Chapter 1: Introduction and Regional Summary

1 Introduction

1.1 Purpose of the Housing and Business Development Capacity Assessment

This Housing and Business Development Capacity Assessment (HBA) has been prepared to meet the requirements of the National Policy Statement on Urban Development (NPS-UD).

Introduced in 2020, the NPS-UD recognises the national significance of:

- Having well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future, and
- Providing sufficient development capacity to meet the different needs of people and communities.

A HBA assesses the demand for housing and business land and determines how much development capacity is needed to sufficiently meet that demand.

The NPS-UD outlines the purpose of the HBA and are included below.

Section 3.20 Purpose of the HBA

- 1. The purpose of an HBA is to:
 - a. Provide information on the demand and supply of housing and of business land in the relevant tier 1 or tier 2 urban environment, and the impact of planning and infrastructure decisions of the relevant local authorities on that demand and supply; and
 - b. Inform RMA planning documents, FDSs, and long-term plans; and
 - c. Quantify the development capacity that is sufficient to meet expected demand for housing and for business land in the short term, medium term, and long term.

A housing update to the 2019 Wellington Region HBA (prepared under the National Policy Statement on Urban Development Capacity 2016) was completed in 2022. It provides an interim update on housing development capacity, as required by clause 4.1(2) of the NPS-UD. It covered the Greater Wellington urban environment, made up of Wellington City, Porirua City, Kāpiti Coast District, Upper Hutt City, and Lower Hutt City.

This document is an update of the 2019 HBA, relating to both housing and business land in the Wairarapa-Wellington-Horowhenua region. It meets the requirements of the NPS UD and has been prepared to inform the Future Development Strategy (FDS) for the same geographic area and development of councils' 2024 Long-Term Plans.

1.2 Statutory context – what does the NPS-UD require?

The region is growing which puts pressure on the available development capacity. Councils cannot effectively plan for that growth if they do not know how much development capacity they have, what pressure is being put on it, over what timeframe, and in which areas. It is these questions that this report seeks to answer. This is important, as a shortage of development capacity is likely to put upwards pressure on house prices and business land as people compete for limited development opportunities.

Tier 1 and 2 councils must prepare a HBA to ensure their planning decisions are well-informed by the demand and supply of housing and business land. The HBA helps to inform councils' Long-Term Plans, Future Development Strategy, and RMA planning documents.

Under the NPS-UD, Greater Wellington Regional Council, Wellington City Council, Porirua City Council, Kāpiti Coast District Council, Upper Hutt City Council, and Hutt City Council are classified as tier 1 councils. Masterton District Council and Horowhenua District Council are classified as tier 3 councils, while Carterton District Council and South Wairarapa District Council do not have a classification. All these councils are part of the Wellington Regional Leadership Committee (WRLC) region and are being included in this HBA.

This HBA is required to:

- Analyse the affordability and competitiveness of the housing market and the impact of planning decisions and infrastructure on the market;
- Estimate demand for housing and business land by type and location in the short, medium, and long term;
- Quantify development capacity for housing and its feasibility, and what is reasonably expected to be realised in the short, medium, and long term;
- Provide the basis for bottom lines for sufficient housing development capacity;
- Quantify development capacity for business land and its suitability in the short, medium, and long term; and
- Quantify any insufficiencies in development capacity for housing or business land and whether the shortfalls are due to planning or infrastructure constraints.

1.3 A partnership approach

The Wairarapa-Wellington-Horowhenua region, as shown in Figure 1.1 below, is highly connected. Good transportation links between the cities and towns, particularly in the metropolitan area, means that there are few barriers between the various housing markets, and businesses have a wide choice of locations in which to establish. It also means that the labour force is highly mobile.

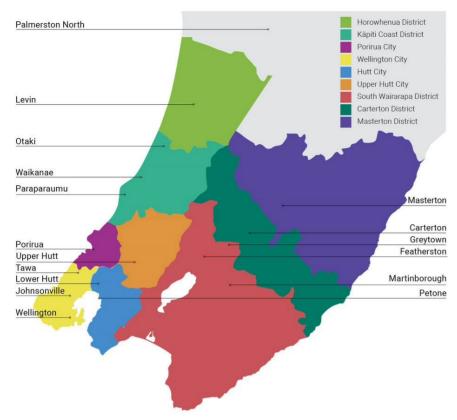


Figure 1.1: Map showing the environment Wairarapa-Wellington-Horowhenua region.

In this context, and with the requirement under the NPS-UD for councils that share jurisdiction over an urban environment to jointly prepare an HBA, the councils have adopted a joint approach to undertake the assessment together.

This report has been prepared for the Wellington Regional Leadership Committee (WRLC) as a report for the wider Wairarapa-Wellington-Horowhenua region. It will be used to support spatial and other planning being undertaken by the councils in the region and the WRLC. Whilst the report breaks land requirements down to a council level, we will be developing a regional response to meet required levels of expected demand. In the short term, this planning will be undertaken as part of the region's Future Development Strategy.

This joint approach:

- Ensures a consistent way to assess development capacity;
- Uses a common methodology and assumptions for population projections;
- Uses similar modelling processes for each council;
- Leverages off the resources available to each council;
- Presents results not just on a city-or town basis, but across the Wairarapa-Wellington-Horowhenua region; and
- Is consistent with work on joint spatial planning for the region.

1.4 Engagement

The NPS-UD encourages involvement of the development sector in the preparation of the HBA to provide real-word evidence and contribute to the quality of the assessment, particularly regarding what is feasible and reasonably expected to be realised. We engaged specialist consultants who work within the development market and use that experience to liaise with business and housing developers and infrastructure providers in preparing this HBA. For more information see Appendix 5: Business Feasibility Report.

1.5 Link to the Draft Future Development Strategy

HBAs inform Future Development Strategies, which are also required under the NPS-UD. The Draft Future Development Strategy take a helicopter view of the Wairarapa-Wellington-Horowhenua region to show the broad locations for future growth and general locations of main infrastructure corridors over the next 30 years.

This HBA uses 2022 Sense Partners population projections as the bottom lines to be consistent with the Future Development Strategy assumptions.

The last Census held in March 2023 will provide an important foundation for considering future expectations for population, and subsequent housing demand. The timing of the 2019 HBA meant we did not have the last five years of adapt to confirm in this HBA but will have for the next one in 2026.

All councils in the region are preparing for growth. Fluctuations in projections are expected and don't change the fact that we need to continue facilitating growth. The point in time nature of this analysis means the Future Development Strategy uses the HBA as a temperature check to provide a base to build our future vision for growth and development with the strategy.

1.6 Relationship with other plans and strategies

The NPS-UD fits within a broader framework of plans and policy statements prepared under the Resource Management Act 1991 (RMA). National policy statements sit at the second level of the RMA hierarchy. Regional policy statements and district plans must 'give effect' to a national policy statement¹.

Along with requiring preparation of the HBA, the NPS-UD directs tier 1 and 2 councils to set housing bottom lines for the short to medium and long term, based on the HBA, in their regional policy statements and District Plans.

The Wellington Regional Growth Framework (WRGF) – a non-statutory spatial plan that describes a long-term vision for how the region will grow, change, and respond to key urban development challenges and opportunities – identifies a mix of development in urban renewal areas and future urban areas, as well as a priority work programme to increase housing supply, affordability, and

¹ Section 75(3)(c) RMA

Wairarapa-Wellington Horowhenua Region - Housing and Business Development Capacity Assessment - August 2023

choice. The WRGF is now being updated and developed into a Future Development Strategy (as mentioned above) which is a statutory document required by the NPS-UD for all tier 1 and 2 councils.

Councils also prepare a number of non-RMA plans and strategies to inform decision-making and directions for the management of growth. These range from required documents such as Long-Term Plans and associated infrastructure strategies, through to optional documents, such as growth strategies, town centre plans, and open space strategies. All these documents are an important consideration for this capacity assessment, and for responding to the findings of the HBA where required. These documents are detailed in the individual council chapters that follow where relevant.

1.7 Report Structure

This report has been structured with several chapters all presented independently for ease of reading.

- Chapter 1: Introduction and regional summary This chapter provides the background to the project, details how the HBA fits with the broader planning framework, outlines the methodology for the HBA and provides results at a regional scale.
- Chapters 2 through 10: Results for each council These chapters provide a more detailed breakdown on a council-by-council basis and tells the growth story for each of these areas.
 - Chapter 2: Wellington City Council
 - Chapter 3: Hutt City Council
 - Chapter 4: Porirua City Council
 - Chapter 5: Kāpiti Coast District Council
 - Chapter 6: Upper Hutt City Council
 - Chapter 7: Horowhenua District Council
 - Chapter 8: Masterton District Council
 - Chapter 9: Carterton District Council
 - Chapter 10: South Wairarapa District Council
- Technical reports and additional information are collated into a separate appendices document.

2 Our growing and changing region

Key findings

The population of the Wairarapa-Wellington-Horowhenua region is projected to grow by around 200,000 people over the period to 2051 - that's another Wellington City.

Housing and business land demand is a product of population growth. It refers to the demand for residential dwellings across the spectrum of housing types and business land across a spectrum of business uses. To understand the growth pressures facing the region, we first need to establish what level of population growth is expected and over what timeframe.

In 2020 Sense Partners forecast a population increase for the region of around 250,000 by 2051; however, it is now not certain that growth will reach pre-COVID-19 projected expectations. The latest (2023) Sense Partners projections suggest growth of around 184,000 by 2052. Stats NZ projections suggest a more modest population increase, with the median projection at about 79,000 between 2018 and 2048. The extent of the divergence between projections highlights the uncertainty of predicting the future, and how much growth relies on international migration.

This HBA uses population projections produced in 2022 by Sense Partners, except for Horowhenua where they were not completed until 2023 and Porirua where 2021 figures have been used to align with their Proposed District Plan. The median projection was selected as it is statistically the most likely to occur. Sense Partners have updated the projections for 2023, however, this was not available at the time the analysis for this HBA was undertaken. We are using 2022 projections as the bottom lines to be consistent with the Future Development Strategy assumptions.

A range of projections were considered for use in this HBA, including the Statistics New Zealand (StatsNZ) medium growth series projection and the Sense Partners median projection. These can be seen in Figure 1.2.

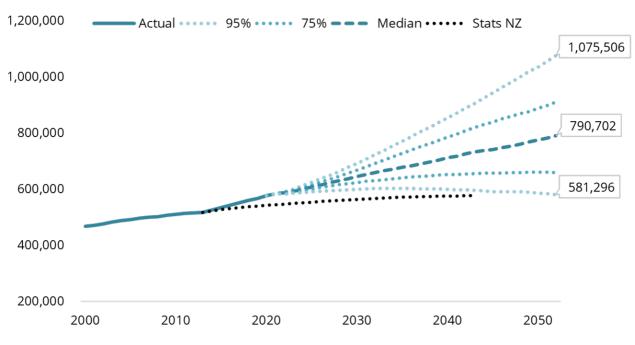


Figure 1.2: Regional population projections 2021–51. Source: Sense Partners, Statistics New Zealand.

The Sense Partners median projection was selected as the most appropriate for this assessment due to:

- StatsNZ projections typically underestimate the level of growth in the region. Population growth over the past 5 years has been three times as strong as StatsNZ expected, despite border closures associated with COVID-19.
- The assumptions made on net migration. 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 StatsNZ medium projection assumes a substantial decline in net migration, an average of 0.1% per annum.

There is considerable uncertainty around the projections, especially long term, which are highly sensitive to the assumption of persistently positive net inward migration. As a result, there is a 50% probability of annual growth from 1.4 - 1.9% over the next 10 years and from 0.8 - 1.7% over the next 30 years.

Table 1.5 shows the projected population growth for each territorial authority.

Council area	2021–2024	2024–2031	2031–2051	TOTAL
Kāpiti Coast District	2,400	6800	15,900	25,100
Porirua City	2,400	5,900	15,300	23,600
Upper Hutt City	1,900	5,000	11,300	18,200
Lower Hutt City	3,500	10,400	25,700	39,600
Wellington City	2,300	15,300	40,300	57,900
Horowhenua District (2023)	1,500	3,300	7,500	12,300
Masterton District	1,400	3,400	7,900	12,700
Carterton District	500	1,200	3,100	4,800
South Wairarapa District	500	1,400	3,200	5,100
Total	16,385	52,662	130,185	199,300

Table 1.5: Population growth for the Wairarapa-Wellington-Horowhenua region by council, 2021–2051.

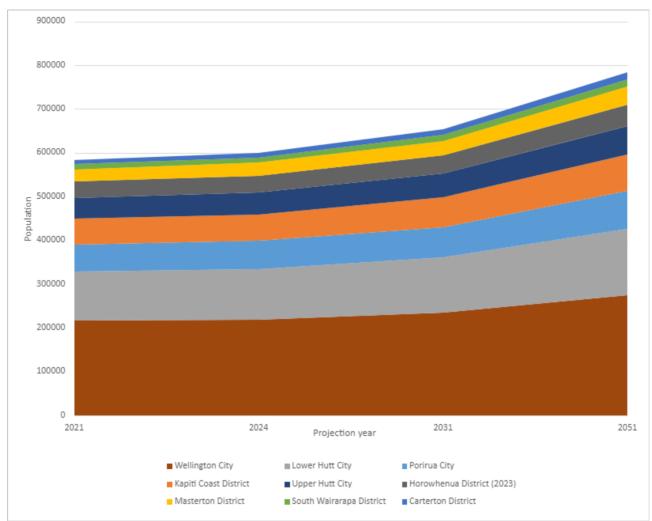


Figure 1.3 shows the same growth projections for the Wairarapa-Wellington-Horowhenua region over the 30-year period that this report covers.

Figure 1.3: Population projection for areas within the Wairarapa-Wellington-Horowhenua region. Source: Sense Partners.

3 Regional capacity assessment – Housing

1.8 Introduction

Following analysis of the housing market, the questions that are answered in this section of the report are:

- How many houses do we expect will be needed in the region in the next 30 years? (Section 4.3 housing demand)
- How many houses could be built in the region in the next 30 years? (Section 4.4 housing development capacity)
- Do we have enough capacity to provide for the houses we need? (Section 4.6 housing development sufficiency)

It is important to note that 'capacity' of the housing market does not refer to capacity of the building industry to build or what the market is going to provide in reality. It refers to the availability of land for development.

1.9 Analysis of the housing market and the impact of planning (indicators and monitoring data)

The requirements from the NPS-UD for this part of the HBA are outlined below:

- 1. Every HBA must include analysis of how the relevant local authority's planning decisions and provision of infrastructure affects the affordability and competitiveness of the local housing market;
- 2. The analysis must include an assessment of how well the current and likely future demands for housing by Māori and different groups in the community (such as older people, renters, homeowners, low-income households, visitors, and seasonal workers) are met, including the demand for different types and forms of housing (such as for lower-cost housing, papakāinga, and seasonal worker or student accommodation); and
- 3. The analysis must be informed by:
 - a. Market indicators, including:
 - i. Indicators of housing affordability, housing demand, and housing supply; and
 - ii. Information about household incomes, housing process, and rents; and
 - b. Price efficiency indicators

1.9.1 Market analysis

The population of the Wairarapa-Wellington-Horowhenua region is growing faster than forecast in the 2019 HBA. The estimated population as of June 2023 was 580,500¹, which is higher than both the forecast.id and StatsNZ high series referenced in the 2019 HBA.

Figure 1.4 shows there was an under-supply of new housing entering the market for a sustained period between 2014 and 2019, with new dwellings consented failing to meet household growth. In mid-2020, new dwellings consented exceeded household growth, which is partly due to a drop in population growth as a result of COVID-19 immigration restrictions. Since COVID-19 border restrictions ended, we have seen a bounce back in migration to pre- COVID-19. Despite the increase in new dwellings consented, the rate of household growth has slowed compared to the 2020-2021 numbers and is showing signs of a further slowdown. The current economic conditions facing New Zealand's construction industry include high levels of inflation, material supply issues and labour shortages. These are expected to continue to affect demand for housing and the ability of the construction sector to deliver houses on the ground. This means the housing supply issues needs to be continually monitored.

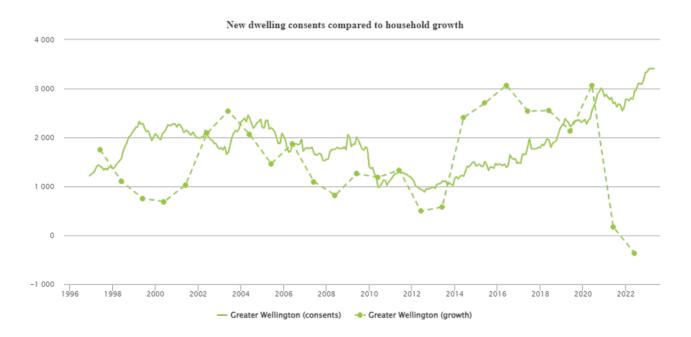
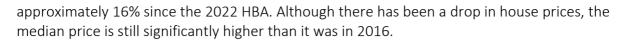


Figure 1.4: New dwelling consents compared to household growth. Source: MHUD.

Figure 1.5 shows that house prices in the region increased significantly between 2016 and 2020. In late-2021 the sales price peaked and has been declining since. As at March 2023, the median price of a residential dwelling in the Wairarapa-Wellington-Horowhenua urban environment was \$700,000. Prices have risen by around 37% since the 2019 HBA was completed and dropped by

¹ StatsNZ estimated resident population.



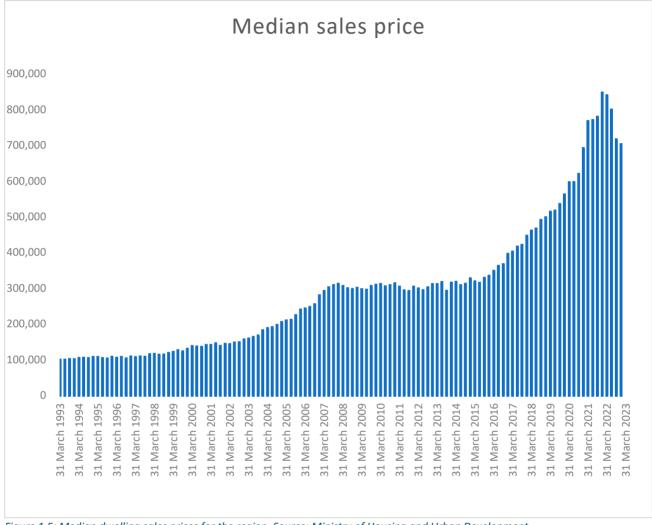


Figure 1.5: Median dwelling sales prices for the region. Source: Ministry of Housing and Urban Development.

Price-cost ratio is a general indicator of the flexibility of land markets to accommodate new homes. The current price-cost ratio is 2.7, as shown in Figure 1.6. A price cost ratio of between 1-1.5 is historically common where the supply of land, and development opportunities, are responsive to demand. All urban areas in New Zealand had a ratio of between 1-1.5 some 20 years ago. A price cost ratio above 1.5 suggests, with some caveats, that land supply and development opportunities are not keeping up with demand. As a result, land prices are having an effect on house prices. The Greater Wellington urban environment has predominantly been above 1.5 since 1993. This suggests that the region has had an ongoing under-supply of new sections and other residential opportunities, which is impacting housing affordability and the competitiveness of the housing market. The present dip in the index is likely in response to COVID-19 border restrictions impacting immigration.



Figure 1.6: Housing price-cost ratio for the Greater Wellington urban environment. Source: MHUD.

For more up to date data on housing affordability, the new tool, 'Changes in Affordability Indicators' (CHAI)¹, shows how the affordability of renting a home, saving for a deposit and servicing a mortgage for people entering the market has changed over time. Indicators for the region show rates for 'deposit affordability' are beginning to improve as prices drop; however, 'mortgage serviceability' is becoming more difficult as interest rates rise. This is an issue for those with large mortgages and first-home buyers. Rental affordability, while less volatile than mortgage serviceability in the long run, has nevertheless been trending downwards (less affordable) in recent years.

1.9.2 Housing for Māori

At the regional level, for the purpose of this HBA, Stats NZ data in Table 1.6 provides some insight into the current levels of Māori home ownership in the region. Māori households are more likely to reside in homes that are rented than owner-occupied. Rates of home ownership for Māori in the Wellington region are slightly higher than for Māori at the national level (43% compared with 42%), but less than ownership rates for non-Māori in the Wellington region (43% compared with 55%).

A number of papakāinga communities (housing on ancestral Māori land) already exist or are underway within the region, including Hurunui-o-Rangi Marae Papakāinga outside Carterton, Te Aro Pā Trust papakāinga housing in Wellington City and Te Puna Wai Papakāinga Housing Project in Wainuiomata. The WRLC is also working on a pilot project with Te Puni Kokiri to develop guidance

¹ https://www.hud.govt.nz/stats-and-insights/change-in-housing-affordability-indicators/about-the-indicators/

material, alongside whānau and hapū in the Kāpiti Coast district, that will support whānau/hapū in their aspirations to develop papakāinga housing in the district. Working with WRLC iwi partners will provide insights on current and likely future demands and aspirations for housing by Māori which will inform future iterations of the HBA.

Wellington Region ¹		New Zealan	d
Māori			
Owned 43% (12,939)	Rented 57% (17,232)	Owned 42% (119,388)	Rented 58% (166,413)
Non-Māori			
Owned 55% (85,884)	Rented 44% (69,321)	Owned 53% (727,992)	Rented 47% (640,005)

Table 1.6: Māori and non-Māori rates of home ownership in Wellington Region compared to New Zealand.

1.10 Housing demand – how many houses can we expect will be needed in the region in the next 30 years?

Key finding

Over 99,000 additional dwellings will be required by 2051 to accommodate population growth.

Population growth can be translated into growth in dwelling numbers based on the number of households and changes in household size. Based on the population projections set out in Section 2 of this HBA, regional housing demand with over the next 30 years is projected in Table 1.7

¹ This data does not include the Horowhenua District.

	Estimated dwellings 2021	Additional dwellings 2021–24	Additional dwellings 2024–31	Additional dwellings 2031–51	Projected dwellings 2051	Change in dwellings 2021–51
Sense Partners projection	251,517	8,947	21,949	53,450	335,863	84,346
With competitive ness margin added		11,412	26,306	61,584	350,819	99,302

Table 1.7: Housing growth for the Wairarapa-Wellington-Horowhenua region (number of dwellings), 2021–2051.

Breaking down that growth by council area provides the projections in Table 1.8.

Table 1.8: Housing growth by Council area, 2021-2051

Council area	Estimated dwellings 2021	Additional dwellings 2021–24	Additional dwellings 2024–31	Additional dwellings 2031–51	Total additional dwellings 2021–51
Kāpiti Coast District	28,319	1,557	3,920	8,411	13,888
Porirua City	22,541	1,141	2,444	6,303	9,888
Upper Hutt City	19,317	942	2,016	4,973	7,931
Lower Hutt City	45,906	2,055	4,395	11,551	18,001
Wellington City	90,298	3,523	7,814	19,070	30,407
Horowhenua District	18,767	780	1,750	3,890	6,420
Masterton District	13,987	760	2,564	3,935	7,259
Carterton District	5,433	312	693	1,728	2,733
South Wairarapa District	6,949	342	710	1,723	2,775
Total	251,517	11,412	26,306	61,584	99,302

Figure 1.7 shows the projected number of dwellings for each area within the Wairarapa-Wellington-Horowhenua region over the 30-year period that this report covers.

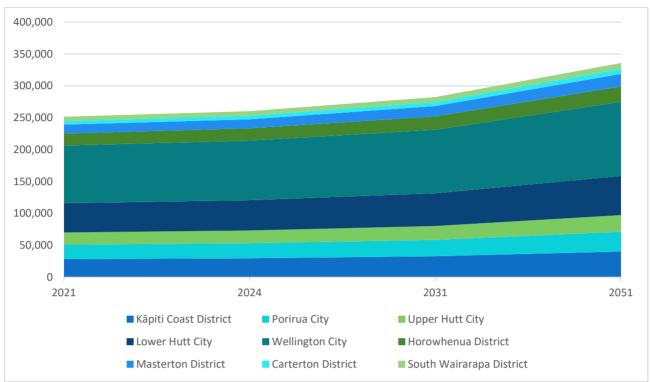


Figure 1.7: Projected total housing by council area.

In addition to projecting aggregate demand, additional modelling was completed to provide insight into the nature of that demand by dwelling type and location. A detailed breakdown of demand by dwelling type at a sub-council level is presented in each council's HBA chapter.

Further detail on the modelling that underpins the population projections and housing demand it is available in Appendix 1.

1.11 Housing development capacity – How many houses could be built in the region in the next 30 years?

Key findings

The Wairarapa-Wellington-Horowhenua region has:

- A plan-enabled capacity of 1,378,033 houses.
- A total feasible development capacity of 316,116 houses.
- A total realisable capacity of 206,613 which is the number of houses that can be expected to be built over the next 30-years. This is made up of 77,070 standalone houses, 86,835 terraced houses, and 34,767 apartments (plus 7941 greenfield homes which were not part of the model).

The NPS-UD requirements for this section of the report are as follows:

Section 3.24 Housing demand assessment

- 1. Each HBA must estimate, for the short term, medium term, and long term, the demand for additional housing in the region and each constituent district of the tier 1 or tier 2 urban environment:
 - a. In different locations; and
 - b. In terms of dwelling types.
- 2. Local authorities may identify locations in any way they choose.
- 3. Local authorities may identify the types of dwellings in any way they chose but must, at a minimum, distinguish between standalone dwellings and attached dwellings.
- 4. The demand for housing must be expressed in terms of numbers of dwellings.

Housing development capacity refers to the level of residential growth a city or district can accommodate. Housing development capacity is not limited to land available for urban expansion (greenfield land), it also includes capacity within existing urban areas to provide infill development, redevelopment (for example a multi-unit development replacing one existing house with three or four new houses), and apartment development.

A note on terminology

In describing housing development capacity, the following terms are used:

- **Plan-enabled** housing development capacity enabled in all land zoned or set aside for housing without accounting for any constraints, as provided for in the relevant plans and strategies.
- Infrastructure-ready housing development capacity having adequate development infrastructure (water supply, wastewater, stormwater, and land transport infrastructure) to support development of the land.
- Feasible and reasonably expected to be realised housing development capacity that is commercially viable for a developer to develop considering costs, revenues, and yields and likely to be taken up for development.

The relationship between the different types of housing development capacity is illustrated in Figure 1.8 below.

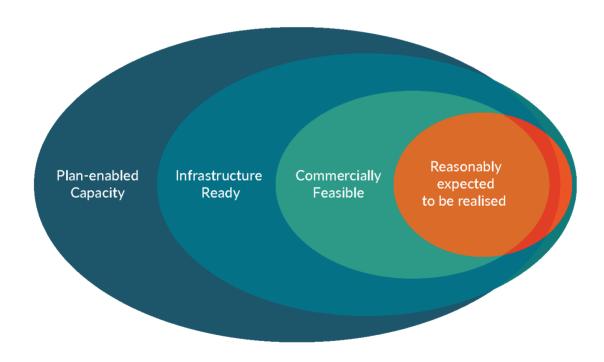


Figure 1.8: Relationship between types of housing development capacity. Source: Ministry for the Environment.

1.11.1 Modelling methodology

The analysis of housing capacity used a GIS based model, to help identify potential development capacity from different development scenarios including infill development, redevelopment and greenfield development ¹.

1.11.2 Infill and redevelopment model methodology

The infill and redevelopment model models all land parcels under five hectares that are zoned for residential development or a portion of residential use in mixed use areas. Each council undertook their own infill and redevelopment modelling using the Wellington Region Residential Capacity Model.

For every site across the region, District Plan rules have been applied to determine what could theoretically be built on the site. Two scenarios were run for each site:

- Infill development where development is modelled around existing buildings
- Comprehensive development where sites are treated as empty.

The model identifies a theoretical capacity of what could be built on each site. The model then tests three development types for each site, standalone, terraced and apartment, in a range of sizes to identify the maximum development size and type within the rules for that site.

The model assumes every site is developed to its maximum potential. It does not account for any amalgamation of sites.

The full methodology is provided in Appendix 1.

1.11.3 Greenfield model methodology

The greenfield model models all land parcels over five hectares that are zoned for residential or mixed-use development and any parcels that may not currently be zoned but that are otherwise identified as future growth areas. In Wellington and Porirua, the greenfield capacity has been identified separately by the individual councils, with the feasibility not assessed by Property Economics for Wellington.

For the most part, these greenfield sites in the areas modelled by Property Economics are treated the same as the smaller urban sites. The primary adjustments applied is to assume 30% of each site is required for internal roading and reserves.

The greenfield model methodology is provided in Appendix 2 of the HBA.

¹ The greenfield model models all land parcels over five hectares that are zoned for residential development and any parcels that may not currently be zoned but that are otherwise identified as future growth areas.

1.12 Plan-enabled housing development capacity

Plan-enabled capacity is modelled based on the operative and proposed planning documents of each council, using the parameters detailed in Table 1.8.

Table 1.8: Definition of plan-enabled housing capacity

Plan-enabled development capacity – definition			
Short-term (0–3 years)	Land zoned for housing (permitted, controlled, or restricted discretionary) in an operative district plan		
Medium-term (3–10 years)	Land zoned for housing (permitted, controlled, or restricted discretionary) in an operative or proposed district plan		
Long-term (10–30 years)	Land zoned for housing (permitted, controlled, or restricted discretionary) in an operative or proposed district plan, or indicated for future urban use or urban intensification in a future development strategy or other relevant plan or strategy		

All councils are well advanced in preparing either plan changes, variations, or full District Plan reviews to enable intensification as required by the NPS-UD as outlined in Table 1.9.

Table 1.9: Council implementation of NPS-UD intensification policies.

	Implementation of NPS-UD intensification policies
Hutt City Council	Currently undertaking a full review of its District Plan, including implementation of the direction of the NPS-UD. A decision on the Intensification Planning Instrument (a plan change that will give effect to the intensification policies of the NPS-UD) is was released in August 2023.
Kāpiti Coast District Council	Recently adopted its District Growth Strategy. This is informing an urban development plan change, including implementation of the direction of the NPS-UD. A decision on the Intensification Planning Instrument (IPI) was made in August 2023.
Porirua City Council	Notified its Proposed District Plan shortly after the NPS-UD came into effect. The Proposed District Plan partially implements the direction of the NPS-UD. A variation to give full effect to the NPS-UD was notified in August 2022. Decisions on the Proposed Porirua District Plan are expected to be released in December 2023.
Upper Hutt City Council	Hearings were completed for the IPI, incorporating the matters required by 2019 RMA Amendment Act, in May 2023. Decisions will be released by December 2023.
Wellington City Council	Currently hearings are underway for the Proposed District Plan (PDP) which is a key implementation tool for the delivery of WCC's Spatial Plan. The PDP incorporates the matters required by 2019 RMA Amendment Act. Decisions with regard to the Intensification Streamlined Planning Process will be released in March 2024, with the balance of decisions to be released by late 2024.
Greater Wellington Regional Council	Currently hearings are underway for the Proposed Change 1 of the Regional Policy Statement which will account for new national direction. Most relevant to the HBA it includes enabling urban development and infrastructure in appropriate locations. Encouraging more intensive urban development that is sensitive to the environment and meets the needs of more people.

In addition, district plan changes are occurring in other areas where the NPS-UD intensification does not apply. They have been included in Table 1.10.

Table 1.10: Council implementation of other plan changes.

	Other district plan changes
Wairarapa Combined District Plan	A review of the Wairarapa Combined District Plan is currently underway. A draft was released for informal consultation in October 2022, with the Proposed Plan expected to be publicly notified in late 2023.
Horowhenua District Council	The Horowhenua District Plan was made operative in July 2015. Three plan variations were made operative in late 2015. Plan Change 4 was adopted in June 2022 to rezone 420 hectares of land for residential and mixed use purposes. The appeals to the plan change have all been resolved, and it is expected to be made operative before the end of 2023. A further Plan Change (Plan Change 6/7) is being developed which will allow for further intensification and rezoning of additional greenfields sites. This is expected to be notified in 2024.

Table 1.11 sets out the plan enabled or theoretical capacity. Of the 1,129,509 houses enabled by the District Plans across the region, 92% come from infill and redevelopment capacity, with the remaining 8% coming from greenfield capacity. This number, at this stage of the analysis has not been tested for feasibility or expected to be realised. This happens in the next stage.

	Infill/ redevelopment capacity	Greenfield capacity	Total plan-enabled capacity
Kāpiti Coast District	260,049	40,947	300,996
Porirua City	144,450	6,604	151,054
Upper Hutt City	209,996	31,693	241,689
Lower Hutt City	308,744	3,701	312,445
Wellington City	294,923	4,441	299,364
Horowhenua District	21,497	7,072	28,569
Combined Wairarapa Districts	35,189	8,727	43,916
Total	1,188,324	103,185	1,378,533

Table 1.11: Plan-enabled housing development capacity for the Wairarapa-Wellington-Horowhenua region.

1.13 Feasible and reasonably expected to be realised development capacity

In assessing housing development capacity, plan-enabled capacity provides a theoretical starting point. Next is analysis of market conditions and behaviours to understand how much of the plan-enabled capacity is likely to translate into new dwellings. This involves two steps:

- 1. Assessment of what is commercially viable to develop (feasible capacity)
- 2. Analysis of how much of the feasible capacity is likely to be developed (reasonably expected to be realised).

The parameters in Table 1.12 are used.

Table 1.12: Definition of feasible development capacity.

Feasible development capacity – definition				
Short- to medium-term (0–10 years)	Development capacity that is commercially viable to a developer based on the current relationship between costs and revenue			
Long-term (10–30 years)	Development capacity that is commercially viable to a developer based on the current relationship between costs and revenue, or on any reasonable adjustment to that relationship			

Across the Wairarapa-Wellington-Horowhenua region, total feasible development capacity is assessed to be 311,720 dwellings, made up of 25% standalone houses, 56% terraced houses, and 19% apartments. This can be seen in Table 1.13. This number, at this stage of the analysis has not been tested for expected to be realised. This happens in the next stage.

	Standalone houses	Terraced houses	Apartments	Total
Kāpiti Coast District	14,468	39,142	1,773	55,383
Porirua City	24,177	14,631	2516	41,264
Upper Hutt City	13,005	11,000	1,538	25,543
Lower Hutt City	5,104	35,978	16,486	57,568
Wellington City	13,011	45,695	36,295	99,442 ¹
Horowhenua District	2,720	7,871	-	14,091²
Masterton District	2,853	7,728	-	10,581
Carterton District	972	5,414	-	6,386
South Wairarapa District	1,700	7,708	-	9,408
Total	77,950	175,164	58,607	319,616

Table 1.13: Feasible capacity by housing typology to 2051.

Sensitivity analysis

The capacity models operate on a number of core assumptions, and those assumptions flow into the results that are presented in this HBA. Further detail on the assumptions is outlined in Appendix 2 of the HBA.

This report presents a series of headline numbers, which is represented as a final capacity number. This is done to provide clarity to the reader. However, in practice, capacity will always operate within a range depending on a number of factors. This range has been tested through sensitivity analyses.

For the infill and redevelopment modelling, the sensitivity analyses considered several changes, such as increasing the economies of scale component of the model (therefore reducing building costs), increasing building value (therefore increasing sales values), increasing land values, and reducing land values.

On top of the feasible capacity modelling, practical considerations must be taken into account as to what is likely to be developed. The realisation rates essentially provide for 'development chance'

¹ This total includes separate greendfield developments of 4441 homes at Lincolnshire Farms and Upper Stebbings. These were not included in the model and so we dont have the typology breakdown.

² This total includes separate greendfield developments of 3500 homes at Tara-Ika. These were not included in the model and so we dont have the typology breakdown.

given the propensity for development variances. These considerations are based on dwelling typology, development option, and greenfield competition. The identification of these variables not only provides for sensitivities but also addresses the relativity between typologies. While all three typologies may be feasible the development model identifies the site scenario with the highest profit margin. The details of these sensitivity analyses are presented in the Property Economics reports for each council.

Not all development capacity will be delivered over the next 30 years. Landowners have different motivations for their land and may not wish to sell to a developer or may not wish to subdivide or redevelop themselves. Others may simply enjoy their property as it currently is. Additionally, different development types have different risk profiles and financing requirements. All these factors affect realisation of feasible development capacity.

As required by the NPS-UD, this HBA assesses the realisable proportion of feasible development capacity. The model has applied different realisation rates to different development types and different areas, with the details about the assumptions made and reasons included in each council's report. The results have been collated across the region in Table 1.14 below.

	Standalone houses	Terraced houses	Apartments	Total
Kāpiti Coast District	20,291	11,869	513	32,673
Porirua City	6,805	11,343	2,202	20,350
Upper Hutt City	15,084	2,485	891	18,460
Lower Hutt City	10,207	8,182	9,847	28,236
Wellington City	15,772	32,329	21,314	73,856 ¹
Horowhenua District	3,104	5,363	-	11,967²
Masterton District	2,807	5,162	-	7,969
Carterton District	807	3,595	-	4,402
South Wairarapa District	2,193	6,507	-	8,700
Total	77,070	86,835	34,767	206,613

Table 1.14: Reasonably expected to be realised infill / redevelopment capacity by housing typology to 2051.

¹ This total includes separate greendfield developments of 4441 homes at Lincolnshire Farms and Upper Stebbings. These were not included in the model and so we dont have the typology breakdown.

² This total includes separate greendfield developments of 3500 homes at Tara-Ika. These were not included in the model and so we dont have the typology breakdown.



Figure 1.9: Reasonably expected to be realised infill / redevelopment capacity by housing typology to 2051.

The methodology used to calculate reasonably expected to be realised development is provided in Appendix 2 of the HBA.

1.14 Greenfield vs Brownfield Development

Given the significant oversupply of realisable capacity in the region, we compared the greenfield and brownfield realisable capacity (Table 1.15 below). Whilst there is more than enough capacity within our existing urban environments to meet demand, there is still strong demand for greenfield housing, and greenfield development will continue to play a key role in meeting housing demand in the short to medium term.

	Urban realisable capacity	Greenfield realisable capacity
Kāpiti Coast District	27,935	4,738
Porirua City	26,995	6,604
Upper Hutt City	16,178	2,303
Lower Hutt City	26,602	1,634
Wellington City	69,415	4,441
Horowhenua District	5,025	6,942
Combined Wairarapa Districts	15,704	5,364
Total	187,854	32,026

Table 1.15: Greenfield v Brownfield capacity for the Wairarapa-Wellington-Horowhenua region.

1.15 Standalone vs attached dwellings.

Given the significant oversupply of realisable capacity in the region, we compared the demand for different typologies with the realisable capacity (Figure 1.10 below). Whilst there is more than enough capacity within our existing urban environments to meet demand, when broken down by typology in some areas (Lower Hutt, Horowhenua, Masterton and Carterton) the demand for standalone dwellings is unable to be met. Given the significant capacity of attached dwellings overall sufficiency is able to be met.

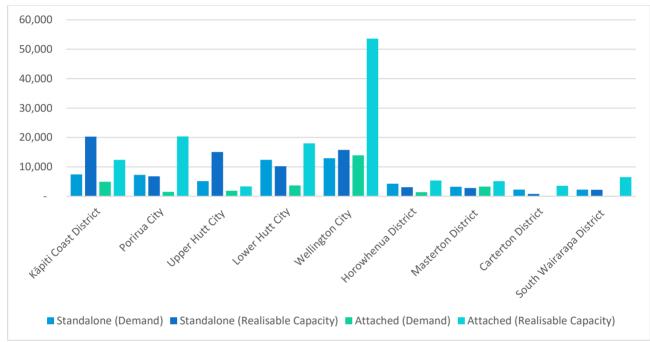


Figure 1.10: Reasonably expected to be realised infill vs Demand by housing typology to 2051. Attached includes apartments and terrace housing

1.16 Housing development sufficiency – do we have capacity to provide for the houses we need?

Key finding

The Wairarapa-Wellington-Horowhenua region is estimated to have sufficient capacity to meet demand over the long term, with a surplus of 107,310 dwellings.

Policy 2 of the NPS-UD requires tier 1 councils to provide at least sufficient development capacity to meet expected demand for housing over the short, medium, and long term. Under the NPS-UD, for housing capacity in tier 1 councils to be considered sufficient, there must be enough housing capacity to meet expected demand, plus a competitiveness margin.

Having established the expected demand for new dwellings and the development capacity available within each council area, the two can be compared to understand whether there is sufficient capacity to meet demand. At the regional level, housing demand and capacity is compared as a 30-year total, rather than divided into the short, medium, and long term. This is because demand and development uptake are influenced by a number of factors which cannot be adequately predicted on a regional basis. Individual council chapters further consider housing sufficiency by housing type, and, where possible, by sub-areas to provide a finer-grain picture of capacity. This can be seen in Table 1.16 below.

	Demand	Capacity	Difference	Sufficient?
Kāpiti Coast District	13,888	32,673	18,785	Yes
Porirua City	9,888	20,350	10,462	Yes
Upper Hutt City	7,931	18,461	10,530	Yes
Lower Hutt City	18,001	28,236	10,235	Yes
Wellington City	30,407	73,856	43,449	Yes
Horowhenua District	6,420	11,967	5,546	Yes
Masterton District	7,259	7,968	709	Yes
Carterton District	2,733	4,402	1,669	Yes
South Wairarapa District	2,775	8,700	5,925	Yes
Total	99,302	219,314	107,310	Yes

Table 1.16: Housing sufficiency in the Wairarapa-Wellington-Horowhenua region.

For illustrative purposes, Figure 1.11 below summarises the numbers above on a regional scale and compares the demand to the capacity analysis above to indicate the significant surplus in capacity.

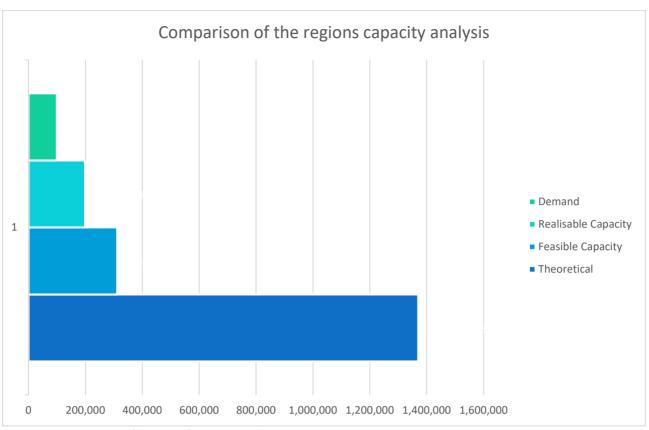


Figure 1.11: Comparison of the region's capacity analysis

1.17 Conclusion

Table 1.17 confirms that the Wairarapa-Wellington-Horowhenua region has sufficient capacity to meet growth requirements over the 30-year period of this HBA. An excess of around 107,000 (more than double demand) dwellings is modelled in this HBA.

Having nearly twice as many homes reasonably expected than needed is a positive for the region and not something many regions in the country have. This is primarily due to increased development now allowed within walking distance of our public transport network. With the amount of capacity provided there is more a focus on the market to deliver - which has a number of broader factors and influences - and the role of government to support this alongside efforts from councils in their own areas (but noting much of this is outside of council's control and settings). This Future Development Strategy is an opportunity to influence where our housing growth should be focused to attain the greatest social and economic benefits for the region and the people in it, whilst protecting and preserving the environment, becoming more climate and natural hazard resilient and influencing the types of housing that will best meet our future needs at the right time.

It is important to highlight that this assessment represents a single point in time. All councils are currently implementing the intensification policies of the NPS-UD, including the Medium Density Residential Standards that have been incorporated in this assessment or are undertaking other District Plan updates. This has increased plan-enabled infill and redevelopment capacity and will inform the level of investment required in the councils' 2024 infrastructure strategies to provide adequate development infrastructure to support sufficient development capacity.

We note there are a range of factors in play outside of council's control, in particular the market has a big influence on realisable capacity. Currently we are in a price slump in the residential property market. This drop in sales price has a significant impact on the level of realisable capacity, dropping the Realisable Capacity for the districts assessed by an average of 36%. This decreases the capacity across the region to just over 141,000 (not accounting for any changes to the Wellington and Porirua districts). This also means that should prices rise (which they usually do after a number of years) the regions realisable capacity will increase accordingly.

4 Regional Capacity Assessment – Business

1.18 Introduction

Key findings - overall

The Wairarapa-Wellington-Horowhenua region has demand for an additional *9,181,700 m*² of business floorspace (or an additional 1192ha of land) over the long-term, with expected population growth being the main driver of economic activity and therefore the need for more land.

Capacity – The region has sufficient business capacity, based on a qualitative analysis with the following types of capacity:

- Over 36,600,000m² (floorspace) potentially available for redevelopment (that's if every site was demolished and rebuilt)
- *Over 7,100,000*² (floorspace) *vacant* (at time of modelling) that could be redeveloped in the short term
- o *Over 17,000,000m*² (floorspace) available for *infill* development

However, we know that demand for industrial land requires larger footprint sites, and due to current land zoning and availability, this category is likely to have a shortfall. A separate project has been commissioned to confirm industrial land demand and identify suitable areas.

An assessment of regional business land capacity was last completed in November 2019 and included the areas of Upper Hutt, Lower Hutt, Wellington, Porirua, and Kāpiti only.

This current assessment has been broadened to include all council areas within the Wairarapa-Wellington-Horowhenua region to align with the wider regional spatial planning already undertaken for the WRGF and being updated as part of the Future Development Strategy. With regards to business land this HBA is required to:

- Estimate demand for business land by type and location in the short, medium, and long-term
- Quantify development capacity for business land and its suitability in the short, medium, and long-term
- Quantify any insufficiencies in development capacity for business land and whether the shortfalls are due to planning or infrastructure constraints.

It is important to highlight that this business land assessment represents a single point in time. All councils in the Wairarapa-Wellington-Horowhenua region are currently in the process of implementing changes to their District Plans. It is expected that through the submission process to the District Plans there will be some changes to the Plans as notified and that these may impact this assessment. At this point in time, we do not know what those changes will be.

Two key reports were commissioned to provide information on business land capacity. These reports and a short overview of the methodology for each is provided below. A full overview of the methodology used for each report can be found in APPENDIX 3 and 4.

Report: Demand for business land in the Wellington-Horowhenua region - Assessing future needs - 28 March 2023

The purpose of this report was to quantify business land demand. The modelling methodology used for the work in this report is split into four stages. These are illustrated in Figure 1.12 below.

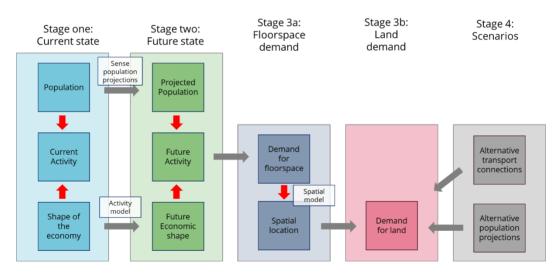


Figure 1.12: Illustration of the modelling methodology used. Source: Sense Partners.

Report: Review of the suitability of existing business and industrial land - April 2023

This report presents the results of a review of the development feasibility of business land in 2022 using a Multi Criteria Assessment (MCA), based on engagement with industry stakeholders and council officers at each of the five tier 1 councils. In addition, it also provides the baseline assessment of the MCA for the Horowhenua and Wairarapa Districts.

The engagement process involved undertaking a number of workshops and meetings to assess business demand and business development capacity against criteria in the MCA for each of the districts within the region.

The MCA used in this assessment is the same one that was used to inform the 2019 HBA. These criteria include key factors influencing the feasibility of land for business development.

1.19 Key Business Context (stats and indicators)

Key findings

The Wairarapa-Wellington-Horowhenua region has demand for an additional *9,181,700* m² of business floorspace (or an additional 1192ha of land) over the long-term with expected population growth being the main driver of economic activity and therefore the need for more land.

The types of business floorspace demand requirements at the end of 2051 can be broken down as follows:

- *Commercial 1,700,460m2*
- *Government 839,691m2*
- *Retail 1,038,595m2 -* To put this in context this is over 2 times the current floorspace of Queensgate Mall in Lower Hutt.
- Education 788,463m2
- *Health 1,010,164m2*
- Industrial 3,062,345m2 (or 697Ha of land) To put this in context this is over 2 times the area of the Seaview/Gracefield/Moera area in Lower Hutt.¹
- Other 741,978m2

Understanding the key drivers of economic growth enables us to understand and model employment projections which in turn enables us to understand land requirements. Each of the key drivers is outlined below with more information on each available in the source document. See

¹ The Seaview/Gracefield/Moera total land area (excluding road parcels) as defined in the General Business and Special Business zones of the Hutt City Council District Plan is 2.37sq.km or 237 hectares.

Appendix 3 "Demand for business land in the Wellington-Horowhenua region – assessing future needs" Sense Partners February 2023.

1.19.1 Key business-related drivers are¹:

Key driver 1: High household incomes attract growth to the region

The Wellington region has a high concentration of jobs in upper income brackets with variation across councils. Almost half of the jobs in the Wellington region earn a median wage in advance of \$70,000. For the rest of the country, this figure is just 4%.

Horowhenua lies in the Manawatū-Wanganui region. The region has lower incomes compared to Wellington or New Zealand as a whole, with 49% of jobs lying in the \$50,000 to \$60,000 income bracket.

Within the Wellington region, there is variation in local incomes. Many of the higher paying jobs are located in Wellington City, for example. However, the people working those jobs frequently live outside of Wellington City, as far afield as Horowhenua and Masterton. The ability to work remotely, and the much broader acceptance of this post-pandemic, will increase this spread. This means that the flow on benefit of those jobs is felt across the region.

Key driver 2: High levels of education are reflected in estimates of human capital

The high incomes identified in key driver 1 are reflective of the concentration in the region of a highly educated workforce. This is a key aspect of the agglomeration benefits within the region and assists in driving economic growth.

Key driver 3: The concentration of Government helps drive incomes and education

Government is a major direct and indirect employer of highly qualified individuals, and New Zealand's civil service is largely concentrated in Wellington City. Analysis shows that roughly half of Central Government administrative jobs are located in the region.

Key driver 4: The region has a slender advantage over Auckland housing costs

Housing costs reflect rents and mortgage costs across the housing stock. Analysis shows lower housing costs for the Wellington region than Auckland, giving the region a slight edge in disposable incomes. There are local variations – Masterton is more affordable, but this gap is closing.

The tools available to compete with other parts of the country are not simply lower house costs, but a better living experience. This includes a rural lifestyle in areas like the Wairarapa and Horowhenua and parts of Kāpiti.

Key driver 5: Manufacturing is an important component of economic activity

¹ Some of the references in this section refer to Wellington City and some to the region based on available information.

As measured by contribution to GDP, manufacturing is the largest industry in the country. In the year to March 2019, the sector contributed \$30.6b to GDP. In this region, however, it is only the 3^{rd} largest industry overall, at \$4.6bn.

With just 6% of NZ wide manufacturing jobs producing 15% of manufacturing GDP, the region punches above its weight.

From 2000 to 2010, manufacturing GDP grew at an average 1.6% per year. This is compared to a 4.4% average across the entire regional economy, explaining the fall in share. Since 2021, however, this trend has ceased. Manufacturing has grown at 4%, while total GDP has grown at 3.9%.

Key driver 6: Agriculture remains important to Horowhenua and Wairarapa

In the main population centres, such as Wellington City or the Hutt Valley, agriculture (including horticulture) is a small portion of overall employment. Kāpiti also has an important agricultural component given its climate and location. For Horowhenua and Wairarapa, however, agricultural employment plays a significant role in local economies. This includes direct employment on the farm and in the packhouse. The sector also supports 1,500 jobs in the local food processing industry, exporting nationwide and globally.

1.19.2 Key demographic change drivers are:

Key driver 7: Population growth has exceeded previous forecasts

Since the previous business land assessment in 2019, population growth in the region has pushed higher. Population growth over the past 5 years has been three times as strong as Statistics New Zealand expected, despite border closures associated with COVID-19.

Both the higher population starting point and a stronger population projection imply a need to accommodate much higher demand for business land than the previous study.

Key driver 8: Internal migration responds to economic opportunity

High income and job growth attracts new residents from other regions and from overseas. This is a two-way relationship. Population growth, in turn, drives economic activity through increasing demand for goods and services, as well as an increased supply of workers and entrepreneurs.

The shortfall between local population growth and NZ wide growth in the early 2000s was sharpest in those areas furthest out, like Wairarapa and Horowhenua. As growth has spread out, those areas are now experiencing population growth in line with, or even exceeding, NZ wide growth.

All areas have experienced a sharp downturn coinciding with the pandemic lockdowns. This is due to the border closures, and hints at the importance of international migration in regional population growth.

Key driver 9: Migration accounts for much of the short term variation in growth

Base population growth, in the form of births and deaths, only changes slowly over time. Migration, in comparison, can change rapidly as is the primary source of short-term variation in population growth. As one of the country's largest urban agglomerations, the Wellington region attracts domestic migrants from all over New Zealand. The region's high incomes and concentration of niche and specialist employment helps the region attract migrants. The main source of inward migration is international migration.

There is a strong core-periphery dynamic within the region. With the exception of overseas migrants, each territorial authority tends to attract most migrants from its neighbouring council. Auckland is also a common source of inward migration, reflecting that city's own strong population growth and capacity constraints.

There is a knock-on effect as extra-regional migrants (overseas, Auckland, etc) move predominantly to Wellington City. A crowding out effect incentivises Wellington residents to move into neighbouring areas, in turn prompting a shift of their own.

Key driver 10: Most areas are ageing, while Wellington City attracts youth

The largest source of population growth in the region between 1998 and 2018 was in older age groups. In part, this reflects a population that is ageing faster than it is growing. Late career individuals (51 - 65 years) make up a large portion of growth in all areas across the region. This cohort is likely to still be in the labour force. With years of accumulated workforce experience, they may bring a considerable productive boost to local economies. Over this period, household size has fallen.

Wellington City is unique in that growth is spread across most age groups. Growth in the tertiary group (ages 18 to 25) makes up 18% of total growth, while mid-career (36 - 50) makes up 17.6%.

1.20 Business Demand

Key finding - demand

An additional 9,181,700 m² of business floorspace (or an additional 1192Ha of land) will be required in the region in the next 30 years with more than half of this being for industrial activity use.

An assessment of business land demand undertaken by Sense Partners for this HBA shows that demand for business land will grow strongly across the Wairarapa-Wellington-Horowhenua region over the next three decades, fuelled by higher than expected population growth.

The demand projections used in this report are calculated including the following:

1. Projections draw on job numbers by sector over the past 20 years as a key input.

- 2. Population projections are used as a base input. The previous report on business land in 2017 relied on Statistics NZ projections of population growth and these have proven to underestimate the actual population growth. Note that the Statistics NZ projection used in 2017 estimated a population of 547,000 people by 2022 in the region whereas the actual population in 2022 was 580,000. This poses challenges when projecting growth over a 30-year period but has been taken into account in the analysis of demand.
- 3. A package of transport projects referred to as Transport 1 scenario. This is included in the demand projections as transport investment is a major influence on the rate and shape of demand growth. Transport projects included in Transport Scenario 1 are the Northern Corridor (the Smart Motorway, Transmission Gully, Mackay's to Peka Peka, Peka Peka to Otaki, and Otaki to North Levin), RiverLink, and Rail Network Investment. Transport Scenario 1 includes projects already completed, and some projects highly likely to be completed over the 30-year period.¹
- 4. A competitive margin is required to be added by the National Policy Statement on Urban Development. The competitive margins to be applied are: 20% for the short term, 20% for the medium term, and 15% for the long term. Further information on competitive margins can be found in the glossary. Growth is expected to be uneven with local trends and nuances determining where demand falls.

Key regional points made in that report with regards to demand are:

- It is time now to plan to meet continuing increases in business land demand.
- Population growth is the main driver of economic activity.
- Transport investment will further boost economic activity. Transport investment has a major influence on the rate and shape of demand growth. High level modelling suggests transport linkages are important for economic activity. Without transport investment, other regions are more attractive to firms and workers.
- Accommodating demand will be a challenge. Geography is a major constraint across much of the region. This increases the cost of developing land, as well as impeding transport access. It may prove difficult to accommodate the full projected demand due to these natural constraints.
- Competition with residential uses adds another complicating element. The same land ideal for business is often just as ideal for residential uses. Some sectors can co-locate with residential activity and may be less impacted. Some sectors, particularly industrial, may find themselves priced out of an area.

In addition to this the report noted the following points related to each district and its key sector/s:

- Agriculture is a major feature in Horowhenua
- Kāpiti Coast retail supports a retired and commuter population
- Porirua has high education and healthcare sector shares
- Jobs in Wellington City are mainly government and commercial

¹ For more information on this Transport Scenario and Transport Scenario 2 see Section 5 (pages 67-81) of the "Demand for business land in the Wellington-Horowhenua region – Sense Partners February 2023 – Appendix 3

- Lower Hutt is a centre of manufacturing in the region
- Upper Hutt is a local centre of government employment
- Agriculture is losing its dominance in South Wairarapa
- Industrial jobs have a high share in Carterton
- Masterton has a relatively even spread across sectors

The following tables present the demand for business land and business floorspace as modelled by Sense Partners for the Wairarapa-Wellington-Horowhenua region. Many business sectors (such as office and retail) can be intensified on existing land whilst others (such as industrial), need land to spread their activities out. We report results for both floorspace demand and land demand. This helps to inform councils' understanding of the role of density across regions and across business sectors.

The increase in hectares of additional business land required is shown in Table 1.18. and Table 1.19, firstly by council and secondly by sector type.

Note that in reading the table, the land required at 3 years is included in the 10-year figure and the land required at 10-years is included in the 30-year figure.

Table 1.18: Increase in hectares of additional business land required by council area (including uplift requirements). A total of 1192
ha is required by the end of the 30 year period this table breaks down what we need for short-medium-long term.

District	2021-2024	2024-2031	2031-2051	Total
Carterton District	9.00	23.22	122.67	154.89
Horowhenua District	7.39	17.87	36.81	62.07
Hutt City	30.09	73.38	224.05	327.52
Kāpiti Coast District	14.76	20.25	72.24	107.25
Masterton District	0.57	13.47	24.12	38.16
Porirua City	18.39	41.06	108.60	168.05
South Wairarapa District	-0.46	3.09	7.27	9.9
Upper Hutt City	1.64	2.76	48.07	52.47
Wellington City	29.63	68.06	174.58	272.27
TOTAL REGION	111.03	263.16	818.40	1,192.59

Table 1.19: Increase in hectares of additional business land required by sector type including uplift requirements)¹. A total of 1192 ha is required by the end of the 30 year period this table breaks down what we need for short-medium-long term.

Sector	2021-2024	2024-2031	2031-2051	Total
Commercial	3.75	9.09	37.30	50.14
Government	-0.66	4.63	15.22	19.19
Retail	24.38	35.16	102.68	162.22
Education	8.22	14.0	46.49	68.71
Health	7.27	23.12	74.00	104.39
Industrial	56.44	158.64	482.50	697.58
Other	11.63	18.14	60.21	89.98
TOTAL SECTORS	111.03	263.17	818.40	1,192.59

Figure 1.13 shows the information from Table 1.19 above in graph form - the projected increase in hectares of business land by sector type within the region over the 30-year period that this report covers. It shows how the majority of the demand in the industrial sector which is usually requires a lot of land and can't be intensified. When supply is constrained locally, business land demand can be expected to spill over and be diffused spatially across nearby regions e.g. excess demand for industrial in Hutt City to be impact neighbouring councils such as Upper Hutt. Understanding constraints on supply and seeking a collective approach to accommodating regional demand is likely to return better outcomes.

¹ For more information on this what is includes in each sector type see Table 11 (page 38) of the "Demand for business land in the Wellington-Horowhenua region – Sense Partners February 2023 – Appendix 3

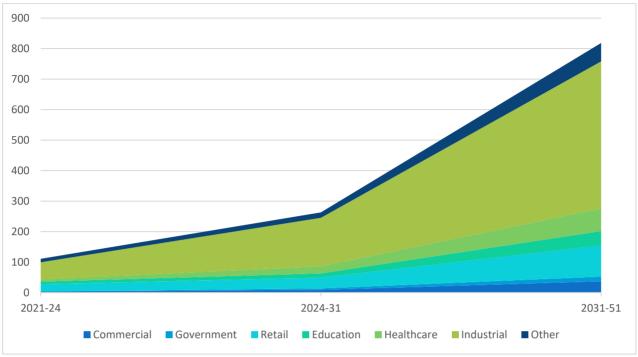


Figure 1.13: Projected increase in hectares of business land by sector type.

Land area is a two-dimensional measure of space requirements. For the majority of the sectors, the more relevant measure is floor area. Office space in nearly all instances involves multi-storey buildings. The same can be said of space for government requirements, and the retail, and health, education and training sectors also often operate in multi-storey environments. Table 1.20 and Table 1.21 below set out business demand by floor area across the region and by sector.

Table 1.20: Increase in floorspace (m^2) of additional business land required by council area (including uplift requirements). A total of 9,181,698 m^2 is required by the end of the 30 year period this table breaks down what we need for short-medium-long term.

District	2021-2024	2024-2031	2031-2051	Total
Carterton District	38,375	94,808	495,316	628,499
Horowhenua District	38,900	90,199	187,032	316,132
Hutt City	172,491	416,173	1,343,969	1,932,633
Kāpiti Coast District	78,791	118,838	380,320	577,949
Masterton District	10,886	69,093	139,055	219,034
Porirua City	95,473	220,331	628,454	944,258
South Wairarapa District	634	14,503	34,263	49,400
Upper Hutt City	4,401	24,918	235,199	264,518
Wellington City	377,887	903,207	2,968,182	4,249,276
TOTAL REGION	817,838	1,952,071	6,411,790	9,181,698

Table 1.21: Increase in floorspace (m^2) for business activity required by sector type (including uplift requirements). A total of 9,181,698 m^2 is required by the end of the 30 year period this table breaks down what we need for short-medium-long term.

Sector	2021-2024	2024-2031	2031-2051	Total
Commercial	110,775	271,582	1,318,103	1,700,460
Government	5,554	194,563	639,574	839,691
Retail	156,522	223,918	658,155	1,038,595
Education	101,574	167,800	519,090	788,464
Health	77,626	226,507	706,031	1,010,164
Industrial	251,945	709,781	2,100,619	3,062,345
Other	113,842	157,919	470,217	741,979
Total	817,838	1,952,071	6,411,790	9,181,698

Land demand will be higher than floorspace requirements, as this includes servicing for the site such as parking and access. Industrial land, which equates to half of the demand for land area across the region, also tends to be more space intensive and require separation from sensitive land uses such as residential development. Conversely, retail and commercial sector development can be easier to accommodate and co-locate with other land use activities.

1.21 Business Development Capacity

Key findings - capacity

- The region has a number of business areas that cater for a range of activities, with concentrations of activity in some parts of the region.
- The main areas of capacity in the region are in Wellington City and Hutt City, with industrial areas such as Kaiwharawhara and Seaview/Gracefield.
- *The key factors that influence the uptake and development of business land in this region are:*
 - Limited supply of industrial land
 - Commercial feasibility
 - Timing of strategic projects
 - o Planning risks
 - o Developer obligations
 - o Residential growth

1.21.1 Business capacity - Plan enabled, feasible, and realisable

The approach to understanding business capacity is detailed in Appendix 1. By way of summary, a GIS model was developed that allowed the capacity of the business areas of each district to be understood – both in terms of infill development, redevelopment, and development of any currently vacant sites.

In the same vein as residential, this modelling was based on District Plan standards. A similar level of economic analysis as undertaken for residential development was not suitable for business land. This is due to the particular economics underlying business development being different across varying types of business development.

For information on which particular business areas across the region were modelled refer to local council HBA chapters which provide district level reports on housing and business.

Plan enabled

Plan-enabled capacity is modelled based on the operative and proposed planning documents of each council.

Modelling results show the following business capacity across the region as seen in Table 5.5. Definitions of headings in the tables are:

- Existing floorspace: Floorspace area of existing buildings present in business zones.
- Infill floorspace: Capacity for infill development in business zones, if existing floorspace is retained.
- Redevelopment floorspace: Capacity for business floorspace if complete redevelopment of business zoned land was to occur.
- Vacant: Vacant land in business zones which has the capacity for development.

Table 1.22 below sets out the modelled business floorspace capacity in the categories above. More detailed analysis of this is provided in each District Chapter.

District	Existing floorspace	Infill floorspace	Redevelopment floorspace	Vacant
Carterton District	137,074	2,468,586	3,105,306	2,551,485
Horowhenua District	482,770	719,632	1,457,619	372,073
Hutt City	2,181,429	2,437,859	5,950,043	306,546
Kāpiti Coast District	465,629	1,438,837	3,966,144	1,655,957
Masterton District	415,409	3,762,147	5,183,245	1,411,290
Porirua City ¹	556,778	1,960,202	4,601,320	225,620
South Wairarapa District	90,758	888,719	1,188,560	324,634
Upper Hutt City	484,300	928,300	3,392,200	202,300
Wellington City	1,758,480	2,443,528	7,837,964	50,744-
TOTAL REGION	6,572,627	17,047,810	36,682,401	7,100,649

Table 1.22 Business development capacity (m^2) – plan enabled by district.

¹ Porirua City development capacity values do not include healthcare activities taking place in the Special Purpose Hospital Zone at Kenepuru. For development values which include the Special Purpose Hospital Zone, refer to the Porirua City Council chapter of the HBA.

Feasible and sufficient

In assessing business development capacity, plan-enabled capacity provides a theoretical starting point. The next step is an analysis of market conditions and behaviours to understand how much of the plan enabled capacity is likely to translate into new business capacity.

The feasibility¹ of business development is different to the approach adopted for residential. This is because the feasibility of residential development can be undertaken in a generic manner based on a range of certain financial inputs. Business development is much more nuanced, given the range of buildings, locations, and tenures that are involved in business development.

To understand the likelihood within this region, work was commissioned (see *"Review of the suitability of existing industrial and business land – April 2023"* by the Property Group) to:

Appendix A Understand the key factors that influence the update and development of business land in this region; and

Appendix B Undertake an assessment of a total of 80 business land areas in the region against a set of relevant criteria in a Multi Criteria Assessment (MCA).

The full report can be found in Appendix 4. This includes the full methodology and results. The report is an update to the version undertaken for the last HBA.

This report identified the following key factors (Table 1.23) influencing the uptake and development of business land across this region as a whole. Each district has its own localised factors.

Table 1.23: Key factors influencing the update and development of business land in the region.

Key factor	Explanation
Limited supply of industrial land	Across most areas a shortfall in availability of industrial land has been identified, both greenfield development areas and capacity within existing industrial zoned areas.
Commercial feasibility	Feasibility of new development within business zoned land is challenging due to the changing nature of the market demands, including competing demand from residential development, increasing development costs, and the cost/provision of supporting infrastructure connections. In particular, the region has increasing costs associated with the cost of addressing resilience.

¹ Short to medium term (0-10 years) = development capacity that is commercially viable to a development based on the current relationship between costs and revenue; Long-term (10–30 years) = Development capacity that is commercially viable to a developer based on the current relationship between costs and revenue, or on any reasonable adjustment to that relationship.

Key factor	Explanation
Timing of strategic projects	The timing of strategic projects in the region, such as Transmission Gully and Infrastructure Acceleration Fund (IAF) developments, has and will affect the timing and rate of uptake of business land as well as affecting the type of land in demand.
Planning risks	The District Plans and how they are applied provides some uncertainty to developers in terms of how resource consents will be assessed (e.g., activity status and notification) and information requirements (e.g. design guides), which has significant cost and time implications. Uncertainties are also associated with changing national planning legislation.
Developer obligations	Costs associated with providing infrastructure to sites makes development of business land less viable.
Residential growth	Local population growth generally causes a growth in business land uptake in the city/district. Key factors affecting uptake is protecting business land from encroachment from residential activities or, where appropriate, enabling mixed use developments.

The criteria listed below were used in the MCA with each of the 80 business areas considered as part of this HBA assessed against the criteria on a 0-5 scoring range:

- 1) Proximity to major roading corridors
- 2) Access to rail routes
- 3) Access to the airport
- 4) Access to the seaport
- 5) Public transport accessibility
- 6) Parking availability and accessibility
- 7) Access to required labour force
- 8) Access to markets/consumers & reliance
- 9) Resilience to hazards
- 10) Supporting businesses/services in the area
- 11) Land and property cost
- 12) Developability/functionality
- 13) Separation from more sensitive activities
- 14) Community impact

As the MCA scoring assessment criteria was developed independently for each district, the results across the region are not comparable. The highest scoring sites in each district are shown in Table 1.24, indicating some of the most important sites for business in our region.

City/District	Site/Area	Main activity type
Wellington City	Kaiwharawhara	Industrial
Porirua	Kenepuru	Industrial and Commercial
Upper Hutt	Upper Hutt CBD	Retail
Carterton	Waingawa	Industrial
Hutt City	Petone East	Light industrial
Kāpiti Coast	Te Roto Drive / Kapiti Landing	
Horowhenua	Shannon industrial	Industrial
South Wairarapa	Featherston industrial	Industrial
Masterton	Masterton industrial north	Industrial

Table 1.24: Highest scoring site in each district as assessed by the multi criteria assessment.

1.21.2 Sufficiency of business capacity

Policy 2 of the NPS-UD requires local authorities to provide at least sufficient development capacity to meet expected demand for business land over the short, medium, and long-term. Under the NPS-UD, for business land capacity to be considered sufficient, there must be enough business land capacity to meet expected demand, plus a competitiveness margin.

Having established the expected demand for business land and the development capacity available the two can be compared to understand whether there is sufficient capacity to meet demand.

While the future demand for business land is provided at a district level, we can use our understanding of current business activities to assume where future development might be located and the sufficiency of capacity in those areas. Overall, the assessment of the redevelopment, infill, and vacant land scenarios identifies a large amount of development capacity is available to meet future business demand across the region.

The MCA also identified some clear preferences for business activities and where they might locate. Future industrial activities have opportunities in Kaiwharawhara, Kenepuru, and Waingawa. Upper Hutt CBD, Porirua East/Ranui Shopping Centre, and Johnsonville scored highly for the desirability of the locations, good transport connections, and access. Alexander Road, Ward Street, Cannons Creek, and Park Street also scored well for their mix of development and activity types, and access to other businesses.

The sufficiency is shown in Table 1.25.

Table 1.25: Overall summary of supply to meet demand.

Туре	2021-2024	2024-2031	2031-2051	TOTAL
Demand (with competitive margin)	817,838	1,952,071	6,411,790	9,181,699
Redevelopment				29,243,921
Infill				10,806,224
Vacancy				2,938,313
Sufficiency	Yes	Yes	Yes	

1.21.3 Inter-regional industrial supply opportunities

Opportunities may exist outside of the Greater Wellington Region to accommodate some of the future industrial demand.

Te Utanganui is a unique multi modal distribution hub where road, rail and air transport options are immediately adjacent to each other. It is being developed in Manawatū, spanning across Palmerston North and into the wider Manawatū district. It encompasses several infrastructure projects which, when combined, will create the primary distribution and transport hub for central New Zealand, supporting the transport and logistics centres of South Auckland, Waikato and Canterbury. Projects directly planned or aligned with Te Utanganui include:

- KiwiRail's Regional Freight Hub
- Te Ahu a Tūranga: Manawatū-Tararua Highway
- Ōtaki to North of Levin (O2NL) Expressway
- North East Industrial Zone (NEIZ)
- Ruapehu Aeropark
- Kawakawa Industrial Precinct, Feilding
- Palmerston North Airport
- Palmerston North Integrated Transport Initiative Regional Freight Ring Road
- Manawatū Inland Port

In addition to the project, Te Utanganui's strategy encompasses the broader transport and distribution system across central New Zealand including:

- Port developments and investments at the major international ports
- Secondary developments including Marton Rail Hub, Whanganui port, Smart Road in Taranaki, Oringi in Tararua, Whakatū inland port in Hastings and Horowhenua Business Park

A Masterplan has been developed for Te Utanganui, and this outlines a programme of rezoning which will eventually unlock an additional 260ha of land for large floor plate and freight and distribution focussed industrial activities. The first phase of rezoning will commence in 2024.



Figure 5.3: Te Utanganui

1.22 Conclusion

The assessment of business capacity sufficiency is more difficult to assess than that of residential capacity due to the range and scale of activities. This is why the analysis is more qualitative and uses the Multi Criteria Analysis to help assess the suitability and sufficiency of business land.

For business land, short- and medium-term capacity is available, but longer term requirements may need to be accommodated by redevelopment of existing sites. Industrial land capacity is an issue across the region. Opportunities outside of the region, such as Te Utanganui, may be able to accommodate industrial demand. The Wellington Regional Leadership Committee is commissioning a piece of work to consider future industrial opportunities in more detail.

Table 5.8 confirms that the Wairarapa-Wellington-Horowhenua region has sufficient capacity from a numbers perspective to meet growth requirements over the 30-year period of this HBA. An assumption has been made that the vacant land is the most realisable in the short term as it is both available and plan enabled. However, this assumes that all vacant land is developed, when in reality this may not be the case due to market drivers such as construction costs, price and the right land being available in the right location. As an example, the size and shape of vacant brownfield land parcels can be inconsistent with the manner in which they become available, which means they are not able to deliver to the type of demand that we receive. Land availability also becomes more of an issue in the longer term when dependence for land is reliant on redevelopment of existing sites. There is no guarantee that land will come forward for redevelopment, and that this land will be what the market wants or feasible.

It is important to highlight that this assessment represents a single point in time. All councils are currently implementing changes to their District Plans. This has increased plan-enabled and redevelopment capacity and will inform the level of investment required in the councils' 2024 infrastructure strategies to provide adequate development infrastructure to support sufficient development capacity.

5 Infrastructure capacity

1.23 Introduction

Enabling development requires the provision of adequate infrastructure to support growth. The NPS-UD identifies two categories of infrastructure:

- Development infrastructure network infrastructure for water supply, wastewater, or stormwater, and land transport controlled by local authorities or council-controlled organisations.
- Additional infrastructure public open space, community infrastructure, land transport not controlled by local authorities, social infrastructure (schools and healthcare facilities), network telecommunication, and network electricity or gas.

Ensuring that development capacity is infrastructure-ready is a key element of providing sufficient capacity to meet the expected demand for housing. The assessment of infrastructure-readiness focuses on development infrastructure, as outlined in Table 1.26.

Table 1.26: Definition of infrastructure-ready development of	capacity
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Infrastructure-ready development capacity – definition		
Short-term (0–3 years)	Development capacity with adequate existing development infrastructure to support the development of the land	
Medium-term (3–10 years)	Development capacity with adequate existing development infrastructure to support the development of the land, or adequate development infrastructure is included in a long-term plan	
Long-term (10–30 years)	Development capacity with adequate existing development infrastructure to support the development of the land, or adequate development infrastructure is included in a long-term plan or infrastructure strategy	

Our existing infrastructure will need to support much of our region's expected development in the next 30 years, so it is critical that we maintain and strengthen our existing infrastructure effectively to increase the resilience of our networks for our region, both now and in the future. This will support the current population and new developments in the region.

Council and others identify their infrastructure spend to support development within the region. These documents state what we can afford, not necessarily what we need to spend. This highlighted a funding gap. The Diagram below provides a high-level view of these funding gaps. Diagram xx: Infrastructure gaps

Infrastructure type	Gap	
Three waters	Council Long Term Plans identify the level of three waters infrastructure spend over the next ten years to support the expected levels of housing and business development. It is acknowledged that often these infrastructure projects and costs are what the council can afford and is less than what is needed to fully fund three waters requirements. This gap between what is needed and what can be afforded has not been costed.	
	Some councils have not yet completed detailed growth studies to fully understand the three waters investment requirements to support housing and business development.	
	There is also uncertainty created by three waters reform.	
Transport	High level analysis suggests we need to double the current level of transport spend we are planning for in the region to enable us to catchup on maintenance, provide the required service levels we want for an increasing population and reduce our emissions	
Education	Whilst MoE have identified potential education requirements in areas prioritised in the Future Development Strategy, it is acknowledged that there is significant potential for housing development outside these areas as well and this creates uncertainty regarding where and when investment occurs.	
Energy and telecommunications	There is a need for electricity and telecommunications network upgrades to accommodate not only more housing and business development, but to improve our energy resilience and accommodate more renewable electricity generation in the region.	
Health	At this stage no further hospitals are planned for this region	
Blue green network eg parks	In some parts of the region further investment in local parks and pocket parks may be needed to support well-functioning environments in our towns and cities. Nature based solutions will be needed to be invested in support our blue network and support stormwater management.	

Current limitations of data and modelling capacity necessitate a qualitative assessment of overall infrastructure-ready development capacity. In some parts of the region there are constraints in three waters networks that may impact on development capacity. The scope and immediacy of these constraints vary. The impact on development capacity is discussed in each council's chapter of the HBA. Infrastructure and land-use planning and development is an ongoing and iterative

process. All councils have work underway to better understand and address development pressures on infrastructure.

We have mapped current LTP projects to indicate what infrastructure is planned in Figure 1.14.

INFRASTRUCTURE PROJECTS COMMITTED IN LTPs

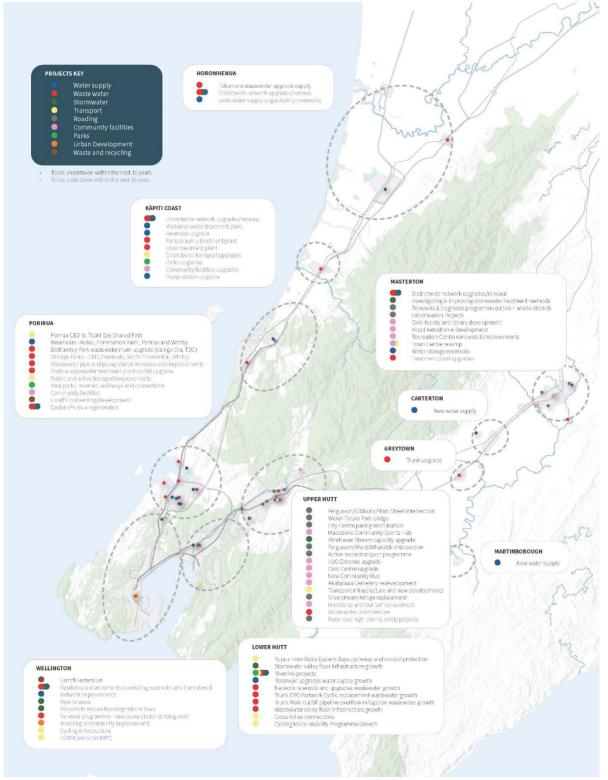


Figure 1.14: Map of committed growth related projects in Council LTP's 2021-2031

1.24 Three waters infrastructure

Across the Wairarapa-Wellington-Horowhenua region, three waters (water, wastewater and stormwater) networks are generally in poor condition and were not designed to meet current community expectations for environmental outcomes. Three waters networks are constrained in large parts of the region and most areas are unable to accommodate new growth without investment in capacity improvements. Some areas are already experiencing shortfalls in agreed levels of service. Currently there is a significant level of investment required to meet existing requirements for water services and growing regions are putting pressure on aging infrastructure.

There are also a number of increasing pressures on the three waters infrastructure in the region including:

- Funding challenges for current and new infrastructure.
- Managing urban growth within environmental limits.
- Managing existing infrastructure and designing new infrastructure for the impacts of climate change.
- The vulnerability of the three waters assets to the impacts of extreme natural hazards.
- Expected changes to legislation that will impact on the requirements of the network.

The councils, except for Carterton, Kāpiti Coast, Masterton, and Horowhenua, are partners in Wellington Water Ltd (WWL), a Council Controlled Organisation responsible for the provision of three waters infrastructure. WWL provided an assessment in 2021 for three waters infrastructure (provided in Appendix 5.6) which formed part of the 2022 HBA Update.

For this HBA, conversations were held with WWL and it has been determined that the 2021 assessment is still current and able to be utilised for this update, as there has been no significant shift in the data informing their assessment. Councils new to the HBA process have detail in their chapters about three waters capacity for growth.

WWL assessed infrastructure capacity using existing modelling, growth studies, and councils' 30year infrastructure investment strategies. Areas were classified as having infrastructure ready development capacity if they were adequately serviced by existing three waters infrastructure or will be serviced by infrastructure identified in the council's long-term plan or 30-year infrastructure strategy. Kāpiti Coast District Council has adopted a similar methodology for its own assessment.

These assessments represent a single point in time. Infrastructure and land-use planning and development is an ongoing and iterative process. As development plans coalesce, infrastructure needs are assessed, funding options confirmed, and investment schedules revised. Three waters infrastructure growth plans need to develop alongside council growth plans to provide infrastructure-ready development capacity. All councils have work underway to better understand and address development pressures on their three waters networks, as well as prepare for upcoming Three Waters reform. In addition, all councils are currently updating their 30-year infrastructure and investment strategies to help inform 2024 Long Term Plans.

Further complicating the long-term certainty for the three waters infrastructure is the three waters reform legislation which will remove three waters infrastructure assets from Council's balance

sheets and transfer them to new water entities. These new entities will be responsible for the management and delivery of three waters infrastructure and services and are likely to be operational by July 2026.

1.25 Public transport infrastructure

For the purposes of the NPS-UD, land transport development infrastructure controlled by councils has two elements:

- 1. The public transport network controlled by Greater Wellington Regional Council and Horizons Regional Council (Horowhenua)
- 2. The local roading network controlled by each district council

Analysis below of public transport infrastructure is provided for the Wairarapa-Wellington-Horowhenua region, while analysis of the capacity of the local roading network is provided in each council's chapter. An inter-related element of land transport is the state highway network controlled by Waka Kotahi NZ Transport Agency. A regional analysis of its sufficiency is provided as part of the section on additional infrastructure in Appendix 5.3 below.

Greater Wellington Regional Council has provided an assessment of the capacity of the Wellington public transport network to respond to population growth (Appendix 5.1). In addition to population growth, public transport must respond to the policy direction of the Regional Public Transport Plan 2021-31 to ensure a greater share of travel is made by public transport (mode shift) and customer expectations that services are high quality, accessible, affordable, reliable, and frequent.

The Regional Public Transport Plan 2021-31 sets out planned infrastructure investments, this is currently being updated for the 2024-2034 Regional Land Transport Plan. An overview of key investments is provided in Appendix 5.5.

There are three areas where there are key challenges for public transport capacity:

- Wellington City bus network bus services must mix with increasingly congested traffic, affecting reliability and limiting the ability to operate more services. This makes providing additional capacity to respond to growth difficult. This is currently being addressed through Let's Get Wellington Moving, particularly through bus priority measures and mass rapid transit.
- Regional rail network growth in patronage is higher than planned for. This is currently being addressed through the Wellington Regional Rail Strategic Direction investment pathway which includes provision of additional rolling stock and infrastructure upgrades.
- There is no effective public transport in Horowhenua and northern parts of Kapiti including Ōtaki. The only rail service is the Capital Connection from Palmerston North to Wellington, currently running once a day. Investment in public transport in this part of our region is needed and important for delivering future sustainable growth and connected low emissions urban areas and communities.

1.26 Additional infrastructure

Under NPS-UD clause 3.5 (1) local authorities must be satisfied that the additional infrastructure to service development capacity is likely to be available.

Analysis of the sufficiency of three types of additional infrastructure provided for in the Wairarapa-Wellington-Horowhenua region is assessed: state highway infrastructure, regional parks, and schools. Each council provides an assessment of the sufficiency of additional infrastructure in their individual chapters.

1.26.1 State highway infrastructure

Waka Kotahi NZ Transport Agency has provided an assessment of the current performance and challenges facing the state highway network, and planned investment in the short, medium, and long-term (Appendix 5.3).

In terms of current performance of the state highway network, for most journeys, there is a moderate amount of travel variability during the AM peak and inter-peak periods. Areas where travel variability is high, indicating more incidences of congestion and travel delay, are around Aotea Quay and the Basin Reserve in the AM peak, and along SH1 from Ngauranga Gorge to Wellington Airport in the PM peak. The assessment also discusses specific travel challenges and constraints in each council's area. The implications of these are discussed in the relevant council's chapter of the HBA.

Overall, current and planned state highway capacity is not a constraining factor for development capacity. However, the assessment notes that transitioning to a low-carbon future means urban development and transport must be planned to enable transport choice and reduce carbon emissions, and an overall reduction in vehicle kilometres travelled. As such, many of the improvements required to address current challenges for the state highway network relate to the provision of improved access by active modes and public transport.

1.26.2 Regional parks

Regional parks administered by Greater Wellington Regional Council provide public open space. The regional park and river corridor network comprises 33,000 hectares in eight regional parks and river corridors managed for flood protection and recreation purposes in the Wellington region – see Table 1.27. There are no regional parks in Horowhenua, but they enjoy an abundance of natural areas such as Foxton Beach and the Tararua Ranges (administered by DOC) within close proximity. Regional open spaces were mapped as part of the constraints mapping for the Future Development Strategy and shown in Figure 1.15.

Table 1.27: Regional park network by area and location.

Name	Council Area	Area (hectares)
Akatarawa Forest	Upper Hutt City Council; Kāpiti Coast District Council	15,500
Battle Hill Park	Porirua City Council	500
Belmont Regional Park	Wellington City Council; Porirua City Council; Hutt City Council	3,500
East Harbour Regional Park	Hutt City Council	2,000
Kaitoke Regional Park	Upper Hutt City Council	2,860
Pākuratahi Forest	Upper Hutt City Council	8,000
Queen Elizabeth Regional Park	Kāpiti Coast District Council	638
Wainuiomata Regional Park	Hutt City Council	340

Including Conservation land, regional parks, territorial authority parks and reserves and QEII Trust covenants



d Urban zones State Highways

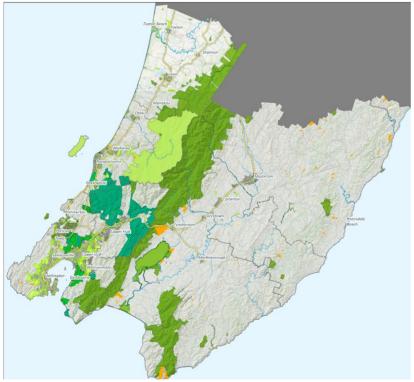


Figure 1.15: Map from FDS constraints report, showing parks and conservation land.

The regional park and river corridor network is considered adequate overall to meet the recreational needs of the community, however there are gaps in the trail network connecting parks. Opportunities to improve the quality of regional park open space for human health and wellbeing and environmental value were identified in Toitū Te Whenua Parks Network Plan 2020-30. These include access to parks, including public and active transport, climate change action (mitigation and adaptation), and greater promotion of environmental and heritage values.

Public open space administered by councils is discussed in each council's chapter of the HBA.

1.26.3 Schools

Planning for schools is undertaken by the Ministry of Education, which monitors growth pressures on schools. The Ministry of Education works with councils to develop plans for new growth areas, and plan for new schools.

The Ministry of Education has supplied information on school capacity, available space, and future plans in Appendix 5.2. Across the Wairarapa-Wellington-Horowhenua region, the capacity of schools to cater for growth is variable. In some parts of the region, schools are approaching or at capacity. In other parts, there is currently significant available capacity. Further details on the sufficiency of school capacity to cater for growth is provided in each council's chapter of the HBA.

1.26.4 Electricity and Telecommunications

Various electricity and telecommunications providers were asked to provide a response for the Housing and Business Assessment. Responses were received from Powerco Gas, Meridian, and Chorus. Copies of these responses are provided in Appendix 5.4.