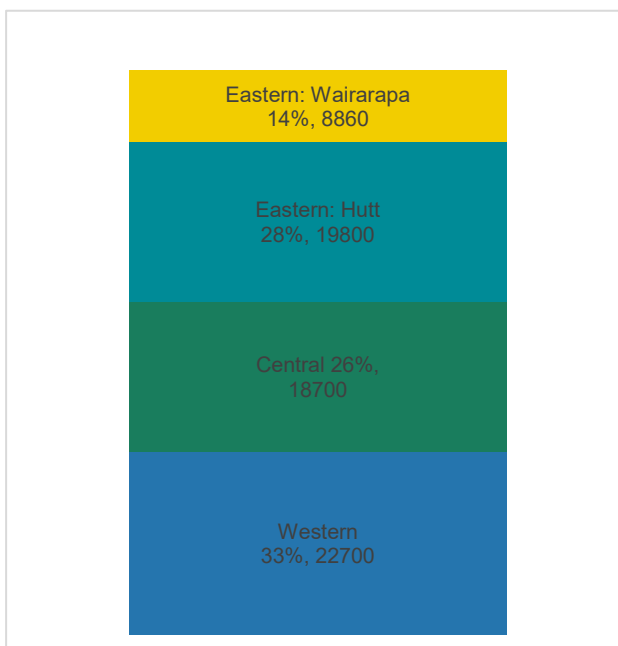


Figure 18: Population growth by WRGF corridor between 2013 and 2023. Source: Stats NZ

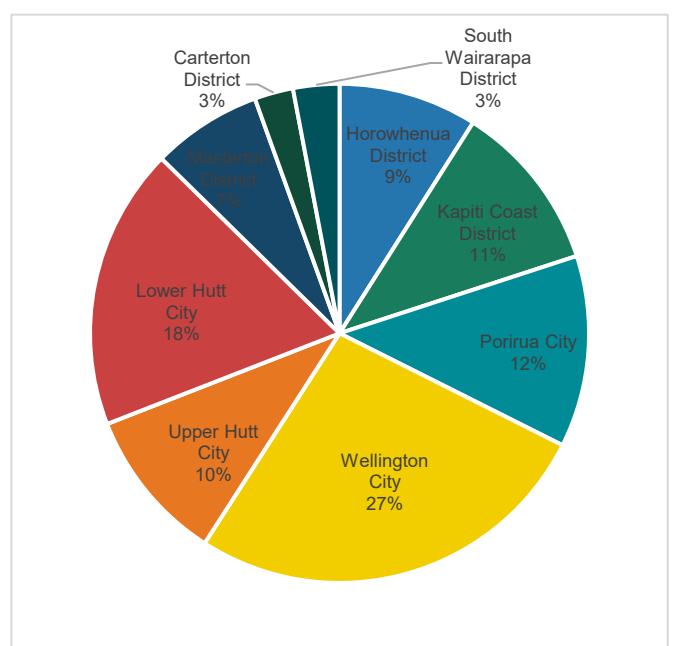


Figure 15: Share of population growth by council area 2013-2023. Source: Stats NZ

While there has been a notable shift in where new population growth is occurring, Wellington has had a lower population growth rate when compared to other large urban areas in New Zealand over the last two decades. Even with the significant increase in population growth, the population of the Wellington urban

area grew by less than Hamilton and approximately the same as Tauranga over the past decade, despite these being considerably smaller cities.

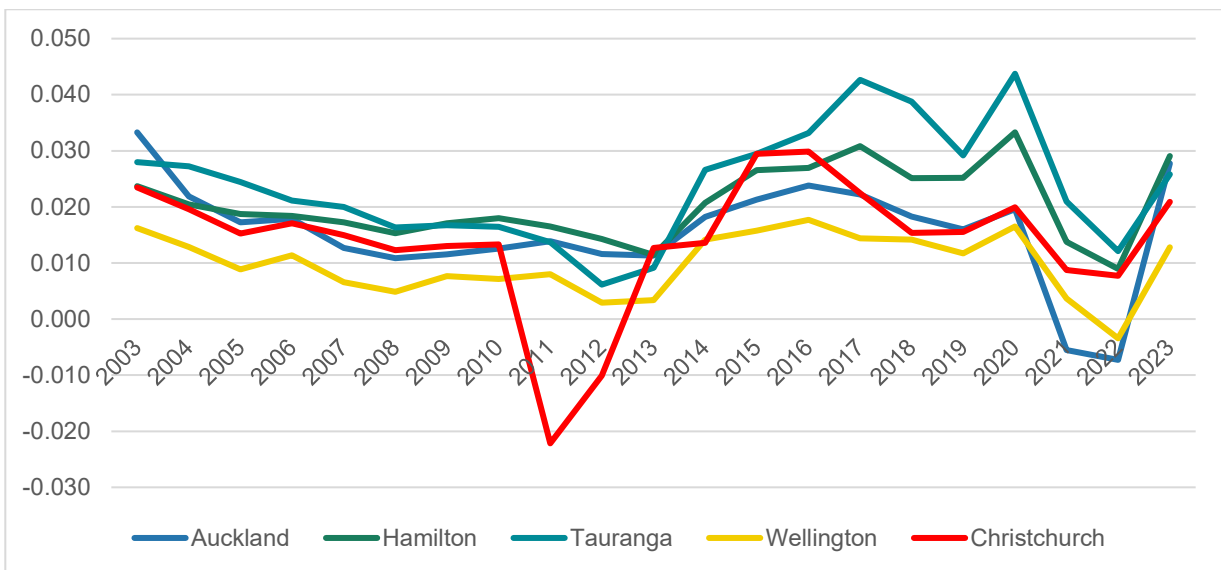


Figure 19: Annual population growth rate of NZ major cities (Tier 1 urban areas). Source: Stats NZ

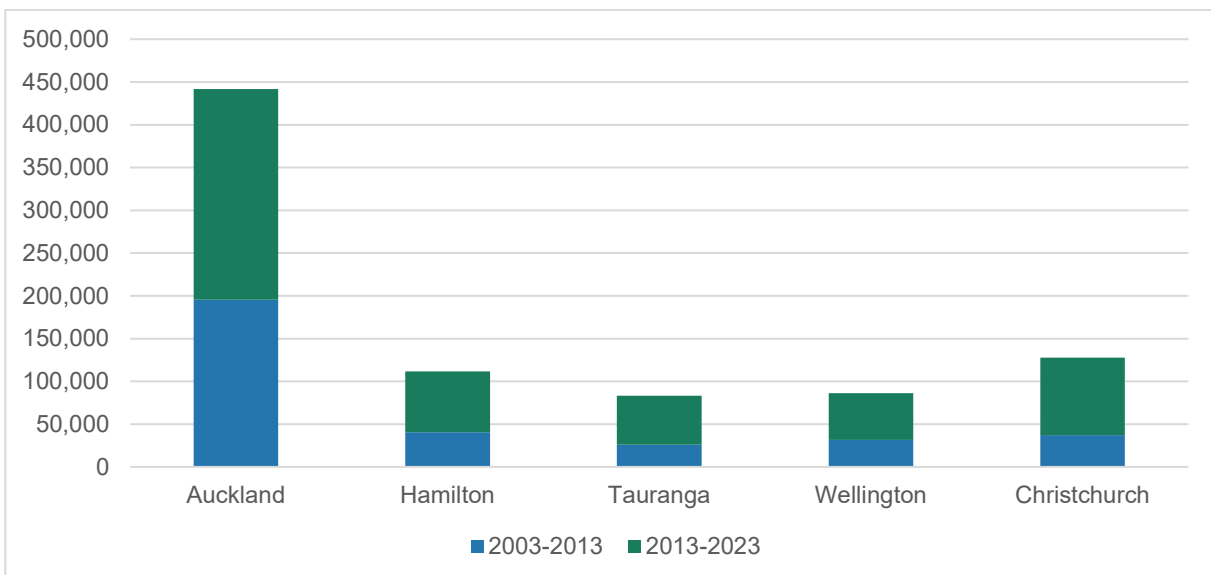


Figure 20: Population Growth 2003-2023, Tier 1 Urban Areas. Source: Stats NZ

The scale of growth relative to the existing population in Wellington means there has been little change in the distribution of total population between council areas. As figure 23 on the next page shows, the percentage of the region's total population within each council area has been reasonably constant over the past two decades.

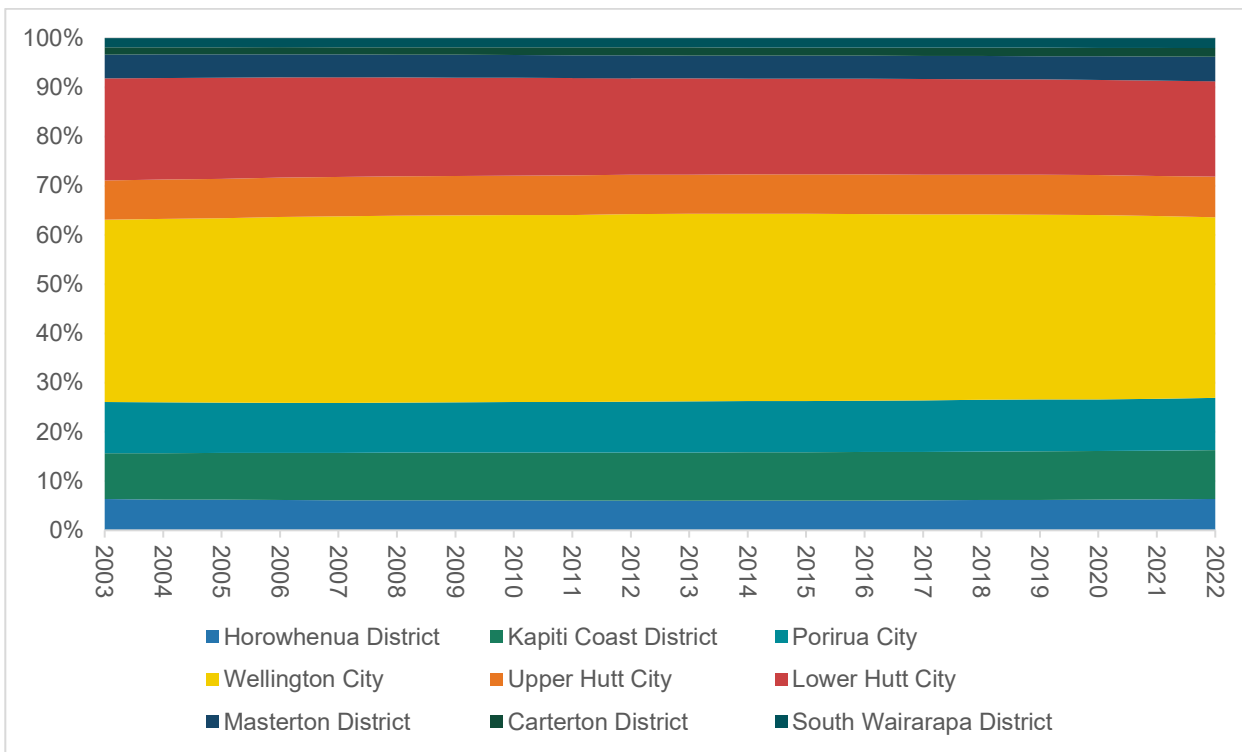


Figure 21: Share of total resident population by council area 2002-2022. Source: Stats NZ

Population demographics

Demographic factors such as age, household size, and deprivation can influence the demand for housing, services, and travel behaviour.

Wellington’s age structure is generally in line with New Zealand overall. Figure 24 show Stats NZ’s subnational projected population age structure for the region and New Zealand. Projections for the 15-39 and 40-64 age groups are slightly higher than the national projection, reflecting the region’s role as a major employment location and attractiveness for workers. There is a notable difference between Stats NZ’s demographic projections, and the region’s bespoke Sense Partners forecast, which assumes an overall younger age structure in the future.

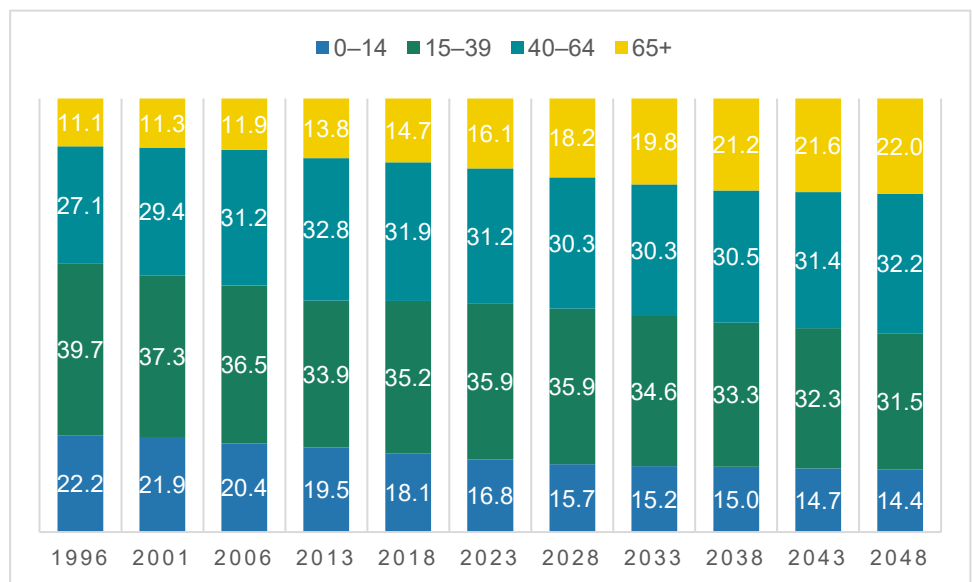


Figure 22: Projected population age structure for the Wellington region, 1996 to 2048

There are some notable differences in the age structure across the councils within the region. Horowhenua, Kāpiti, and the Wairarapa are projected to have a higher proportion of the 65+ age group by 2048 (40%) compared to the region. Porirua and Wellington City will have a higher proportion of people in the 15-39 and 40-64 age groups. The older population profile in these areas may influence travel patterns (less commuting) and demand for public transport services for those with limited mobility.

Like elsewhere in New Zealand, the average household size in Wellington has been steadily decreasing since the early 2000's and is forecast to continue to do so over the next 30 years. Currently, Porirua has the largest average household size (3 people per household) and South Wairarapa has the smallest (2 people per household). The decrease in average household size may influence demand for smaller housing typologies, such as attached dwellings and apartments.

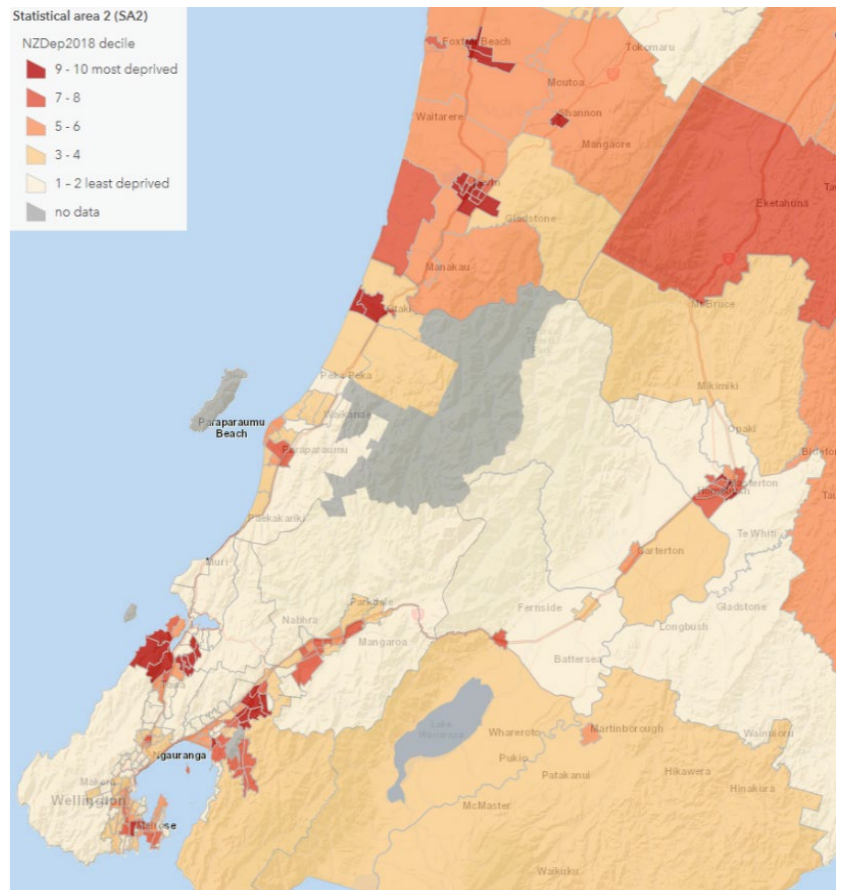


Figure 23: Wellington Region NZDep 2018 by statistical area 2

The 2018 NZ Index of Deprivation (NZDep) is an area-based measure of socioeconomic factors, showing the relative deprivation of different areas. Figure 25 shows the 2018 NZDep for the region. Pockets of high deprivation (decile 9 and 10) are located throughout the region, but are particularly concentrated in Porirua, Lower Hutt, and Levin.

Housing Development Trends

Wellington’s housing development trends have changed substantially over the past 10-15 years, particularly in relation to the amount, type, and location of new dwellings.

Total housing construction has ramped up significantly in recent years. In 2022, over 4,200 building consents were granted for new dwellings, almost double the number consented five years ago (see figure 26).

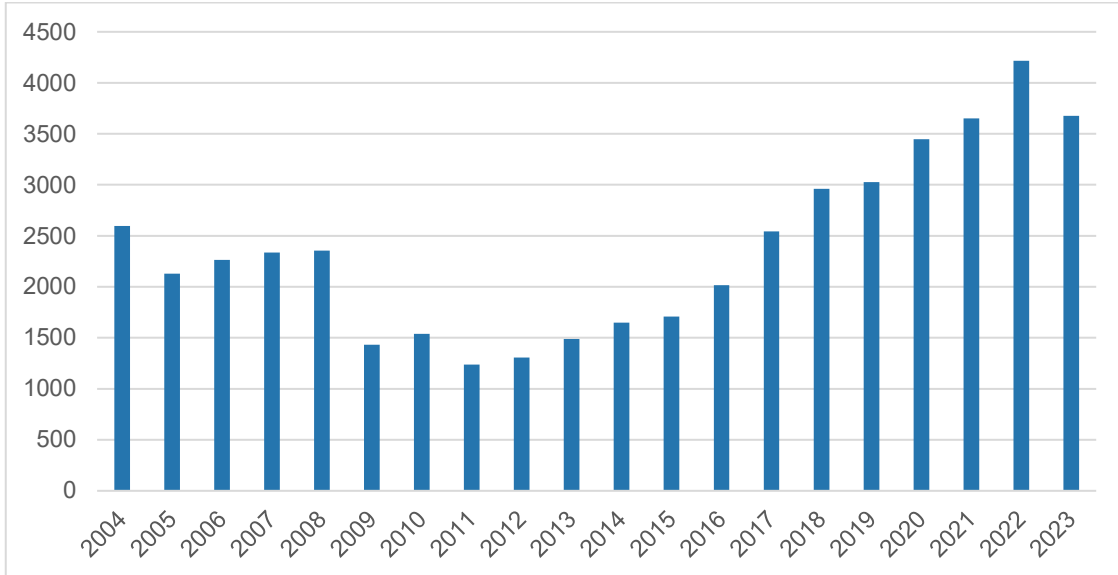


Figure 24: New dwellings consented between 2002 and 2022 (June). Source: Stats NZ

In terms of location, most new dwellings are consented in Wellington City. There have been significant increases in dwellings consented in last decade in Horowhenua, Lower Hutt and Masterton compared to the decade before, with smaller increases in other council areas apart from Kāpiti Coast District where the number of new dwellings consented has declined.

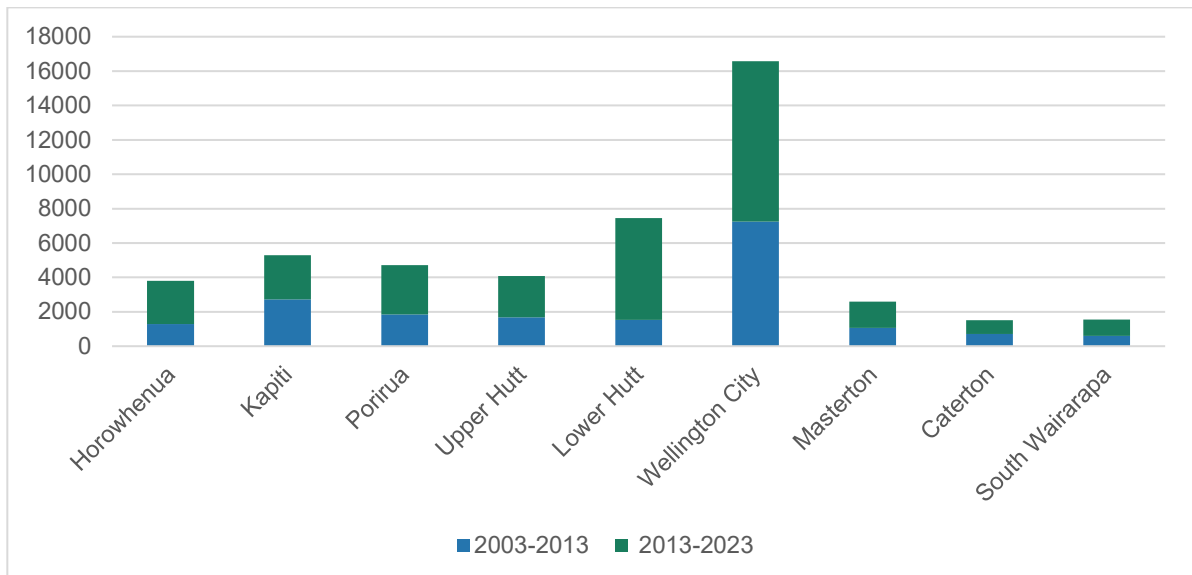


Figure 25: New dwellings consented by council area. Source: Stats NZ

There is also a noteworthy increase in the proportion of attached housing being built in Wellington. In 2021, around 54% of dwellings consented were attached (apartments, townhouses, terraced houses, retirement village units) and 46% were detached houses. This compared to only 25% of consented

dwelling types being attached in 2010 (see figure 28). The increase in attached dwelling typologies has largely been driven by an increase in the townhouses, flats, and units category, particularly since 2014.

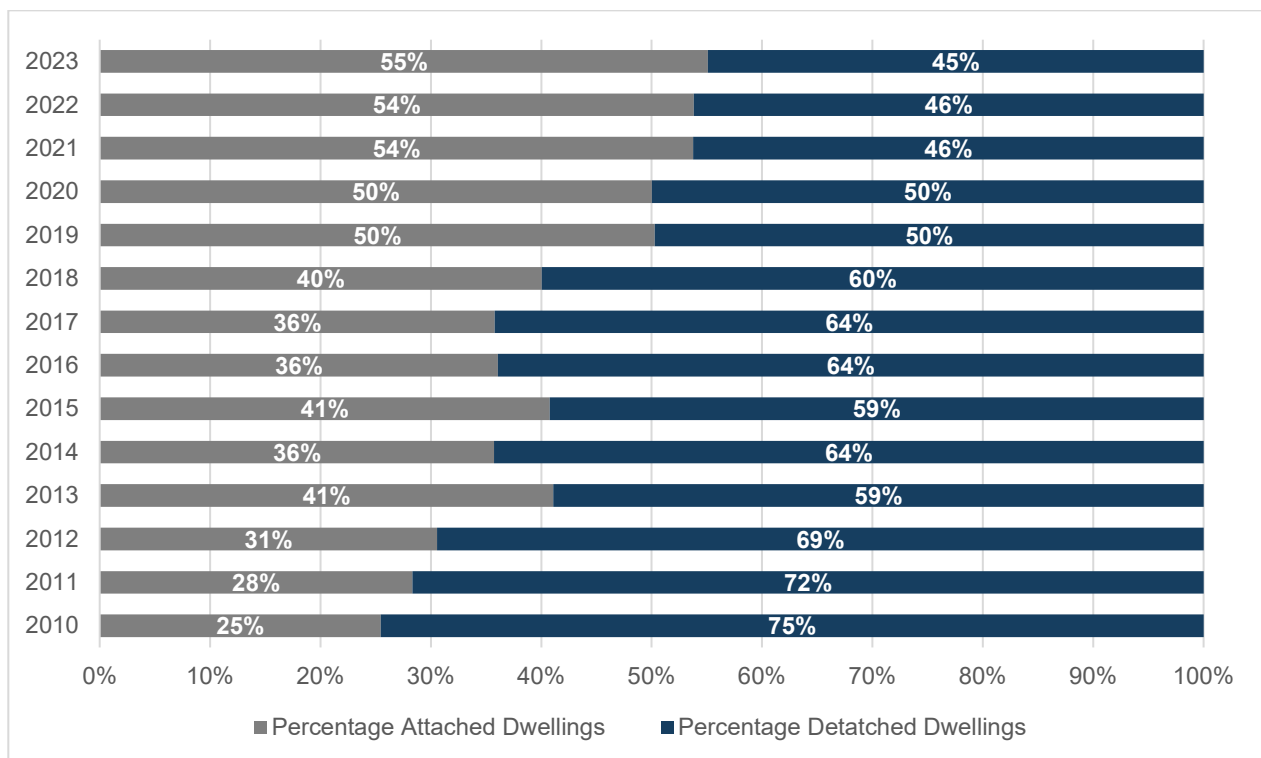


Figure 26: Building Consents by Attached and Detached Dwelling Types 2010-2021, WSSV Area. Source: Stats NZ

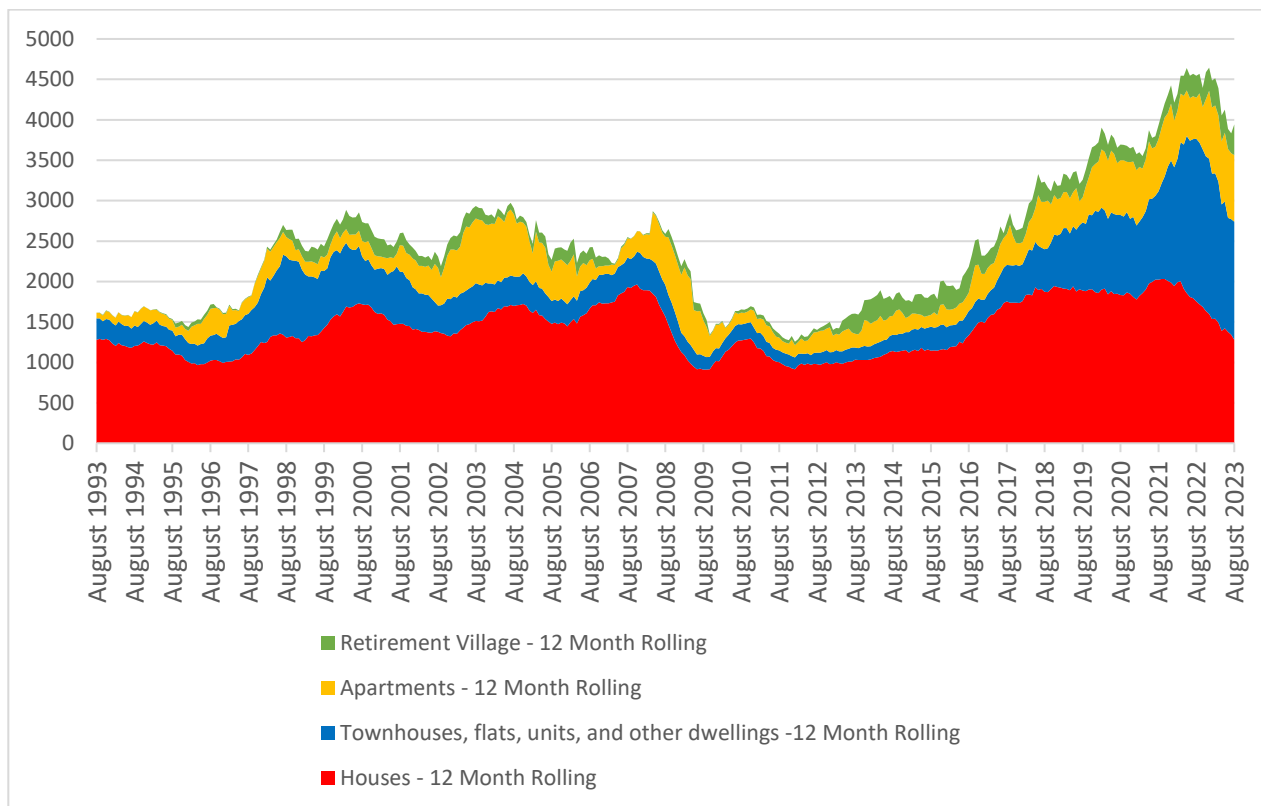


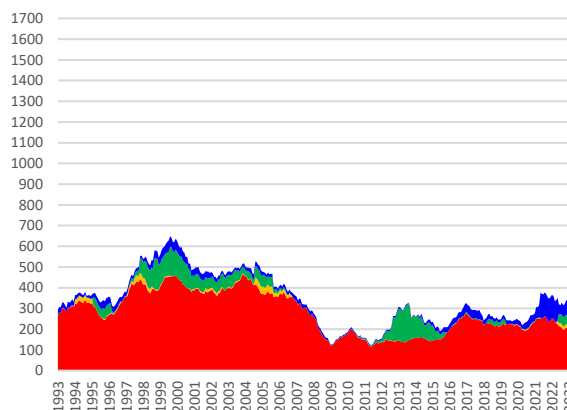
Figure 27: Residential Building Consents by Type, 12 Month Rolling Total 1993-2023, WSSV Area. Source: Stats NZ

This increase in attached dwellings is not occurring across all council areas within the Wellington Region. The series of graphs that follow show the typologies of new dwellings consented within each council area

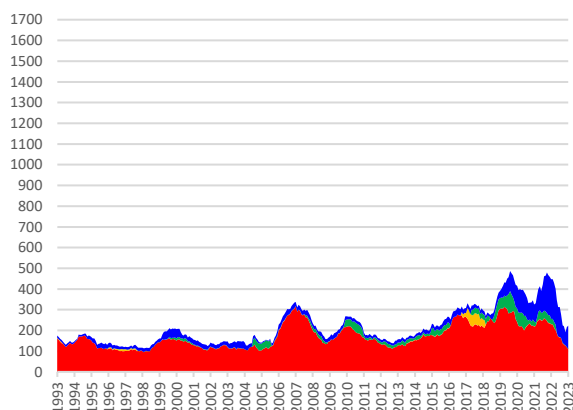
since 1993. There has been a very significant increase in the townhouses, flats, and units category in Lower Hutt since 2017, with much smaller increases in Porirua and Upper Hutt since 2018/19. The significant increase in Lower Hutt is likely a result of plan changes that enabled more medium density development and associated financial incentives. The number of apartments consented fluctuate significantly but only occur in Wellington City in notable numbers, although an increasing number of apartments have been consented in Lower Hutt since 2020. Outside of Wellington City and Lower Hutt, detached dwellings very much remain the dominant type of dwelling being consented.

- Houses - 12 Month Rolling
- Apartments - 12 Month Rolling
- Retirement Village - 12 Month Rolling
- Townhouses, flats, units, and other dwellings -12 Month Rolling

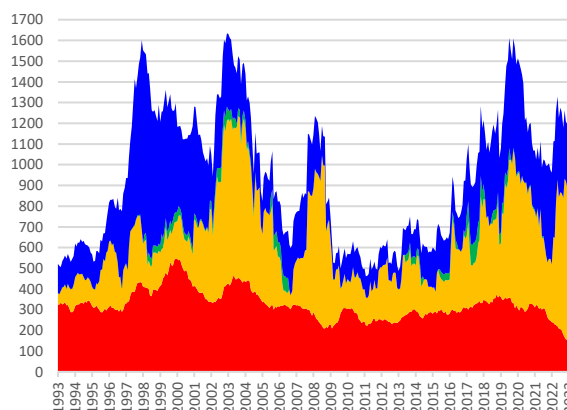
Kāpiti Coast District Council



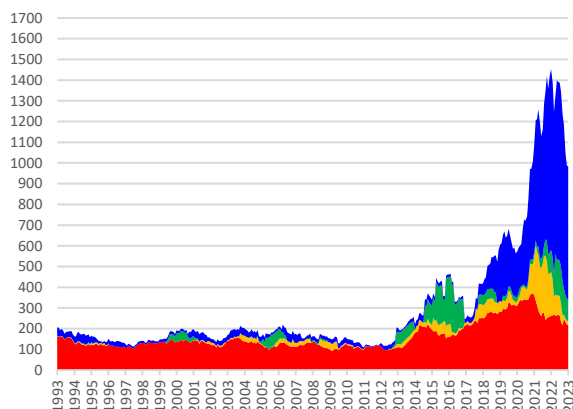
Porirua City Council



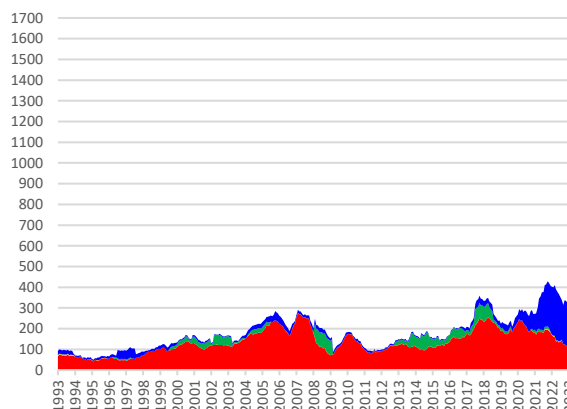
Wellington City Council



Hutt City Council



Upper Hutt District Council



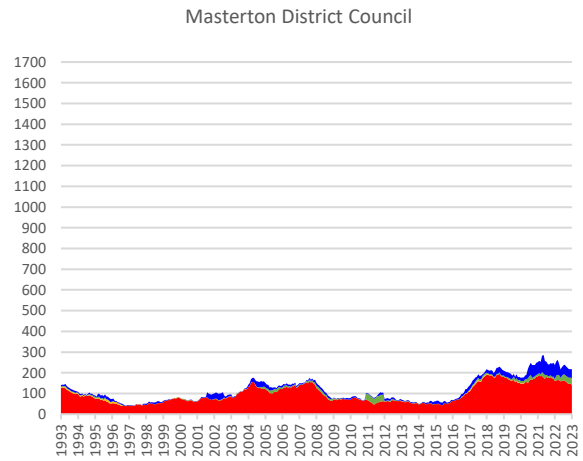
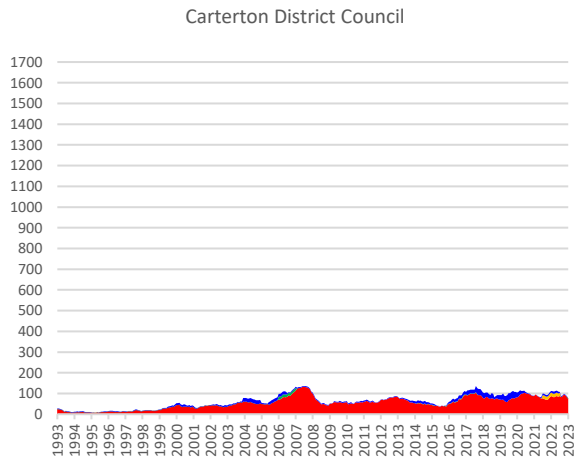
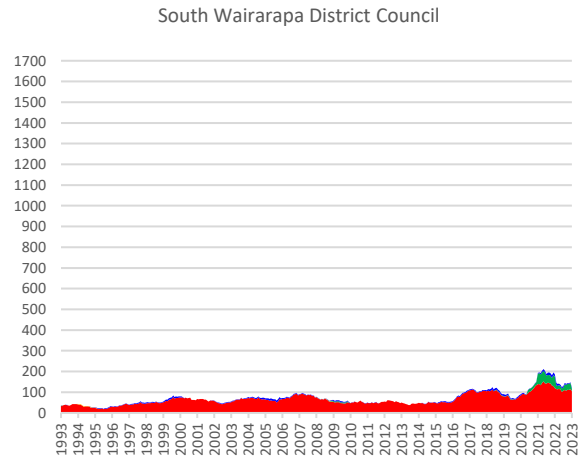
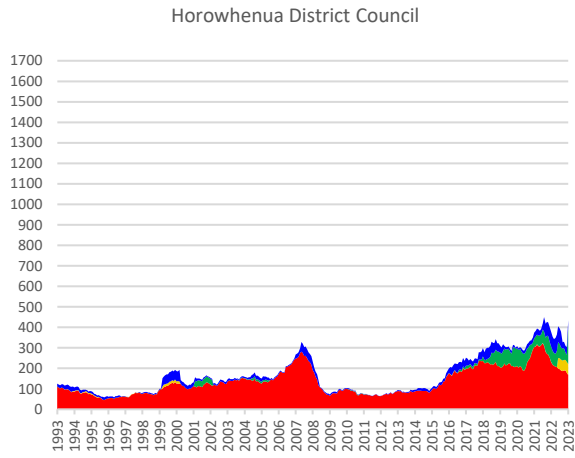


Figure 28 12-month rolling (stacked) new residential building consents by council and type – 1993 to 2023. Source: Stats NZ

Employment and Commercial Development

There has been little change in employment growth patterns over the past two decades, with the region experiencing steady growth over the long-term with some variance in employment growth on an annual basis.

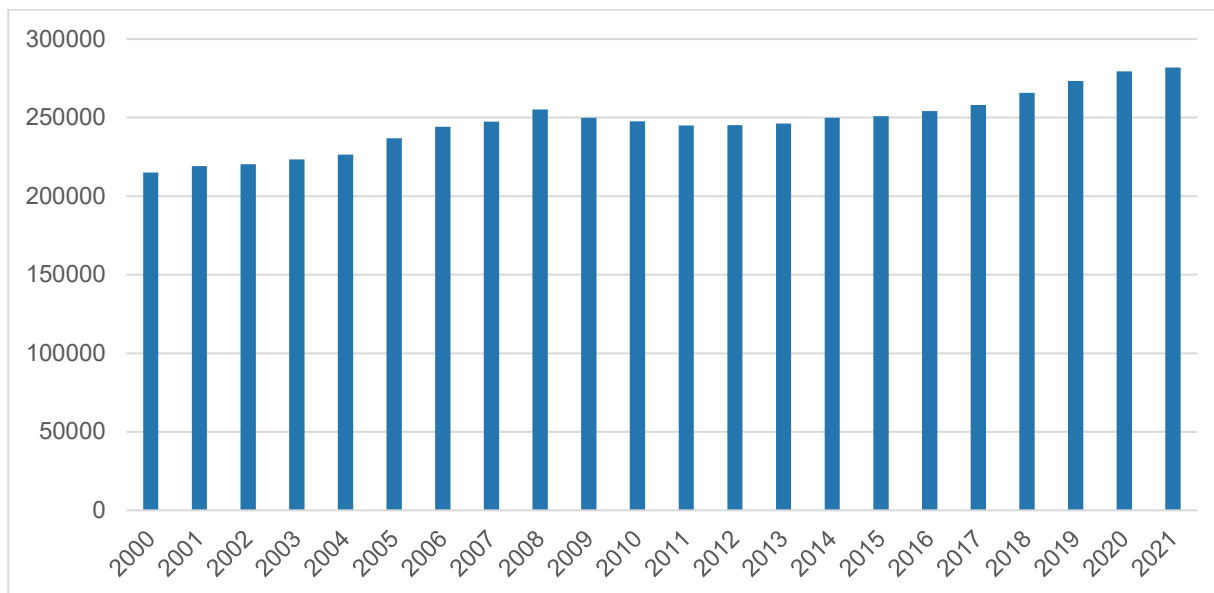


Figure 29: Total employment, 2000 to 2021. Source: Stats NZ

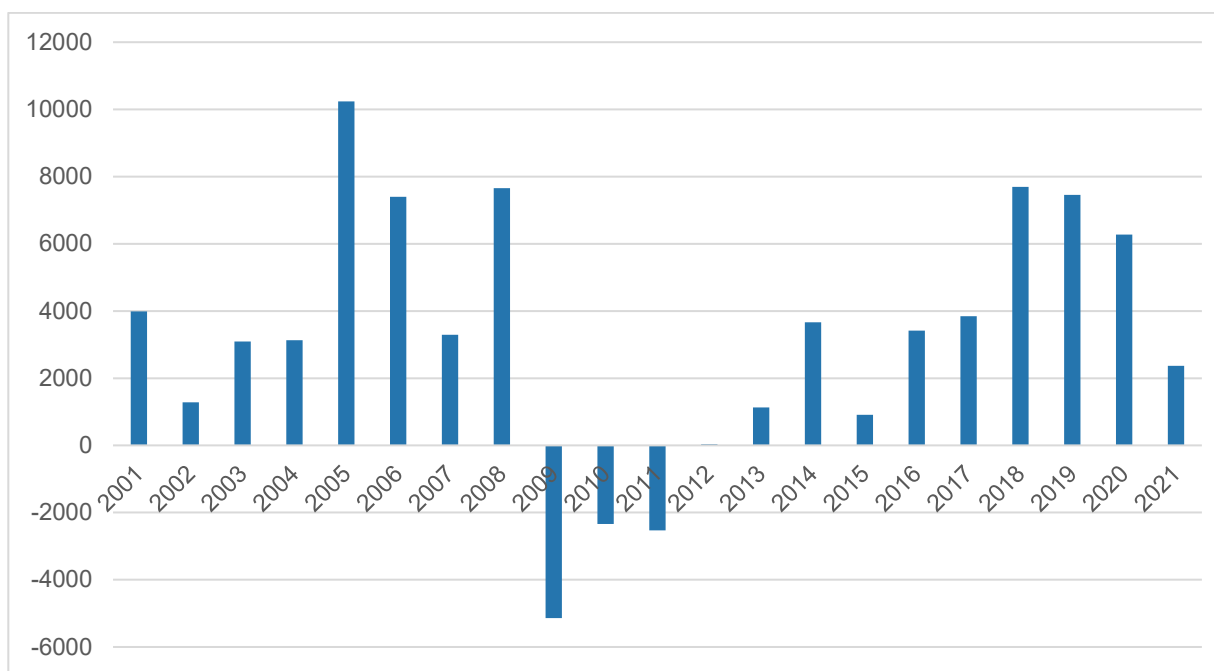


Figure 30: Annual employment change, 2001 to 2021. Source: Stats NZ

The share of the region's jobs located in each of the WRGF corridors and council areas has been relatively constant over the past decade (see figure 33). Approximately 60% of jobs are in Wellington City, 15% in the Western Corridor, 20% in the Hutt Valley and 5% in Wairarapa. The share of jobs by sector within each corridor has not changed notably over this period either. There is a very significant

concentration of jobs at the northern end of the Wellington CBD, with three adjoining SA2 areas³ located around the Wellington Rail Station accounting for approximately 30% of the total jobs in the region. However, the increase in frequency in which some employees work from home since the COVID-19 pandemic are not represented in these statistics (the possible implications of this is discussed in the next section).

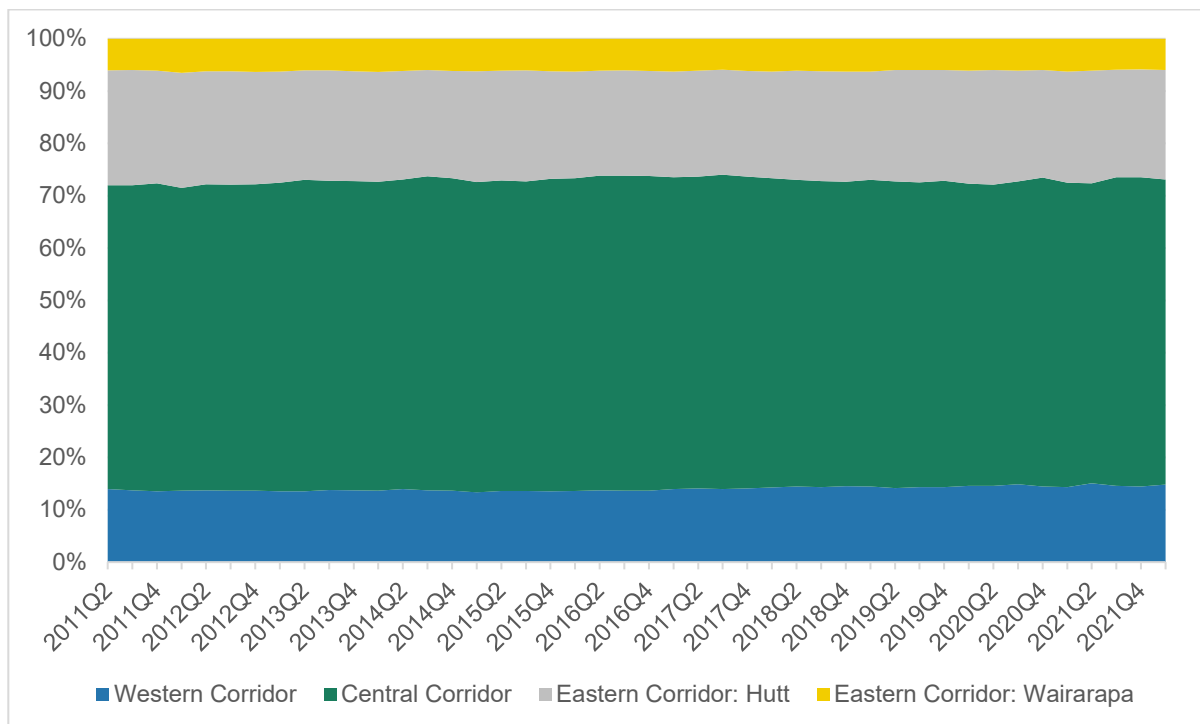


Figure 31: Employment by Workplace Location, WRGF Corridors, 2011 to 2021. Source: Stats NZ

Consents for non-residential floorspace fluctuate significantly from year to year, likely due to the relatively small scale of the Wellington market and scale of new buildings being consented (i.e., one or two large projects result in a spike in new consented floorspace). Analysis of the spatial location of non-residential consents show a predictable pattern – new office floorspace is focused within the CBD, factory and warehousing in established industrial areas in Hutt Valley and Porirua; rural buildings in the Wairarapa and Horowhenua. New retail and hospitality floorspace is spread across the larger commercial centres throughout the region, although less new retail and hospitality floorspace has been consented in the CBD than might be expected given its prominence as the main commercial hub of the region and lower North Island. This may be due to the relatively constrained nature of the CBD to accommodate large format retailing, and the turnover and renovation of business space within existing buildings, rather than requiring construction of new premises.

COVID-19 impacts

Since early 2020 COVID-19 has had a dramatic global impact. While the short-term impacts are becoming clearer since the end of the Covid Protection Framework in September 2022, there is continued uncertainty on the longevity and severity of COVID-19 impacts. Emerging information and trends are

³ 87,000 jobs (30% of total) are located in the Wellington Central, Thorndon and Pipitea-Kaiwharawhara SA2 areas.

beginning to provide a picture of longer lasting impacts and what this means for Wellington’s transport system and future development. Based on what we know now, these include:

- Increased levels of working from home for office-based jobs. This particularly impacts the Wellington CBD due to the high concentration of office-based jobs which are able to be undertaken from home or remotely from locations elsewhere in New Zealand. This has the potential to impact on locational choices for households if access to the employment opportunities of the CBD becomes valued less.
- Less activity in and commuting to the CBD, and more activity in secondary centres and peri-urban areas. This matches national trends where private vehicle commuting to CBDs in major urban areas has decreased while private vehicle commutes to peri-urban areas have increased (see figure 35). Activity in Wellington CBD dropped by as much as 40% below pre-covid levels in March 2022 (at the time there were no restrictions on movement in Wellington but covid was circulating in the community).
- Lower levels of public transport use, although boardings for bus and rail have been steadily increasing since March 2022.

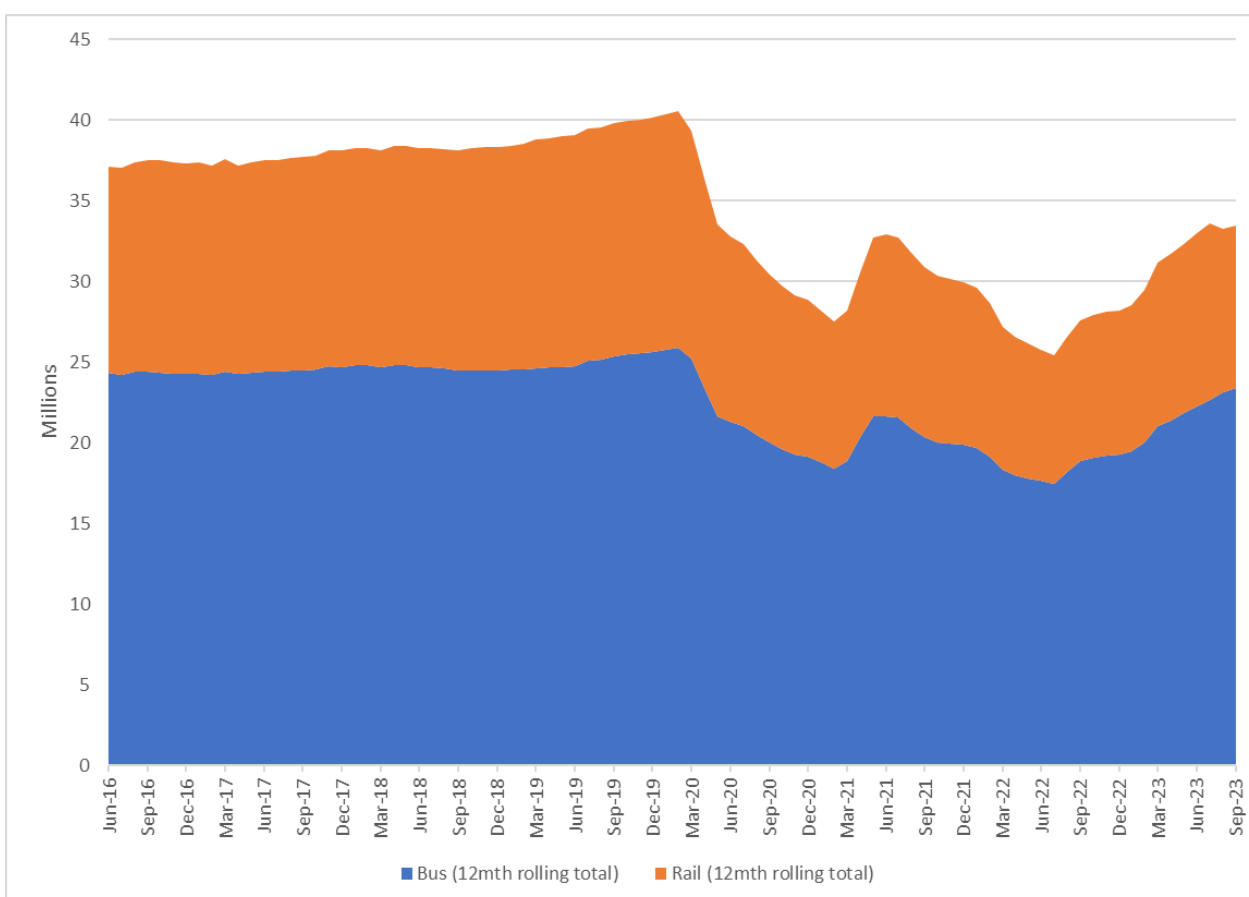


Figure 32 Greater Wellington Region 12-month rolling total boardings for bus and rail - June 2016 to November 2022

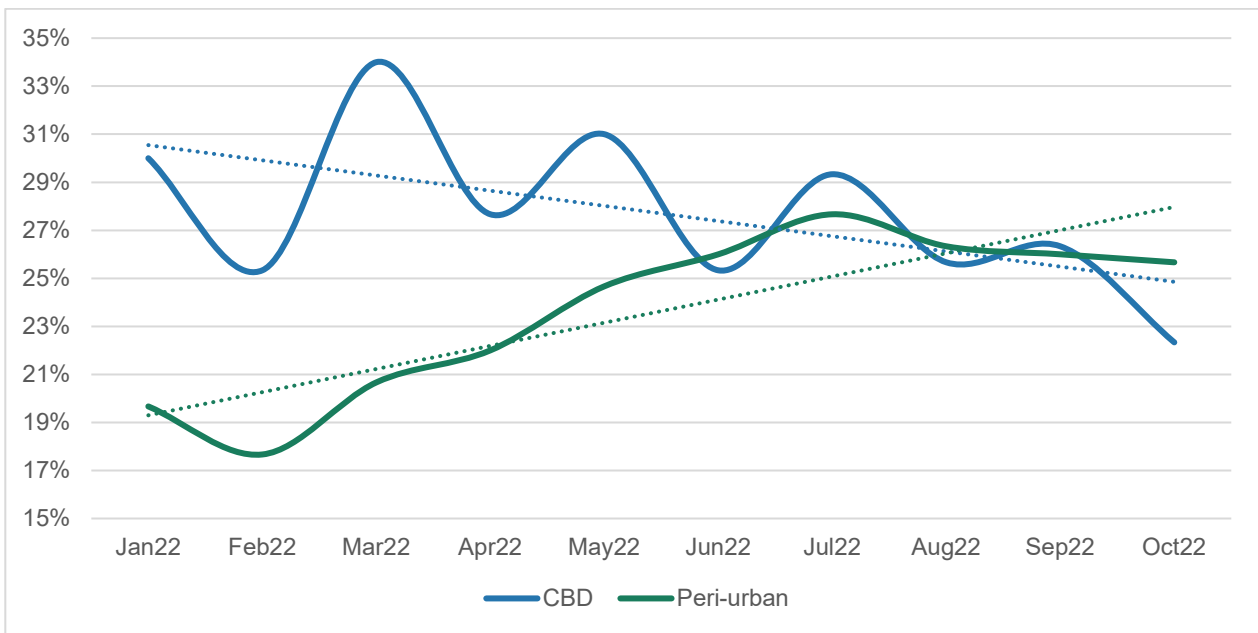


Figure 33: Percentage of private-vehicle trips for commuting into CBD and into peri-urban areas (NZ wide data), 2022. Source: NZ Transport Agency Customer Journey Monitor

Many of these impacts are interrelated and likely to be supporting the dispersal of population growth across the region (alongside affordability pressures) and the resulting decline in population growth in central Wellington. If the trend towards greater dispersal persists, then current transport strategies and investments will need to be reconsidered to provide for a more multi-centric urban area.

Continued monitoring of trends such as working from home, immigration, and economic activity, will be important to form a view on the enduring trends which might impact the way Wellington grows.

New legislation and policy shifts

Over the past three years there have been significant changes to government policy and ongoing reforms initiated that will impact how Wellington grows. This section provides a brief overview of recent and future changes and their importance to Wellington. In summary these changes include:

- Increased direction from National Policy Statements to both provide more capacity (National Policy Statement on Urban Development) as well as to better protect the natural environment (National Policy Statements on Indigenous Biodiversity and Highly Productive Land)
- Resource Management Act amendments to enable more development through Medium Density Residential Standards
- Government partnerships such as the WRLC which are informing planning and infrastructure decision making.

National Policy Statement on Urban Development (2020)

The National Policy Statement on Urban Development (NPS-UD) directs local authorities to enable greater housing supply and ensure that planning is responsive to changes in demand. It also seeks to ensure that new development is of a form and in locations that meet communities' needs and encourages well-functioning urban environments. It also requires councils to remove overly restrictive rules that affect urban development outcomes in our cities.

The key impact for Wellington is that the NPS-UD requires more intensification than is currently enabled in the existing district plans of the Tier 1 Urban Area – consisting of Wellington City, Upper and Lower Hutt, Porirua and Kāpiti Coast. The NPS-UD intensification policy directs at least six storey developments within a walkable catchment of existing and planned rapid transit stops, as well as around the city centre and

metropolitan centre zones. In many locations the current zoning framework limits development by using lower density zoning and other regulations in locations that, as per the NPS-UD, would be within a walkable catchment and therefore should be enabling more intensive development.

The Tier 1 councils in the Wellington Area are currently progressing plan changes to implement the NPS-UD using an expedited process. Key features of the draft plan changes released by councils include:

- The Wellington CBD, Lower Hutt and Upper Hutt CBDs are identified as ‘City Centres’ where there is no height limit on development and requiring six-storey development to be enabled in the surrounding walkable catchment
- Kilbirnie, Johnsonville, Porirua, Paraparaumu are identified as ‘Metropolitan Centres’ where six-storey development is enabled within the centre and surrounding walkable catchment
- High-density zoning that enables six storey development has been applied extensively across the valley floor of the Hutt Valley
- High-density residential zoning has been applied in a more limited capacity to the walking catchment of stations on the Kāpiti Line in Wellington City, Porirua and the Kāpiti Coast.

The NPS-UD plan changes also introduce several ‘qualifying matters’ which will moderate the development potential in some of these locations. The extent and implications of qualifying matters will be resolved through the current plan change process.

The 2023 Housing and Business Capacity Assessment shows the impact of the NPS-UD and Medium Density Residential Standard (MDRS) on the quantum and distribution of development opportunities across the region. Wellington and Horowhenua are estimated to have realisable development capacity⁴ for 206,613 dwellings, which significantly exceeds demand under either Stats NZ (36,500) or Sense Partners (86,500) projections. As figure 36 shows, there has been a notable increase in realisable development capacity across all Tier 1 council areas, and in particular Wellington City and Kāpiti Coast. The magnitude of change between 2022 and 2023 illustrates the potential for the NPS-UD and MDRS changes to disrupt established growth patterns if development opportunities in Central Wellington are realised by the market.

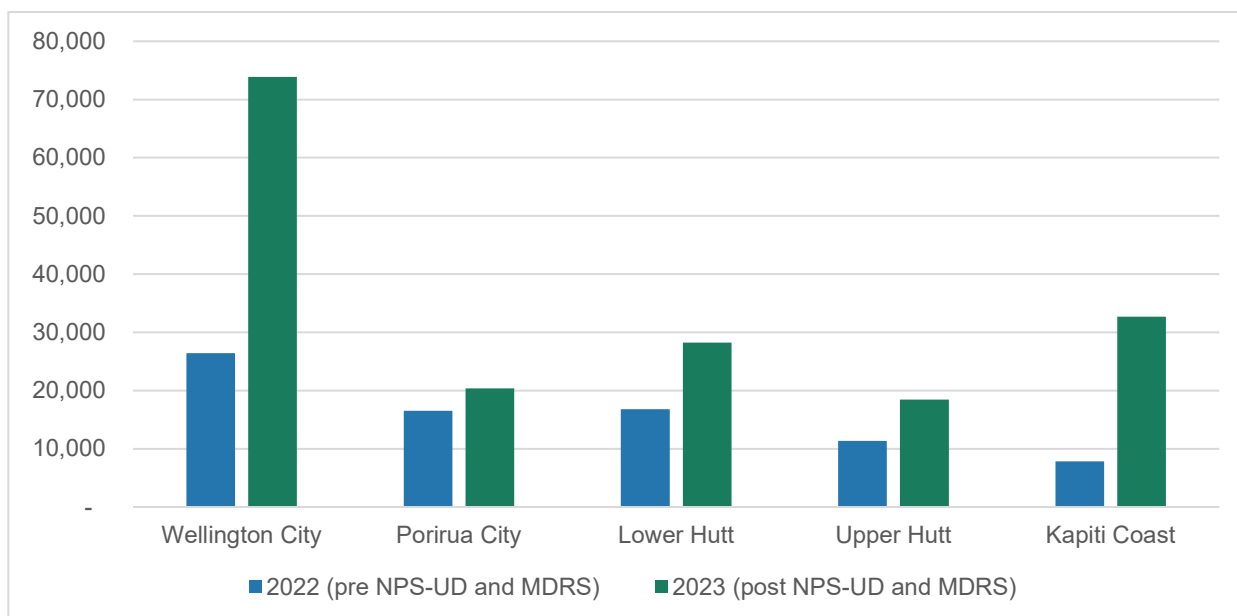


Figure 34: Realisable Development Capacity 2022 and 2023 - Wellington Tier 1 Councils. Source: Wellington Regional Housing and Business Capacity Assessments 2022, 2023 (draft)

⁴ Realisable development capacity is an assessment of the most likely type of development to occur on a site given planning regulations, commercial feasibility, and risk to a developer.

Resource Management (Enabling Housing Supply and Other Matters) Amendment Act (2021)

This act changes the Resource Management Act and the NPS-UD as summarised below:

- There is a requirement to make medium density zoning the default for most residential areas. The zoning includes the Medium Density Residential Standards (MDRS). This will allow people to build up to three homes of up to three storeys on most sites without needing a resource consent.
- NPS-UD policies on where to intensify housing will be changed to focus solely on accessibility to centres, rather than accessibility to opportunities via public transport and demand.
- It introduces a new streamlined planning process so councils can implement the intensification policies required by the NPS-UD from August 2023, at least a year earlier than expected.

At the time of writing, the incoming government has indicated its intention to amend the MDRS provisions to provide councils with greater discretion on where to apply MDRS.

Government greenhouse gas emission reduction plans

In the last few years there has been a much greater focus on the need to reduce greenhouse gas emissions to mitigate the impacts of climate change. Both the Government and Wellington's councils are developing comprehensive plans that detail the scale of reduction necessary to meet international obligations. Transport is the largest generator of greenhouse gas emissions in Wellington, which means it is important for meeting emission reduction goals.

The Government is required by the Climate Change Response (Zero Carbon) Amendment Act 2019 to prepare a plan setting out the policies and strategies for meeting the relevant emissions budget. The first Emissions Reduction Plan was released in 2022: 'Te hau mārohi ki anamata: Towards a productive, sustainable and inclusive economy: Aotearoa New Zealand's first emissions reduction plan' clearly outlines that transformational change to the transport system is necessary to achieve the required scale of emissions reduction. A combination of reducing reliance on private vehicles, transforming the vehicle fleet to zero emissions, and decarbonising heavy transport and freight is proposed.

The emissions reduction plan highlights the important role of land-use in helping to achieve this change. Far greater integration between land-use and transport decision-making is signalled, with a strong focus on ensuring that decisions relating to growth and development support wider goals of emissions reduction.

At the time of writing, the incoming government has indicated a commitment to New Zealand's emission reduction targets, however details of any changes to policy interventions that may be employed to achieve these are unknown.

The Wellington Regional Land Transport Plan (2021) has set a target of 35 percent reduction in transport-generated emissions to achieve within ten years. This target will continue to drive the regions transport programme and investments.

Impact of climate change

Areas of Wellington are particularly vulnerable to seismic risk and other natural hazards. Sea level rise and more severe storms will increasingly impact on the region's coastal communities, roads, and rail infrastructure.

Climate change is expected to affect the magnitude and frequency of climate-related events and we expect that this will be a growing influence in decision making for where and how the region grows.

Climate change related hazards such as coastal inundation and flooding are expected to be felt strongly in low-lying areas of the region, while more frequent and intense rainfall events will increase the risk of erosions and landslides in more hilly areas. Erosion to coastal roads and infrastructure is also likely to increase. The impacts of a major event in Wellington are compounded by reliance on a limited number of road and rail corridors to connect communities.

There is an increasing focus on planning for the impacts of climate change, with several key initiatives underway to better understand and prepare for the potential impacts of climate related hazards. These include Tiro Rangi: Our NZ Transport Agency climate adaptation plan, which has actions to improve our management of climate risks, embed climate adaptation into business processes and investment decisions, and work better with partners on climate adaptation The NZ Transport Agency Resilience Framework is also being updated, with key shifts towards enabling better community resilience.

We will continue to collaborate with partners to improve our collective understanding and managing our response to climate risks, including its impact on current infrastructure, services, and future investment.

Greater partnership between central government, Wellington councils and Mana Whenua on urban development

Over the past five years there has been increased collaboration through the WRLC and specific place-based initiatives such as Let's Get Wellington Moving, Riverlink and Eastern Porirua Regeneration project.

The Wellington Regional Leadership Committee – Priority Development Areas

The WRLC has been established to improve alignment and coordination on urban development and infrastructure issues across the Wellington Region and Horowhenua. It includes representation from central government (including NZ Transport Agency), local government, and iwi. The committee oversees the WRGF, FDS, and associated work programmes, including priority development areas and policy priorities such as how to deliver more affordable housing and quality intensification.

Priority Development Areas are a key focus of the WRLC work programme. These are projects which are considered important for achieving the strategic direction of the WRGF and FDS. These projects offer opportunities for accelerated development and require partnership and collaboration between local government, mana whenua, and crown agencies to deliver a better than 'business as usual' outcome.

The areas / projects and lead agencies are:

- Featherston Masterplan Development – South Wairarapa District Council
- Let's Get Wellington Moving, Courtenay Place to Newtown – Wellington City Council⁵
- Ōtaki – Kāpiti Coast District Council
- Porirua Northern Growth Area – Porirua City Council
- RiverLink – Hutt City Council
- Trentham – Upper Hutt City Council
- Waterloo Station Transit Oriented Development – Greater Wellington Regional Council

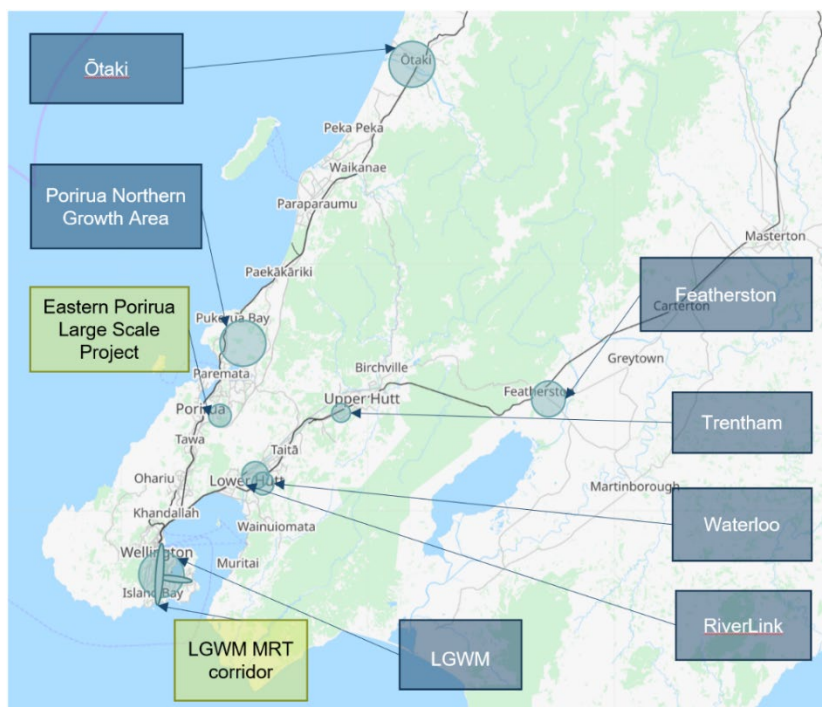


Figure 35 WRLC Complex Development Opportunities and large-scale urban development projects. Note CDOs are in blue boxes and urban development projects are in green boxes.

The priority development areas are at varying stages of progression, and further work is underway to refine the scope and scale of

opportunity they present. They are expected to form an important contribution to the region's medium-term pipeline of housing and growth. Successful delivery of a number of the priority development areas are

⁵ Let's Get Wellington Moving has been disestablished – the future of this PDA is yet to be confirmed.

important for realising the urban development benefits of transport investments (RiverLink) and also provide opportunities for examples of transit-oriented development (Trentham, Waterloo).

Future Development Strategy - Te Tirohanga Whakamua: a statement of iwi and hapū values and aspirations for urban development

The draft FDS incorporates Te Tirohanga Whakamua, a collective statement of iwi and hapū values and aspirations for urban development in the Wellington Region. Te Tirohanga Whakamua has informed the FDS, as required by the NPS-UD and will inform future work carried out by the WRLC. In addition to Te Tirohanga, the FDS identifies a number of specific locations where iwi are either leading or partially leading the implementation of FDS priorities (see appendix 1). These include:

- Porirua West Te Āhuru Mōwai
- Kenepuru
- Trentham
- Ōtaki Ngā Hapū o Ōtaki

Our view of Wellington's future growth

Strategic context and summary

Our view considers both how we think the current strategy guiding Wellington's growth and urban development **could** change as a result of key trends and influences, as well as how we consider it **should** change to better align with our urban development position and government outcomes. There are four key aspects of our emerging view:

- 1. There is uncertainty and differing views about how fast Wellington will grow. We need to plan for a range of possible futures.*
- 2. There is growing uncertainty about where and how growth will occur due to ongoing changes to planning regulation that enable more development across the region, along with changing behaviours and preferences. This creates several planning challenges which we will need to address with our partners.*
- 3. The current trend of growth becoming more dispersed across the region poses challenges for achieving transport outcomes and emission reduction targets. We need to support more growth to occur in accessible locations that have better travel choices.*
- 4. Clear regional alignment and prioritisation is needed to increase confidence to invest in strategic city and region shaping projects. New tools and approaches will be needed to manage the uncertainty about how fast, where, and how Wellington could grow in the future.*

For each aspect, in this section we discuss:

- Causes of the changes
- How this change may affect where and when growth occurs
- Key challenges and opportunities for NZ Transport Agency

Uncertainty about how fast Wellington will grow

There is uncertainty and different views about how fast Wellington will grow. This creates risks we need to manage and equity issues when comparing investment in Wellington with elsewhere in New Zealand. We need to be cautious about Wellington's growth assumptions when considering investments, and plan for a range of possible futures.

The growth forecast used by the Wellington Region councils suggests the region may grow significantly more over the next 30 years than it has historically. The assumptions and rate of growth in Wellington's forecast differ significantly from that used by Stats NZ and New Zealand's other large cities.

Wellington's forecast assumes a higher level of net-migration than Stats NZ over the next 30 years, resulting in annual population growth continuing near the level experienced between 2014-2020, prior to the COVID-19 pandemic. The amount of growth forecast over 30 years considerably exceeds the Stats NZ medium projection by more than the forecasts used by other Tier 1 areas, despite Wellington having a comparably low growth rate over the past 20 years. The difference between Stats NZ and Wellington's Sense Partners forecasts highlights the strong influence of migration as a factor in New Zealand's population growth. Changing the assumptions around migration can have a large effect on the resulting projections.

While there is inherent uncertainty in all forecasts and projections, immigration is influenced by national and international policy settings and events that generally effect New Zealand as a whole. A reasonable degree of consistency about immigration assumptions used in growth forecasts across New Zealand should be expected. There is not a clear rationale why Wellington should use significantly different assumptions than elsewhere in New Zealand.

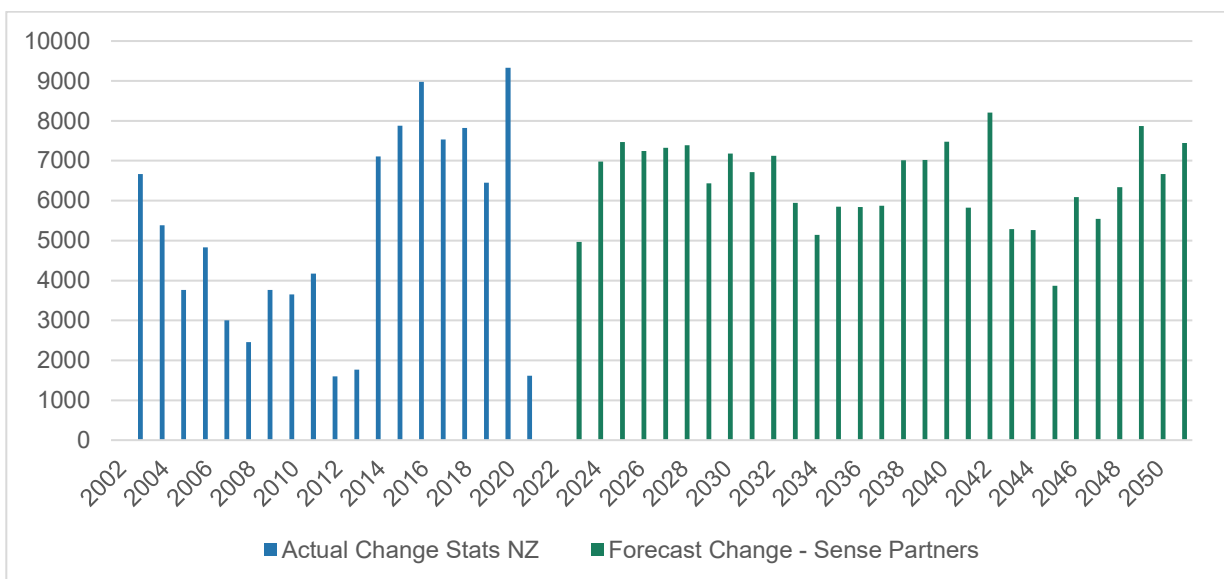


Figure 36: Wellington Region (ex HDC): Annual population change - actual and forecast.

Challenges and opportunities for NZ Transport Agency

Growth projections play a key role in modelling estimated benefits from transport investments, and inform important decisions on timing, capacity, and mode. The inconsistency between Wellington's growth forecast and those used elsewhere creates equity issues when comparing the growth-related benefits of projects and prioritising investment on a national basis. The benefits attributed to growth for projects in Wellington may be overestimated relative to other cities in New Zealand.

While planning for a larger than expected population has advantages, including being more responsive to growth and avoiding negative impacts when infrastructure exceeds capacity (for example, congestion), this needs to be balanced with the opportunity cost of investing in and constructing excess capacity well before it is needed.

Ensuring programmes and projects can be scaled and /or staged where possible, so that investments can be accelerated or deferred in response to changes in growth rates is an effective strategy to address uncertainty in the growth rates. Key steps we could take to address this issue include:

- Require major programmes and projects to be evaluated against a range of growth scenarios (including Stats NZ) so that we understand the benefits relative to other investments in New Zealand, and the dependency of benefits on different growth futures occurring.
- Require programmes to identify triggers and thresholds when additional capacity will be needed, so future investments can be accelerated or deferred relative to changes in the rate of growth.
- Advocate for the Wellington Regional Growth Framework and Future Development Strategy (and associated implementation plan) to consider a range of growth rates and staged and scaled approaches to enabling growth areas and major strategic investments.

Wellington could grow in a variety of ways and locations

There is growing uncertainty about where and how growth will occur due to ongoing changes to planning regulation that enable more development across the region, along with changing behaviours and preferences. This creates several planning challenges which we will need to address with our partners.

A combination of the WRGF / FDS, council growth strategies, NPS-UD and MDRS means that the capacity for new housing and employment growth is many times greater than likely 30-year demand. This means there are many ways and locations in which future development could occur.

As planning controls continue to be reduced, uncertainty will increase further and other factors will become more important in determining the form, location and timing of growth, including:

- Market attractiveness of a location
- Infrastructure capacity to accommodate development and the cost of required new infrastructure
- Environmental constraints such as flood risk, slip hazards and sea level rise
- Cost of development such as geotechnical engineering requirements
- Stated long-term development programmes, particularly by public agencies such as Kāinga Ora.

Wider trends add to this uncertainty, for example:

- While there is a long-term trend of more of Wellington's growth occurring outside of Wellington City, the NPS-UD has significantly increased opportunities for development in more central locations within Wellington City
- COVID-19 has significantly disrupted population trends and travel patterns. It is highly uncertain if these trends will return to pre-pandemic patterns. Some changes, like increased working from home and a shift to online retailing, may never fully return to a pre-COVID state. This is likely to impact different areas of the region in different ways.
- The development market and housing preferences appear to be changing rapidly. A significantly greater proportion of dwellings are attached and there has been a notable increase in terraced housing construction. There is uncertainty whether these trends will continue, accelerate, or return to what was more widespread previously.
- Employment and commercial development forecasts are particularly uncertain, given increased automation, the changing nature of work, and ongoing technological changes that make working from home easier than ever for some jobs,

Overall, while there has always been uncertainty around how Wellington may grow in the long term, changes to planning controls and wider uncertain megatrends mean this uncertainty is not only greater than ever, but also relevant in the short term.

Challenges and opportunities for NZ Transport Agency

Growth projections are an important influence on the work NZ Transport Agency does. Anticipated future population and employment patterns shape expected future travel demand and potential mode choices, including where effort needs to be focused in making improvements to existing infrastructure and services.

The scale of uncertainty around how Wellington may grow in the future is a significant risk to our decision-making. Unless we change how we make assumptions about future growth patterns, we may inadvertently focus effort on the wrong places and invest in the wrong things at the wrong time. At the same time, NZ Transport Agency cannot become paralysed by this uncertainty and avoid making decisions.

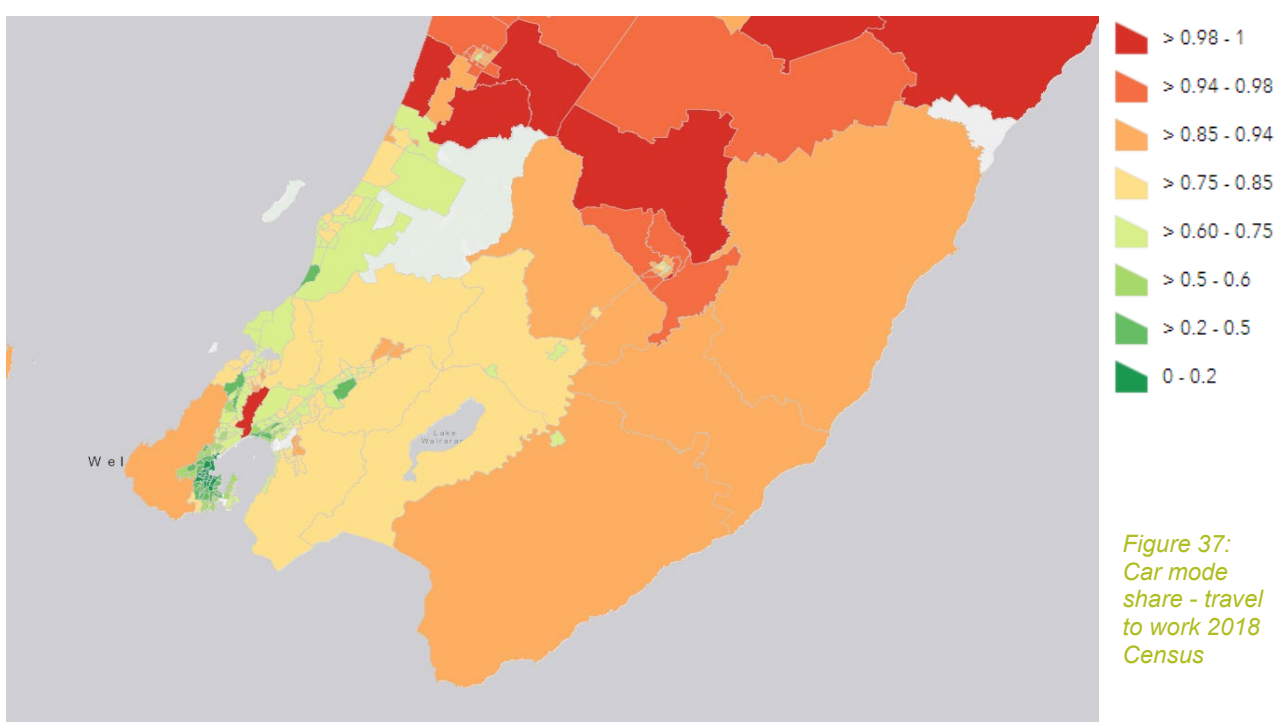
Steps we need to consider taking to respond to this uncertainty include:

- Better understand the factors driving growth trends, so we can adapt quickly and minimise the risk of doing the wrong things in the wrong places
- Better understand the likelihood of different growth outcomes, using scenarios to a greater extent, to know where safer 'no regrets' investment decisions can be made
- Focus more on developing programmes of many small-scale improvements across Wellington, which can respond to changing growth patterns in an agile way
- Focus more on using transport investment to shape urban development, rather than simply responding to it
- Work with others, especially agencies more directly involved in urban development, to increase certainty of growth outcomes.

Support more growth in highly accessible locations

The current trend of growth becoming more dispersed across the region poses challenges for achieving transport outcomes and emission reduction targets. We need to support more growth to occur in accessible locations that have better travel choices.

Existing growth patterns and plans pose challenges for achieving transport outcomes and emission reduction targets in Wellington. As discussed in the key trends section, growth has been more dispersed across the region over the past decade. The areas in central Wellington that offer greater public transport and active mode travel options have accommodated a lower proportion of the region's growth over the past decade and have recently seen a decline in population. There has been a notable increase in growth in outer areas such as Horowhenua and Wairarapa, and significantly more growth is signalled in the FDS and council growth strategies in these locations and the Kāpiti Coast. Better access due to recent roading improvements such as Transmission Gully and the Kāpiti Expressway are likely to be contributing to this trend. People living in outer areas are both more likely to drive to work and services than those who live in more central locations, and to also travel further to work and other activities.



This trend of population growth occurring more in outer areas and decline in central locations will generally place greater demand on road networks and make achieving emission reduction targets very challenging. Focussing most growth in locations where travelling by public transport is competitive with travelling by car is likely to optimise the use of the network and support emission reduction goals. In Wellington this is largely locations in and around the CBD and inner suburbs of Wellington City and the immediate walking catchments of rail stations in the Hutt Valley and Porirua (see figure 40).

Supporting changes to urban form will be needed alongside improvements that make public transport, walking and cycling more competitive with car travel across more of the existing urban area. However, these changes are unlikely to occur at the scale and pace required to achieve emissions targets without also reconsidering growth in locations that are presently highly car dependent.

The steady shift towards more attached housing is an encouraging trend and supports our urban development position. Depending on the location, denser housing (and hence population) can support more local services and higher quality public transport services. Shorter travel distances make walking and cycling a viable option for more trips.

The notable increase in medium density development in Lower Hutt around rail stations demonstrates there is demand and a market for denser housing in locations with good transport options when this is enabled by planning regulations. The changes because of the NPS-UD and MDRS are likely to further support this trend. High land value locations that have had their development potential constrained by existing district plans may grow faster than previously expected, such as the inner suburbs across much of Wellington City and a greater extent of the Hutt Valley.

Growth in greenfield areas and rural towns and settlements

While more growth occurring in central Wellington is likely to have the greatest benefits from a transport perspective, growth will also continue to occur in other locations across the Wellington region, including rural towns and settlements, and new greenfield locations at the fringe of the urban area. These developments vary in location, size, access to opportunities, and have communities with different needs and aspirations.

To align with our urban development position, we should encourage growth in these locations to be:

- A contiguous extension of the existing urban area and as close as possible to existing amenities to encourage shorter trip lengths ('leapfrog' development should be discouraged)
- Well connected with active mode networks to existing town centres and local destinations
- Serviced by public transport, in particular be close to the rail network.

There are opportunities for public transport to better serve existing communities, including using on-demand services. Further committed improvements to existing regional public transport on the Wairarapa line, Kāpiti line, and Capital Connection will make these services a more attractive alternative for more trips.

Challenges and Opportunities for NZ Transport Agency

Supporting more growth to occur in accessible locations will require a shift in where we focus our effort, as well as working more closely with our partners to continue this shift to growing 'up' rather than 'out'. Key steps we will need to consider are:

- Advocate for the application of enabling planning framework in central locations with good access to public transport, employment and services so the market can respond to demand.
- Advocate for local government partners to avoid, reconsider or defer growth in areas with comparatively poor access to employment and other opportunities which do not align with our urban development position.
- Improve access and amenity in central locations where higher density development is more likely to be commercially feasible, such as in central Wellington and close to rail stations in the Hutt Valley – including Riverlink, Waterloo and Trentham priority development areas.
- Ensure we are prioritising our planning and design work in the right areas and at the appropriate scale to support growth in a way that will achieve positive changes to travel patterns.
- Ensure that our funding continues to support and enable urban development in ways that will contribute to better transport outcomes.

Percentage of jobs accessible by public transport in the same (or better) time as driving

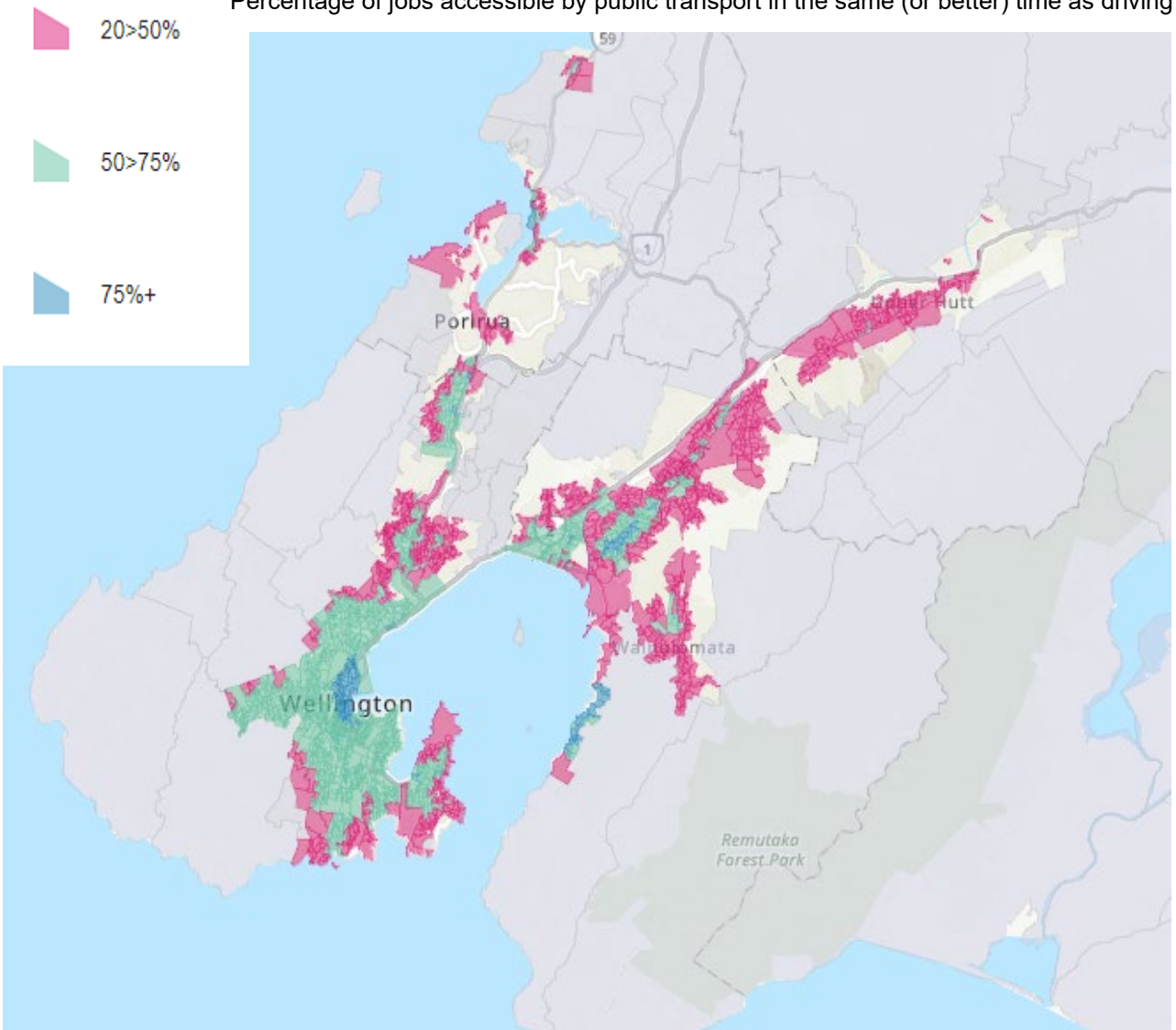
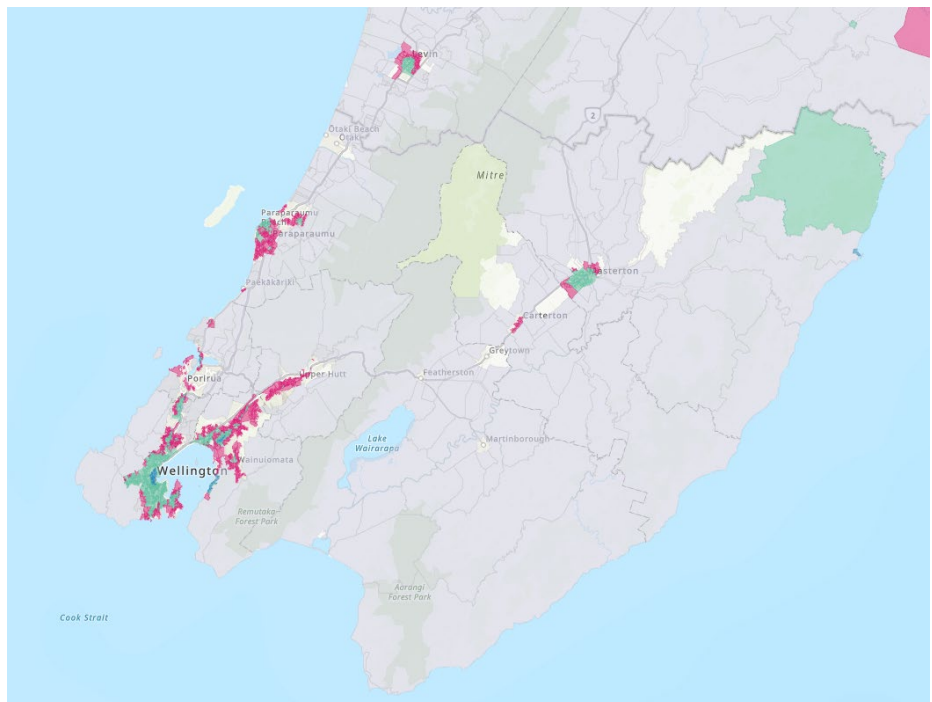


Figure 38: Employment Access – Public Transport relative to Driving, 2022



Clear ‘all of region’ prioritisation and new approaches are needed to achieve regional goals

Clear regional alignment and prioritisation is needed to increase confidence to invest in strategic city and region shaping projects. New tools and approaches will be needed to manage the uncertainty about how fast, where, and how Wellington could grow in the future.

The amount of development capacity signalled in council growth strategies, district plans and known development intentions is more than previously available. This is due to a combination of factors including:

- The NPS-UD and MDRS enabling greater development across most of the urban area, and in particular, high-demand locations where development was previously restricted by planning regulations.
- The amount of greenfield development collectively identified in the growth strategies and spatial plans of councils. A stocktake of greenfield development areas signalled in council growth strategies indicate capacity for approximately 65,000 dwellings in new greenfield developments over the next 30 years.
- The known pipeline of potential development identified in the Wellington Regional Housing Action Plan. The Wellington Regional Housing Action Plan identifies numerous housing development areas that provide for 104,000 dwellings.

Collectively, the supply of planned development capacity in the Wellington Region far exceeds the expected demand over the next 30 years under any growth forecast. While a surplus of development capacity is intentional and supports competition in the market for new housing and business space, the scale of surplus capacity in Wellington means:

- Not all development planned is likely to proceed in the timeframe indicated, at the density signalled, or at all.
- The region could grow in vastly different ways and locations – to illustrate this point, two extreme scenarios how Wellington could grow are:
 - there is enough development capacity in Wellington City alone to accommodate between 85-100% of growth of the region over the next 30 years (depending on how fast the region grows), or:
 - greenfield development areas identified in council plans could provide for between 60-100% of growth over the next 30 years (depending on how fast the region grows), well in excess of the 30% envisaged by the regional growth framework.

Challenges and opportunities for NZ Transport Agency

As illustrated throughout this document, the long-term outlook and recent changes to the planning system mean there are now a much wider range of possible futures for how Wellington could grow and change. This results in several challenges for NZ Transport Agency and other infrastructure providers including:

- that the benefits of investments may not be realised as the assumed demand (uptake) does not eventuate, resulting in sunk costs, underutilised assets and poor value for money
- wasted resource from engaging in planning for developments that do not proceed
- pressure to service everywhere with infrastructure at once, at service levels that are unaffordable or inefficient (or both)
- risks of double counting of growth between projects (e.g., assuming growth occurs according to the intentions of each individual development or project)

- less certainty of cost recovery when development contributions, targeted rates or special purpose vehicles are used as a funding mechanism.

This reduces confidence in where and what we should invest in. Clear regional alignment and prioritisation is needed to provide confidence for infrastructure providers to invest in strategic city and regional shaping projects. New tools and approaches to manage the uncertainty about how fast, where, and how Wellington could grow in the future are also needed. Key steps we will need to consider include:

- Advocate for more specific detail and direction in the Future Development Strategy, such as population and employment targets and staging / sequencing of development areas, to assist with aligning council strategies and plans with agreed regional direction and objectives and reconciling the amount of capacity in new development areas with regional demand /population forecasts.
- Developing regional, city and district growth strategies that acknowledge uncertainty and are ready to adapt and be agile to change. This could be achieved by including clear staging and sequencing for the planning of new growth areas and major infrastructure investments needed to enable growth based on triggers and thresholds, such as when an area reaches a certain population. This approach would allow for investments to be accelerated or deferred relative to changes in growth patterns.
- Using growth scenarios when forming strategies and assessing investment proposals that represent a range of plausible ways growth could occur would help to identify “no-regret” investments and interventions that perform well in a range of possible futures.
- Improved monitoring of intra-regional and intra-city/district growth patterns and indicators that provide greater insight to how the market and behaviours are changing over time.
- Increasing the use of policies, actions and investments that aim to influence demand to accelerate or focus growth on desirable locations rather than traditional supply-side approaches, such as zoning and regulation to limit growth. This could include:
 - Direct investment in ‘city shaping’ infrastructure – that aims to influence demand by improving relative access and amenity
 - Financial tools and incentives, such as Lower Hutt’s Development Contributions remission policy
 - A greater role for public-led or joint initiatives with the private sector to deliver growth in desirable locations, such as with Kainga Ora.
- Closer engagement with the development sector and developing a greater and more nuanced understanding of the market and urban economics. This could help to increase confidence we are investing in locations where the conditions are right for the market to deliver.

Actions

The actions in this section of the report provide direction for NZ Transport Agency and our contribution to work programmes in Wellington. These actions will be implemented across various teams within NZ Transport Agency and rely on a collaborative approach internally, as well as with our external partners.

The actions directly respond to the findings of this report, specifically the challenges and opportunities for NZ Transport Agency identified in section four of this report.

Collectively, these actions identify how we can reflect and pursue our view on Wellington's growth and development. Most actions relate to partnering and influencing other agencies to achieve the desired outcome. They are mostly existing work but provide direction to what we are seeking to achieve through a series of business-as-usual activities, alongside some new work.

For each of the actions we have outlined a more detailed view on how they will be implemented.

Draft Action 1: Collaborate with partners to maximise the value of public investments in Wellington

Our direct influence on growth and urban development in Wellington is relatively limited because we are not the primary decision-maker. However, we have well developed relationships with key partners, including councils and central government agencies and can collaborate with them to align land use and transport plans in order to maximise the value of public investments in Wellington.

Influence policy direction to better integrate urban development and transport	Support the development and implementation of Wellington's Future Development Strategy	Influence ongoing changes to Regional and District Plans	Encourage partners more directly involved in urban development to focus their activity in highly accessible locations	Support the work of the Wellington Regional Leadership Committee
<p>Work across government to advocate that new policy and legislation (e.g. resource management and local government reform) appropriately integrates land use and transport.</p> <p>Work with partners in the region to:</p> <ul style="list-style-type: none"> develop a long-term view (30yrs) of investment programmes in Wellington's strategic road, public transport and active mode networks that aligns with and leads Wellington's growth better integrate transport planning processes (e.g., RLTP/NLTP) with growth strategy development. 	<p>Advocate for:</p> <ul style="list-style-type: none"> clear prioritisation and sequencing of major development areas and supporting infrastructure that distinguishes between planning, investment, and actual urban development major development areas in locations that support transport and urban development outcomes to the greatest possible extent the Future Development Strategy to fully reflect implications from recent trends and policy changes and demonstrates the contribution of urban form to climate targets councils to align district and city growth strategies and spatial plans with the Future Development Strategy. 	<p>Work with councils and other government agencies to advocate that zoning frameworks, objectives, policies and rules of regional and district plans:</p> <ul style="list-style-type: none"> align with the NPS-UD outcomes and implementation of the MDRS consider the transport emissions impact of planning decisions enable more mixed-use development across urban areas have regard to the relevant Future Development Strategy as required and encouraged by the NPS-UD. <p>Continue to influence land-use planning processes to deliver good transport and urban development outcomes.</p>	<p>Use our technical expertise and data analysis to clearly identify locations where growth and urban development should be encouraged and discouraged, based on:</p> <ul style="list-style-type: none"> accessibility mapping investment pipeline information or influence transport system data sets guidance and best practice to support mode shift and emissions reduction climate and natural hazard risk. <p>Promote this evidence and the identified locations where growth should and should not go with our growth partners and within the Wellington Regional Leadership Committee Urban Growth Partnership.</p> <p>Work with Kāinga Ora to better coordinate planning and investment for future large-scale development.</p>	<p>Advocate for a greater 'all of Wellington Region' perspective when considering the impact of growth, investments, and other interventions towards achieving the outcomes of the Wellington Regional Growth Framework / Future Development Strategy and associated implementation plans.</p> <p>Engage with the work programme of the Wellington Regional Leadership Committee across housing, climate, hazards, and economic development to improve our understanding of how these issues may impact Wellington's growth.</p> <p>Support the work of the Wellington Regional Leadership Committee to improve analysis and monitoring of growth, travel trends and other outcomes within the region, including alignment with the outcomes and policy direction of the Future Development Strategy.</p>

Draft Action 2: Reduce risk from growth-related investments

Change and uncertainty about where and when Wellington may grow creates significant investment risks for NZ Transport Agency. Precise growth projections currently play a significant role in our planning and investment decision-making processes. Reducing those risks requires change to how we undertake these processes, so we can adapt more quickly where required. It also means that where we do make transformational investments, we need to work in partnership with other agencies and developers to fully realise their benefits.

Consider a range of possible futures when developing and assessing the benefits of major programmes and projects	Shift to staged programmes of scalable, agile activities	Increase certainty of growth outcomes where we make strategic investments	Use the Wellington Strategic Spatial View to inform our investment decisions and encourage integration across all transport investment in Wellington
<p>Require major city and region shaping programmes and projects to be evaluated against a range of growth projections, forecasts or scenarios (including Stats NZ projections) to understand the benefits relative to other investments in New Zealand and the dependency between benefits and different growth futures occurring.</p> <p>Advocate for Wellington councils to engage with Stats NZ to resolve differences between Wellington's bespoke Sense Partners forecast and Statistics New Zealand projections.</p>	<p>Encourage planning and business case work to focus on creating programmes of scalable interventions that can be quickly and easily adapted in response to changing growth patterns.</p> <p>Promote the use of clear trigger points to guide when investment is required relative to when growth is occurring, rather than long-term forecasts or projections.</p> <p>Consider how the NZ Transport Agency investment decision-making framework can prioritise the development of scalable, agile activities.</p> <p>Consider how future RLTP updates can prioritise scalable, agile activities.</p>	<p>Work with our urban development partners to increase certainty about where and when growth will happen, as part of project development work.</p> <p>Work in partnership with other agencies and developers to fully realise the benefits of investments, including through active involvement in Transport Oriented Development design and structure/master planning.</p> <p>Develop our understanding of how our investments can influence the locational decisions of households and businesses, and shape how the region grows.</p>	<p>Use the Wellington Strategic Spatial View to inform our input to both internal and external investment proposals.</p> <p>Keep the Wellington Strategic Spatial View up to date so that our investment decisions are informed by an understanding of current growth trends.</p> <p>Encourage future versions of the RLTP to integrate all transport funding sources (including new growth-related funds) to deliver the best possible programme within the available investment.</p>

Draft Action 3: Improve growth monitoring and forecasting capability

Significantly greater uncertainty around where, when, and how much growth is likely to occur in Wellington means that current approaches to growth forecasting, especially the use of a single forecast many decades into the future, are no longer appropriate. We also need to better understand current and future growth patterns and trends to ensure our decision-making is informed by the best possible evidence and data.

Develop more sophisticated approaches to growth forecasting	Improve our understanding of growth trends	Clearly identify locations most suitable for future growth
<p>Move towards the use of scenario-based planning as the land-use assumptions for NZ Transport Agency planning work and major investments. Move away from 'project-specific' growth scenarios to ensure regionally consistent decision-making and avoid the double counting of growth-related benefits.</p> <p>Work with partners to ensure growth forecasts used for NZ Transport Agency planning and investments more accurately reflect:</p> <ul style="list-style-type: none"> • development that is likely to occur in the short-medium term • the strategic direction of the Future Development Strategy • long-term uncertainty about the rate of growth. 	<p>Build relationships with the development sector to better understand their key drivers and future plans.</p> <p>Develop a clearer view of current development patterns and trends, as well as known future developments and other potential influences of where and when growth may occur (e.g., constraints on water infrastructure).</p> <p>Develop a better understanding of business and employment trends, including the type and number of employees who are working from home and their travel patterns.</p> <p>Work with our partners to improve the availability of data on growth and development trends within the region.</p> <p>Work with partners to improve our understanding of the impact of climate change and risk on future development and growth patterns, including sharing our climate risk data.</p>	<p>Develop and share maps identifying areas that are progressively better or worse for growth from a transport outcomes perspective.</p> <p>Base this analysis on prioritising locations:</p> <ul style="list-style-type: none"> • Where there is good accessibility to employment, education and social opportunities by public transport and active modes • Where the lowest amount of additional transport investment would be required to enable and support growth • Where growth would result in mode shift and help reduce emissions. • That can be serviced with resilient transport networks.

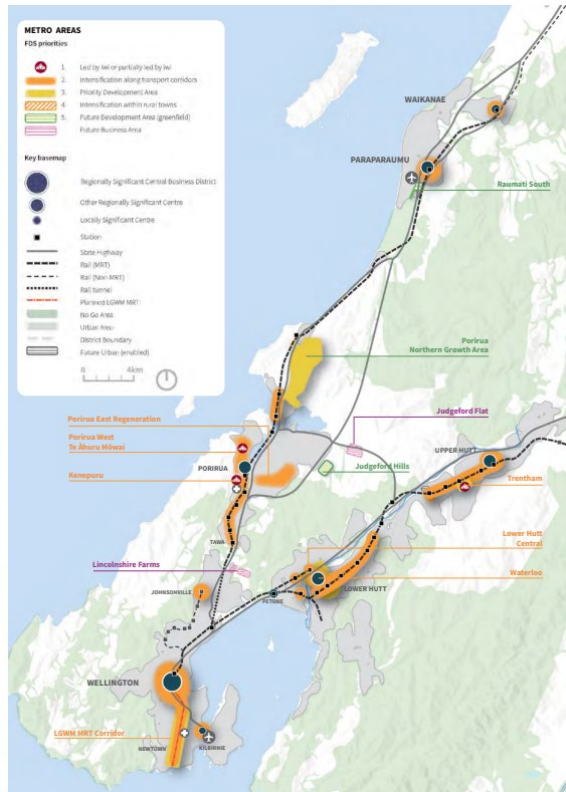
Appendix 1: Draft FDS maps – Development Priorities

FDS priorities

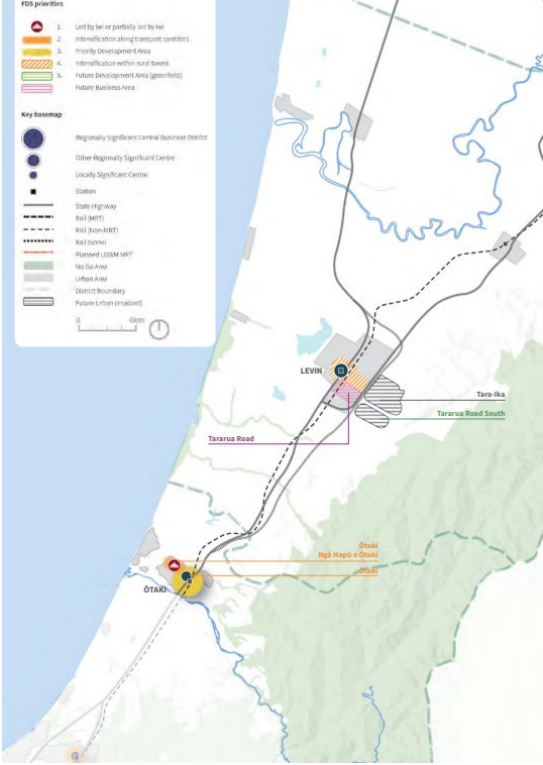
- 1. Led by iwi or partially led by iwi
- 2. Intensification along transport corridors
- 3. Priority Development Area
- 4. Intensification within rural towns
- 5. Future Development Area (greenfield)
- Future Business Area

Key basemap

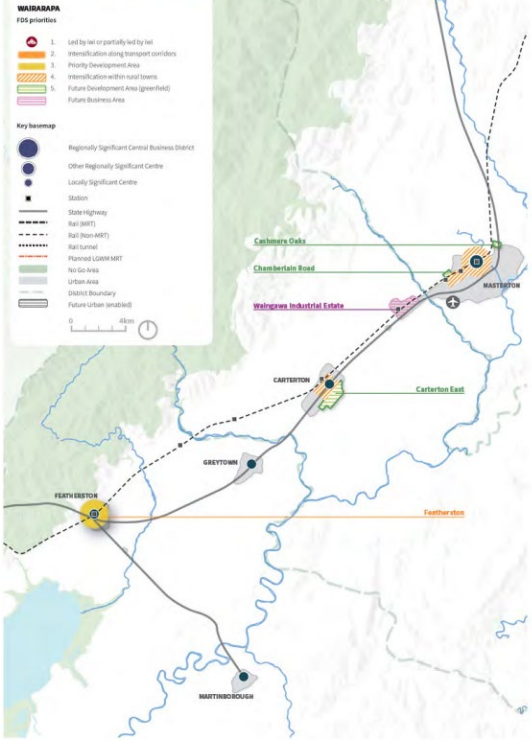
- Regionally Significant Central Business District
- Other Regionally Significant Centre
- Locally Significant Centre
- Station
- State Highway
- Rail (MRT)
- Rail (Non-MRT)
- Rail tunnel
- Planned LGWM MRT
- No Go Area
- Urban Area
- District Boundary
- Future Urban (enabled)



HOROWHENUA AND OTAKI



HASTINGS



Figures

Figure 1: WSSV area annual population change 2002 – 2022 (to 30 June). Source: Stats NZ	5
Figure 2: Residential Building Consents by Type, 12 Month Rolling Total 1993-2022. Source: Stats NZ.....	5
Figure 3 NZ Transport Agency intervention hierarchy from Arataki Version 2. Source: NZ Transport Agency	8
Figure 4 Wellington Strategic Spatial View process diagram methodology.....	9
Figure 5: Geographic area included in the WSSV and Growth Framework Corridors.....	10
Figure 6: Relationship between Wellingtons growth strategies and council plans. Source: Wellington Regional Growth Framework.....	10
Figure 7: Prioritisation criteria in the draft Future Development Strategy.....	11
Figure 8: The 'Corridor View' of the Future Development Strategy.....	12
Figure 9: Distribution of population growth, years 1-30, in the draft Wellington FDS	12
Figure 10: Components of population change - net migration - Wellington Region (5-year period ending June 30). Source: Stats NZ, Sense Partners/Greater Wellington Regional Council.....	15
Figure 11: Wellington Region Population Forecasts – Stats NZ medium (2021) and Sense Partners (2022) 50 th Percentile – 2018 to 2048.....	15
Figure 14: Share of Forecast Population Growth 2018-2084, Sense Partners 2022	16
Figure 15 WSSV area annual population change 2003 – 2023 (to 30 June). Source: Stats NZ	19
Figure 16 WSSV area population growth by council area. Source: Stats NZ.....	19
Figure 17: Share of population growth by council area 2013-2023. Source: Stats NZ.....	20
Figure 18: Population growth by WRGF corridor between 2003-2013. Source: Stats NZ.....	20
Figure 19: Share of population growth by council area 2003-2013: Source: Stats NZ.....	20
Figure 20: Population growth by WRGF corridor between 2013 and 2023. Source: Stats NZ.....	20
Figure 21: Annual population growth rate of NZ major cities (Tier 1 urban areas). Source: Stats NZ.....	21
Figure 22: Population Growth 2003-2023, Tier 1 Urban Areas. Source: Stats NZ.....	21
Figure 23: Share of total resident population by council area 2002-2022. Source: Stats NZ.....	22
Figure 24: Projected population age structure for the Wellington region, 1996 to 2048.....	22
Figure 25: Wellington Region NZDep 2018 by statistical area 2.....	23
Figure 26: New dwellings consented between 2002 and 2022 (June). Source: Stats NZ.....	24
Figure 27: New dwellings consented by council area. Source: Stats NZ	24
Figure 28: Building Consents by Attached and Detached Dwelling Types (2010-2021, WSSV Area. Source: Stats NZ	25
Figure 29: Residential Building Consents by Type, 12 Month Rolling Total 1993-2023, WSSV Area. Source: Stats NZ.....	25
Figure 30 12-month rolling (stacked) new residential building consents by council and type – 1993 to 2023. Source: Stats NZ	27
Figure 31: Total employment, 2000 to 2021. Source: Stats NZ	28

Figure 32: Annual employment change, 2001 to 2021. Source: Stats NZ	28
Figure 33: Employment by Workplace Location, WRGF Corridors, 2011 to 2021. Source: Stats NZ	29
Figure 34 Greater Wellington Region 12-month rolling total boardings for bus and rail - June 2016 to November 2022.....	30
Figure 35: Percentage of private-vehicle trips for commuting into CBD and into peri-urban areas (NZ wide data), 2022. Source: NZ Transport Agency Customer Journey Monitor.....	31
Figure 36: Realisable Development Capacity 2022 and 2023 - Wellington Tier 1 Councils. Source: Wellington Regional Housing and Business Capacity Assessments 2022, 2023 (draft).....	32
Figure 37 WRLC Complex Development Opportunities and large-scale urban development projects. Note CDOs are in blue boxes and urban development projects are in green boxes.....	35
Figure 38: Wellington Region (ex HDC): Annual population change - actual and forecast	38
Figure 39: Car mode share - travel to work 2018 Census.....	42
Figure 40: Employment Access – Public Transport relative to Driving, 2022.....	44

References and Links

Arataki

<https://www.nzta.govt.nz/planning-and-investment/planning/30-year-plan/arataki/>

Government Policy Statement on land transport 2021 / Te Tauākī Kaupapa Here a te Kāwanatanga mō ngā waka whenua 2021

<https://www.transport.govt.nz/assets/Uploads/Paper/GPS2021.pdf>

Government Policy Statement on Housing and Urban Development / Te Tauākī Kaupapa Here a te Kāwanatanga mō te Whakawhanake Whare, Tāone anō hoki

https://www.hud.govt.nz/assets/Urban-Development/Government-policy-statement-GPS/HUD-GPS_Cabinet-Paper-CMYK-5_3b2-web.pdf

Greater Wellington Region Population Forecasts

<http://demographics.sensepartners.nz/>

Horowhenua Growth Strategy 2040

<https://www.horowhenua.govt.nz/files/assets/public/council-documents/strategies/horowhenua-growth-strategy-2040-2022-update.pdf>

Hikina te Kohupara

<https://www.transport.govt.nz/consultations/hikina-te-kohupara-discussion/>

Housing Acceleration Fund

<https://www.hud.govt.nz/urban-development/the-housing-acceleration-fund/>

Infrastructure Funding and Financing Act

<https://www.hud.govt.nz/urban-development/infrastructure-funding-and-financing-act-2020/>

Kāinga Ora

<https://kaingaora.govt.nz/>

Methodology Report: A methodology for strategic assessment of the wider costs and benefits of urban growth, PWC for Ministry of Housing and Urban Development. (2020)

<https://www.hud.govt.nz/assets/Urban-Development/Urban-Growth-Agenda/Methodology-report-A-methodology-for-strategic-assessment-of-the-wider-costs-and-benefits-of-urban-growth.pdf>

Masterton Urban Growth Strategy – Planning for Growth to 2043

(Not available online)

National Policy Statement on Urban Development (2020)

<https://environment.govt.nz/acts-and-regulations/national-policy-statements/national-policy-statement-urban-development/>

Our City Tomorrow: Spatial Plan for Wellington City

<https://experience.arcgis.com/experience/4da3420b9d7c4cc2a00f548ef5e881a1>

Proposed national policy statement for highly productive land

<https://environment.govt.nz/acts-and-regulations/national-policy-statements/proposed-nps-highly-productive-land/>

Porirua Growth Strategy 2048

<https://poriruacity.govt.nz/your-council/city-planning-and-reporting/growth-strategy/>

Resource Management Act

<https://www.legislation.govt.nz/act/public/1991/0069/latest/DLM230265.html>

Resource Management (Enabling Housing Supply and Other Matters) Amendment Act

<https://environment.govt.nz/what-government-is-doing/areas-of-work/urban-and-infrastructure/proposed-rma-amendments-to-enable-housing-intensification/>

Resource Management Reforms

<https://environment.govt.nz/what-government-is-doing/key-initiatives/resource-management-system-reform/overview/>

Statistics New Zealand

<https://www.stats.govt.nz/topics/population>

South Wairarapa Spatial Plan

<https://swdc.govt.nz/consultation/spatial-plan/>

Te hau mārohi ki anamata Towards a productive, sustainable and inclusive economy: Aotearoa New Zealand's first emissions reduction plan

<https://environment.govt.nz/publications/aotearoa-new-zealands-first-emissions-reduction-plan/>

Toitū Te Taiao

<https://www.nzta.govt.nz/about-us/about-waka-kotahi-nz-transport-agency/environmental-and-social-responsibility/toitu-te-taiao-our-sustainability-action-plan/>

Te tupu pai Growing Well – Kaitit Coast Growth Strategy

<https://www.kapiticoast.govt.nz/media/42mmy4nr/growth-strategy-2022.pdf>

Urban Growth Agenda

<https://www.hud.govt.nz/urban-development/urban-growth-agenda/>

Urban Growth Strategy: Planning for Growth to 2043 – Carterton District Council

<https://cdc.govt.nz/wp-content/uploads/2017/09/Draft-Carterton-Urban-Growth-Strategy-V2-.compressed.pdf>

Urban Growth Strategy 2012-2032: Hutt City Council

<https://hccpublicdocs.azurewebsites.net/api/download/8e9200db38b84fa4a6474c52c55cd409/CM9-WE/6c04a46313387f942a6bb0c477c14750bd9>

Upper Hutt City: Land Use Strategy 2016-2043

<https://www.upperhuttcity.com/files/assets/public/yourcouncil/land-use-strategy-2016-2043.pdf>

Wellington Regional Leadership Committee

<https://wrlc.org.nz/>

Wellington Regional Growth Framework

<https://wrgf.co.nz/>