

Key findings

- Population growth: Wellington City has a requirement for 30,407 dwellings in the next 30 years.
- Housing Capacity: This assessment has identified capacity for 73,856 homes to meet demand over the short, medium and long-term periods.
- Business demand: Higher demand for business floorspace and land resulting from higher growth over 2019 assessment with an identified demand of 597 hectares, or 691 hectares (NPS adjusted), in the next 30 years.
- Business Capacity: There is business land in the short to medium term but in the longer-term capacity will rely on redevelopment.
- Infrastructure Capacity: there are known infrastructure issues across the city. A
 long-term investment plan is required to resolve this and unlock full
 development opportunities over the next 30 years.

This Housing and Business Needs Assessment (HBA) report provides an update to Wellington City's 2019 Housing and Business Needs Assessment and the 2022 Wellington Housing Capacity Assessment. This has been prepared to meet the monitoring requirements of the National Policy Statement for Urban Development (NPS-UD). It also serves as a chapter of a the wider Wairarapa-Wellington-Horowhenua region HBA. The Wellington Regional Leadership Committee (WRLC) will use the regional HBA to support spatial and other planning being undertaken for that region, including the Future Development Strategy (FDS).

It is important to highlight that the HBA represents a single point in time. All councils in the Wairarapa-Wellington-Horowhenua region are currently in the process of implementing reviewed District Plans or changes to their existing District Plans in order to give effect to the NPS-UD and Medium Density Residential Standards. It is expected that through the submission and hearings process there will be some changes to the proposed plans as notified. This will impact final planenabled and realisable development capacity figures.

This chapter provides some detail and context for Wellington City Council and is based on the notified version of the Proposed District Plan.

2.1 Wellington City Context

2.1.1 Wellington City

Wellington is New Zealand's Capital City lying at the foot of the North Island. The City is bounded by the coast to the south, east and west, and extends as far as Tawa and Horokiwi in the north where it meets the Porirua City and Hutt City boundaries respectively.

Wellington City Council) WCC) is one of the five territorial authority areas that make up the Wellington 'Tier 1' urban area as defined by the NPS-UD.

2.1.2 Vision, Community Outcomes and Strategic Priorities

Any discussion on housing supply and growth needs to be considered within the context of WCC's overall vision, community outcomes and strategic priorities. The strategic vision adopted as part of the 2021-2031 Long Term Plan (LTP) was "Wellington 2040- an inclusive, sustainable and creative capital for people to live, work and play". This vision statement provides the context through which all Council led planning and investment is considered.

The LTP also sets out City Outcomes for Wellington City. These are intended to support the strategic vision and are the basis for all council activities. These are:

- Environmental A sustainable, climate friendly eco capital.
- Social A people friendly, compact, safe and accessible capital city.
- Cultural An innovative, inclusive and creative city.
- Economic A dynamic and sustainable economy.

While the City Outcomes present the long-term outlook for the city, the LTP sets out six priority objectives to focus on in the next three years. The priority objectives are a result of engagement with business groups, community groups, students, and the public and are as follows:

- 1. A functioning, resilient and reliable three waters infrastructure with improving harbour and waterway quality and, reducing water usage and waste.
- 2. Wellington has affordable, resilient and safe housing within an inclusive, accessible, connected, and compact city.
- 3. The city's core transport infrastructure is a safe, resilient, reliable network that supports active and public transport choices, and an efficient, productive and an environmentally sustainable economy.
- 4. The city has resilient and ft-for-purpose community, creative and cultural spaces including libraries, marae, museums and community halls, where people connect, develop and express their arts, culture and heritage.

- 5. An accelerating zero-carbon and waste-free transition with communities and the city economy adapting to climate change, development of low carbon infrastructure and buildings, and increased waste minimisation.
- 6. Strong partnerships with mana whenua upholding Te Tiriti o Waitangi, weaving Te Reo Māori and Te Ao Māori into the social, environmental and economic development of our city and, restore the city's connection with Papatūānuku (nature).

Although housing affordability and investing in infrastructure to service growth are strategic priorities for Council, they need to be considered alongside other priorities and outcomes such as a sustainable, climate friendly eco-capital, an innovative, inclusive and creative city, rapid transition to zero carbon and being waste free. Therefore, an integrated approach is required to deliver on all of Council's strategic priorities.

2.1.3 Our City Tomorrow: A Spatial Plan for Wellington

The Spatial Plan is a growth strategy for Wellington that sets out a plan of action for where and how the city will grow and develop over the next 30 years. This plan was adopted by Council in June 2021.

This plan also feeds into other policy decisions. It helped to shape the District Plan Review and enables the Council to prioritise investment in transport, new community facilities and infrastructure upgrades.

The Spatial Plan has been guided by the following city goals:

- Mana Whenua Partnership
- Compact
- Resilient
- Vibrant and Prosperous
- Inclusive and Connected
- Greener

The underlying value of the spatial plan is reflected in the range of benefits it can deliver to ensure that the future growth of the city is compact, well-connected and planned; which will result in improved environmental, housing, transport, community and employment outcomes for current and future residents.

Some of these benefits include:

- Adopts a long-term approach to growth that will contribute to more efficient, coordinated and consistent planning and decision making
- Promoting a more compact urban form by encouraging optimal use and development of land in the City;
- Provides stability, certainty and confidence for investment by indicating what types of investment are required and when and

• Promotes more efficient use of existing infrastructure and identifies and guides the priority, location and funding of future physical and social infrastructure services.

The Spatial Plan will likely undergo a refresh in 2024 once the decisions have been made on the Proposed District Plan and adopted by Council.

2.1.4 Wellington City Proposed District Plan (PDP)

The PDP is the statutory tool to enable the approach set out in the Spatial Plan and is the Council's most important land-use planning tool and aims to significantly increase housing supply along with helping to achieve a number of other social, environmental and economic outcomes. Decisions on the PDP process will likely be made in late 2024. A fully operative District Plan will be in place once any appeals have been resolved, which may take up to two additional years.

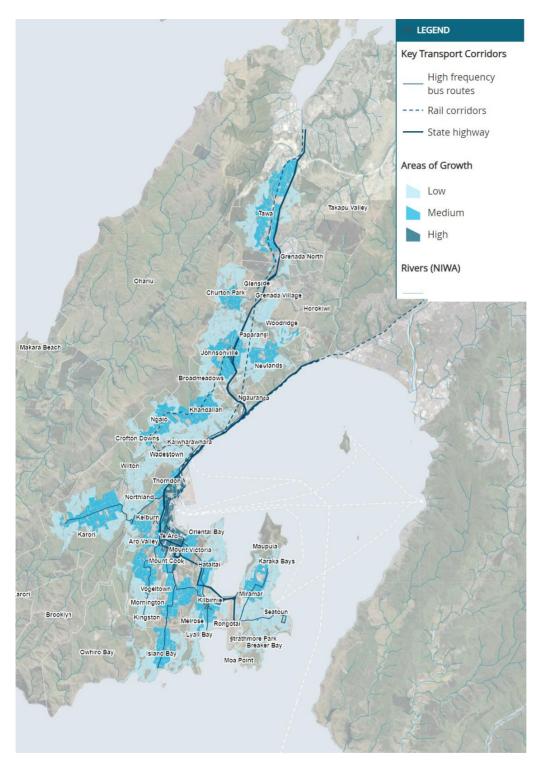
There are limited greenfield developments identified through the PDP, largely restricted to the Lincolnshire Farms and Upper Stebbings areas.

The PDP identifies a broad range of living and working environments across the City, with denser development provided in the City Centre, along major public transport routes, in and around key centres such as Johnsonville, Newtown and Tawa, and within the Let's Get Wellington Moving Corridor.

The PDP also sets out 'housing bottom lines', as required by the NPSUD, based on the findings of the 2022 HBA. These provide that development capacity for 15,098 dwellings is to be provided in the short to medium term and 21,532 dwellings in the long term

2.1.5 Priority Growth Areas

The Spatial Plan identifies Tawa, Johnsonville, City Centre and Newtown as Priority Growth Areas. These growth areas are implemented through the PDP.



Tawa is in the northern area of Wellington City. The PDP provides a Local Centre zoning in the Tawa and Linden Centres, with building heights up to 22m. High density residential development, up to 21m, is enabled around the Tawa and Linden train stations and Local Centres. Most of the residential areas in Tawa have been proposed to be zoned Medium Density Residential, with heights ranging from 11m to 14m, depending on proximity to centres and train stations.

Johnsonville is also in the north of Wellington City. The PDP proposes the Metropolitan Centre Zone in the Johnsonville Centre, with heights up to 35m, and high-density residential development,

up to 21m around the centre. Most of the remaining residential areas of Johnsonville are proposed to be zoned Medium Density Residential, with heights of 11m.

The City Centre is the commercial heart of Wellington and the wider region. It is made up of a mix of inner city living, entertainment, educational and commercial activities. The area is currently home to an estimated resident population of around 17,000 people. It is also a major employment hub, containing around 70% of the city's overall workforce and occupying more than 1.6 million square metres of existing commercial floor space.

2.1.6 Let's Get Wellington Moving

Let's Get Wellington Moving (LGWM) is a partnership between Waka Kotahi NZ Transport Agency, Wellington City Council and Greater Wellington Regional Council, and iwi partners Taranaki Whānui ki Te Upoko o Te Ika and Ngāti Toa Rangatira.

The partnership aims to deliver new transport infrastructure and upgrades to achieve the objectives below. The weighting of each objective is in brackets.

- Liveability: Enhances urban amenity and enables urban development outcomes (20%)
- Access: Provides more efficient and reliable access (15%)
- Carbon emissions and mode shift: Reduces carbon emissions and increases mode shift by reducing reliance on private vehicles (40%)
- Safety: Improves safety for all users (15%)
- Resilience: Is adaptable to disruptions and future uncertainty (10%).

The transport infrastructure and upgrade projects are listed below, under two programmes. The transitional programme is for improvements in the short-medium term within existing roads for walking, cycling and buses and the streetscape. The transformational programme is for large-scale changes to transport corridors that help shape and enable urban development.

Table 2.1 - LGWM Transport Infrastructure and Upgrade Projects

Transitional programme	Transformational programme
Central City walking improvements -	Mass rapid transit (MRT) from Wellington Railway
completed	Station to Island Bay
Cobham Drive crossing - completed	Associated walking, cycling, and public space
Safer speed limits - completed	improvements in MRT's road corridor
Golden Mile (Lambton Quay to Courtenay	Bus priority from Basin Reserve to Miramar shops
Place) revitalisation – by 2025	and Wellington Airport
Thorndon Quay, Hutt Road and Aotea Quay	Basin Reserve grade separation for north-south and
- by 2025	east-west traffic, active mode connections and new
People-friendly City Streets: better bus,	public spaces
walking and cycling journeys within and	A new Mt Victoria multi-modal tunnel
between the city and suburban centres –	Travel demand management

Tranche 1 by 2026, Tranche 2 to be scheduled.

Construction of the transformational programme currently scheduled for 2028, with early works (e.g. second spine on Quays, eastern bus priority) from 2026. Aiming to complete by 2032.

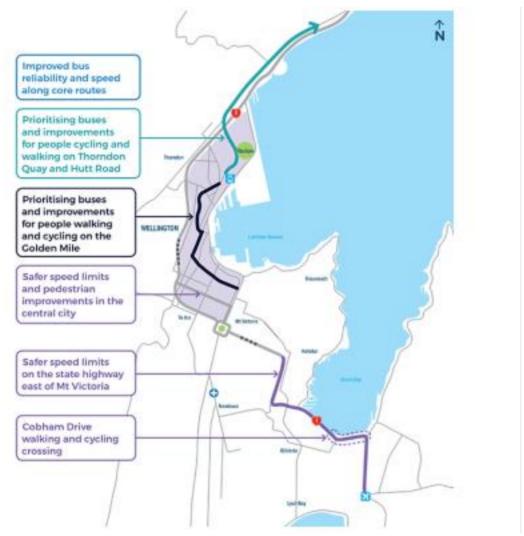


Figure 2.1 – LGWM early delivery work package

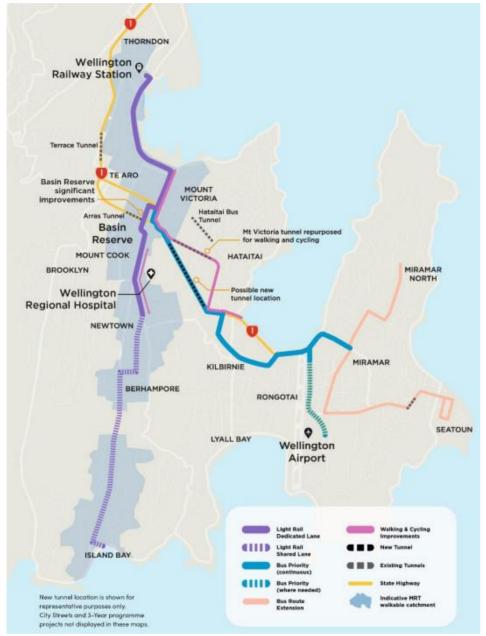


Figure 2.2: Transformational Programme components. Modes and routes might vary in some places.

These projects are important investments to support Wellington City's capacity for development and growth in a manner that reduces carbon emissions and improves access and amenity.

The transformational programme enables and works alongside the investments identified in the Future Development Strategy to centralise growth along the MRT corridor. These include: 3 waters utilities upgrades, more district plan changes, designations for community facilities, and urban development partnerships and interventions around MRT stations.

Land use scenario testing for the detailed business case estimates the change in population and household growth in the MRT and bus priority suburbs. Waka Kotahi is also considering scenarios based on Stats NZ projections, so that the effects of large transport projects can be compared nationally

Table 2.2:

Scenario	30 year households – LGWM suburbs	30 year population growth – LGWM suburbs	30 year population growth - total Wellington City	30 year population growth - total Wellington Region
Do-minimum: Growth without MRT, median projection	7,700	19,400	57,500	~186,000
Some distribution to MRT corridor, with MRT and limited UD interventions	11,100	27,800	57,500	~186,000
Significant distribution to MRT corridor, with MRT and moderate UD interventions	19,180	48,000	73,500	~186,000

Some of the benefits from these transport investments projects are listed below. The third column include the added benefits of pairing the transport projects with intensified land use along the transport corridors.

Key Performance Indicator	Do Minimum 2046	Preferred Programme Option Core Land Use - 2046	Preferred Programme Option Intensified Land Use - 2046
Attracting traffic off city streets (vehicles travelling westbound at Te Aro screenline, AM peak)	10,350 vehicles	2,625 (25%) fewer vehicles	2,200 (21%) fewer vehicles
People living within close proximity to key destinations (access to CBD by PT within 30 minutes, AM peak)	108,100 people	42,100 (39%) more people	80,200 (74%) more people
Comparative travel time between modes (ratio of private vehicle to PT travel time, AM peak) Island Bay to Bowen St	1.5	Decrease to 0.9	Decrease to 0.8
Airport to Bowen St	1.2	Decrease to 0.8	Decrease to 0.9
Public transport delay (public transport travel times, AM peak) Airport to Central Station	32.1 minutes	11.6 minute (36%) reduction	11.6 minute (36%) reduction
Island Bay to Central Station	32.7 minutes	13.4 minute (41%) reduction	13.4 minute (41%) reduction
Mode share in the central city (AM peak, people using public transport to enter CBD cordon in AM Peak)	37.3% of people use public transport	39.9% of people use public transport (Increase of 2.6%)	40.4% of people use public transport (Increase of 3.1%)
Mode share in the central city (AM peak, people using active modes to enter CBD cordon in AM Peak)	13.9% of people use active modes	17.0% of people use active modes (increase of 3.1%)	18.5% of people use active modes (increase of 4.6%)
Carbon emissions (vehicle kilometres travelled, AM peak) East to CBD	23,100 VKT	5,700 (25%) decrease in VKT	6,400 (28%) decrease in VKT
South to CBD	21,600 VKT	3,500 (16%) decrease in VKT	3,500 (16%) decrease in VKT

Figure 2.3:

Related utility upgrades: The transformational programme is a significant opportunity to replace or upgrade the underground utilities in the affected road corridors. In most cases the whole road corridor will be torn up and re-done, with road relocation and expansion in a few areas. Utilities will be moved outside the MRT foundations where possible, to minimise future transport disruptions. While the road is opened up, utility providers can fix and place new infrastructure to cater for the increased population and economic growth expected in the MRT suburbs.

District plan change: The Proposed District Plan (2022) anticipates the transformational programme to the degree known at the time. A district plan change can be started once the transformational programme's detailed business case, funding and locations are confirmed, and the works included in the Regional Land Transport Plan. This plan change will give effect to NPS-UD directions, align zones and land use controls to new layouts and infrastructure, and apply design controls to support good quality transit-oriented development.

Delivery changes: the prioritisation, detail and delivery of the transformational programme may change once the detailed business case is completed at the end of 2024 and may also be subject to government policy changes over time. Presently, the two largest political parties support the Basin Reserve upgrades, a second Mt Victoria Tunnel in some form, rapid transit in some form, and bus priority on the roads leading to the Mt Victoria tunnels. The LGWM Partners, including WCC, will continue delivering the transitional programme works in Table 1 above.

2.1.7 City Housing Action Plan

WCC has recently approved its Housing Action Plan which seeks to ensure better housing outcomes for the City and to address the housing crisis in Wellington City. The Plan seeks to ensure that affordable, safe and dry housing is a priority for the City and its people.

A number of actions have come out of the Plan which include:

- District Plan Changes
- Consenting improvements
- Māori and Mana Whenua housing
- Homelessness
- Social and public housing
- Affordable housing
- Private rental housing to address and enhance the rights of renters
- Reconfirming its commitment to building or contracting 1000 apartments in the central city by 2026 as part of Councils Te Kainga affordable housing scheme.

2.2 Residential Assessment and findings

This section provides demographic context and assessment of residential development capacity for the Wellington City Council over the short (3 years), medium (10 years) and long term (30 years).

2.2.1 Population forecasts

Sense Partners were commissioned to supply population forecasts. The forecasts

The Sense Partners Population Forecast update moderated 30-year growth across Wellington City down from 73,000 to 57,900 as a consequence of Covid -19 and border restrictions impacting migration levels.

Population forecasts are an important factor in determining housing demand. When Council adopted its Spatial Plan in 2021, Sense Partners projected population growth in the range of 50,000-80,000 over the next 30 years based on 2019 figures. This forecasted population range is consistent with the 2021 updated projections provided by Sense Partners as set out in the tables below. Population forecasting at the moment is volatile due to the on-going aftereffects of the pandemic and current economic conditions.

Table 2.2 - Short, medium and long-term population growth for Wellington City, 2021-2051

	Estimated baseline total 2021	Population in 2024	Population in 2031	Population 2051
Sense Partners 50 th percentile projection	216700	219,000	234,300	274,600

Table 2.3 - Short, medium and long term change in population for Wellington City, 2021-2051

	Estimated baseline total 2021	Population change 2021-2024	Population change 2024-2031	Population change 2031- 2051	Total population change 2021- 2051
Sense Partners 50 th Percentile projection	216700	2300	15,300	40,300	57,900
Percentage change (%)	210700	1.1%	7%	17.2%	25.3%

2.2.2 Market analysis and demand for housing

The NPS-UD requires WCC to use evidence about land and development markets to assess whether a well-functioning urban environment and sufficient housing capacity can be achieved.

Demand for housing is influenced by several factors, including changing population demographics, affordability and proximity to the transport network and employment centres.

2.2.2.1 Changing demographics

In addition to population growth (which drivers the number of dwellings required), it is also important to understand changes in the age profile and household types in Wellington City, given their impact on the types of housing needed for Wellington City.

Wellington City's changing demographic characteristics — an aging population, and trends towards smaller households, influence household typologies, resulting in an increase in independent living, retirement villages, rest homes and care home and other types of accommodation for people in their 70s or older, and smaller 1 or 2 bedroom dwellings as families downsize.

2.2.2.2 Home ownership affordability

As identified in the 2022 HBA, affordability of housing in Wellington has been worsening in recent years. House prices peaked in December 2021, however, the number of houses sold and proportion of first home buyers were also at their highest at this time, likely due to historically low interest rates brought about in relation to the COVID-19 pandemic.

Since this peak at the end of 2021, house prices, sales and first home buyer numbers have dropped considerably as shown below in Figures 4 to 7, which is likely due to external factors including interest rate rises and increased living costs. It is unclear what impact increasing housing unaffordability will have on tenure over the long term, however the IPI plan change and the medium density residential standards, were intended by the Government to unlock capacity and increase access to the housing market.

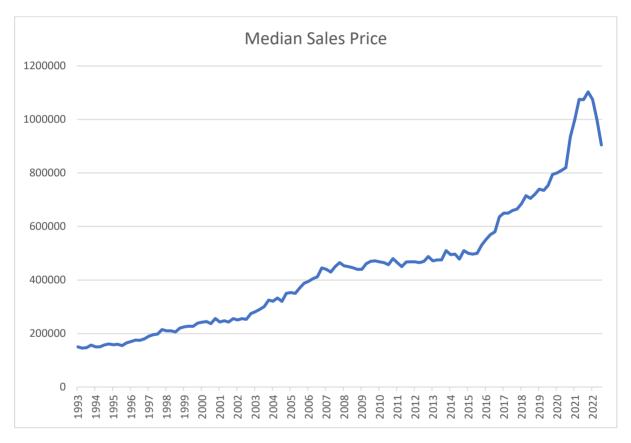


Figure 2.4: Median house sales price in Wellington City, 1993 to 2022

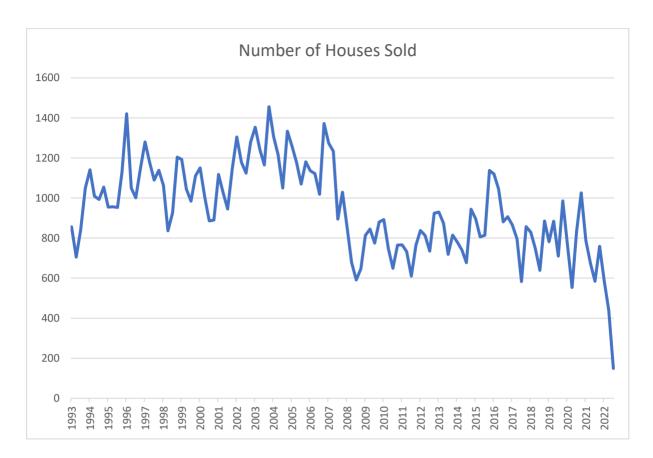


Figure 2.5: Number of houses sold in Wellington City, 1993 to 2022

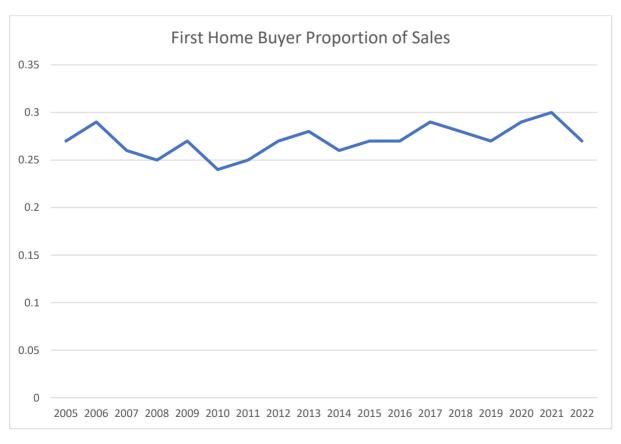


Figure 2.6: Proportion of first home buyers in number of sales in Wellington, 2005 to 2022

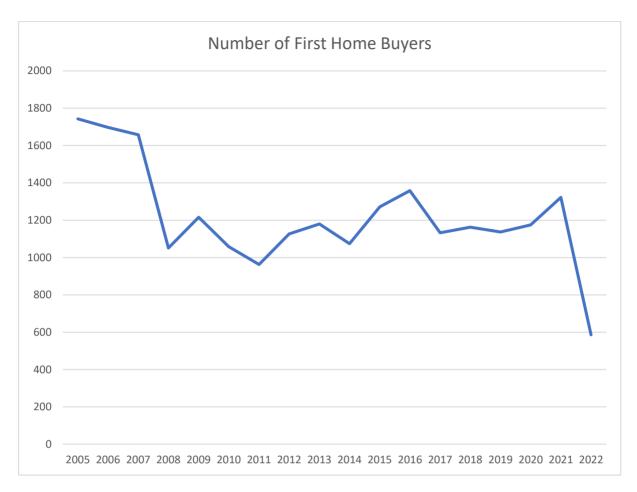


Figure 2.7: Number of first home buyers in Wellington City, 2005 to 2022

2.2.2.3 Renters

The 2018 census indicated that 41.3% of Wellington City dwellings were renting (non-owner-occupied), up from 40.9% in 2013.

The Ministry of Business, Innovation and Employment (MBIE) database of information relating to rent and bonds recorded 25,539 active bonds in Wellington City in June 2023. The data is for non-government owned properties that MBIE has information on and provides a useful indication of the nongovernment rental market.

Figure 8 shows the geometric mean rent data between 1993 and 2022. In this time, the mean rent has risen from \$185 per week to \$593 per week.

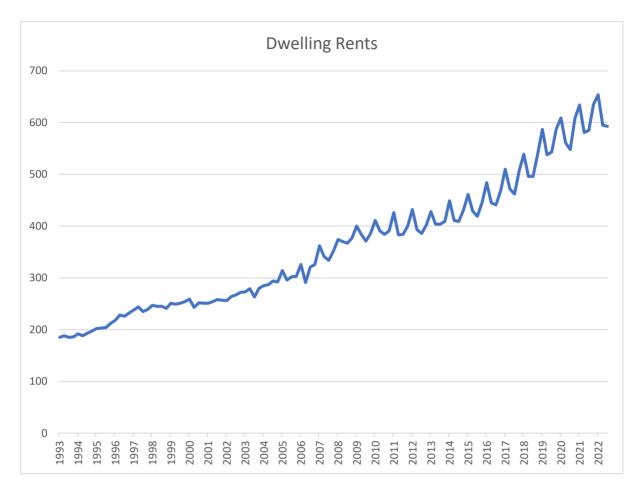


Figure 2.8: Dwelling rents in Wellington City, 1993 to 2022.

2.2.2.4 Public housing

The provision of public housing, transitional housing and emergency housing is another factor which should be analysed to understand the current picture of demand for appropriate housing, for people on low incomes or vulnerable or precarious situations in Wellington City.

Wellington City has 1800 dwellings managed by Kāinga Ora as at March 2023. In addition to this Kāinga Ora housing stock, Wellington City Council has more than 1,900 social housing units across the city, housing over 3,000 tenants on low incomes.

The Ministry of Social Development Housing Register shows the number of eligible applicants not currently in public housing. The Housing Register, as shown in figure 9 below, indicates that housing need among those in Wellington City on low incomes steadily increased between 2017 and 2020. While these figures moderately declined since 2021, they remain high, indicating that demand outstripping available supply of public housing. The worsening affordability of housing and increasing demand, particularly in the renting portion of the market, may be a factor in the rise of public housing registrations as those in vulnerable positions or low incomes are priced out of the market.

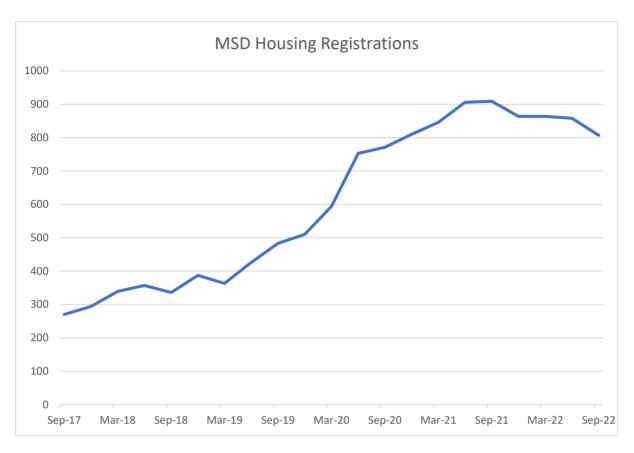


Figure 2.9: Housing need in Wellington City, September 2017 to September 2022

2.2.3 Forecast housing demand

The projected population growth in Wellington City requires an increase in the number of dwellings to accommodate the increased population.

Sense Partners have provided projections for dwellings and dwelling types set out in the tables below. In accordance with the NPS-UD, a margin of 20% is added to the short and medium-term demand, and 15% to the long-term demand. The inclusion of this buffer ensures there is additional capacity to support competitiveness in housing demand.

Table 4.5: Demand for Additional Dwellings in Wellington City, by Dwelling Type (including NPS adjustment)

Additional Dwelling Demand	2021-2024	2024-2031	2031-2051	Total Dwelling Demand
Attached Dwellings	1,749	4,413	9,503	15,665
Standalone Dwellings	1,774	3,401	9,567	14,742
Total	3,523	7,814	19,070	30,407

These district-wide demand projections were further broken down into the different growth catchments and SA2 areas identified in the previous HBA (Housing Catchment Areas). The catchments have been formed by grouping areas of the city that form logical housing catchments i.e., the southern suburbs vs. the eastern suburbs.

The below map shows the location of the Housing Catchment Areas and Wellington City Appendix 2.1 shows how the city has been divided into the seven housing catchments.

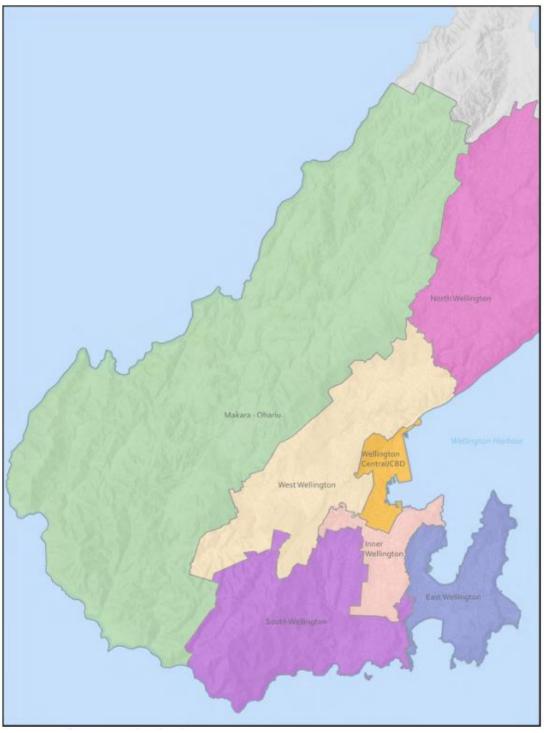


Figure 2.10 - Map showing Housing Catchment Areas in Wellington City

The following tables show demand by housing type across the seven housing catchments. The housing type is broken down by attached housing and standalone housing. Apartments and Terraces are grouped in the 'attached dwellings' housing type. As above, in accordance with the NPS-UD, a margin of 20% is added to the short and medium-term demand, and 15% to the long-term demand.

Table 2.6. Projected Dwellings by Type, North Wellington, 2021-2051.

North Wellington	2021-2024	2024-2031	2031-2051	Total Dwelling Demand
Attached Dwellings	474	1858	2055	4387
Standalone Dwellings	887	1106	3202	5195
Total	1361	2964	5257	9582

Table 2.7. Projected Dwellings by Type, Central Wellington, 2021-2051.

Central Wellington	2021-2024	2024-2031	2031-2051	Total Dwelling Demand
Attached Dwellings	671	1603	4002	6276
Standalone Dwellings	18	7	69	94
Total	689	1610	4071	6370

Table 2.8. Projected Dwellings by Type, Inner Wellington, 2021-2051.

Inner Wellington	2021-2024	2024-2031	2031-2051	Total Dwelling Demand
Attached Dwellings	291	511	1442	2244
Standalone Dwellings	85	199	432	716
Total	376	710	1874	2960

Table 2.9. Projected Dwellings by Type, Southern Wellington, 2021-2051.

Southern Wellington	2021-2024	2024-2031	2031-2051	Total Dwelling Demand
Attached Dwellings	111	103	200	414
Standalone Dwellings	192	524	1534	2250
Total	303	627	1734	2664

Table 2.10. Projected Dwellings by Type, Western Wellington, 2021-2051.

Western Wellington	2021-2024	2024-2031	2031-2051	Total Dwelling Demand
Attached Dwellings	106	195	613	914
Standalone Dwellings	315	1081	2718	4114
Total	421	1276	3331	5028

Table 2.11. Projected Dwellings by Type, Eastern Wellington, 2021-2051.

Eastern Wellington	2021-2024	2024-2031	2031-2051	Total Dwelling Demand
Attached Dwellings	96	143	1190	1429
Standalone Dwellings	206	470	1567	2243
Total	302	613	2757	3672

Table 2.12. Projected Dwellings by Type, Makara-Ohariu, 2021-2051.

Makara-Ohariu	2021-2024	2024-2031	2031-2051	Total Dwelling Demand
Attached Dwellings	0	0	1	1
Standalone Dwellings	71	14	45	130
Total	71	14	46	131

The overall demand for dwellings within Wellington City has fallen by approximately 6,000 from that expected in the 2022 HBA. This fall can be attributed to the use of new 2023 census data and the overall expected decline in population growth from migration due to the overall decline in net migration across the country.

Considering dwelling demand by housing areas shows a shift in expected demand from the 2022 HBA. In 2022, the northern areas of Wellington had the greatest demand for housing. However, this has shifted in the new projections, with Central Wellington now expecting the greatest housing demand. This is significantly made up of demand for attached housing which, in Central Wellington, is assumed to be almost entirely made up of demand for apartments.

Northern Wellington still shows strong demand for both standalone and attached dwellings. This is an expected trend given two factors: one being the notified provisions of the PDP enabling medium to high density in and around centres and train stations and the other being the expected greenfield growth in the northern areas, including in Stebbings Valley and Lincolnshire Farm. The demand for attached housing exceeds that for standalone housing in the northern areas by over two times. This reflects the notified PDP enabling higher density housing in line with the NPS-UD.

Given the location of Inner Wellington to the Central area it is expected that most of the demand for housing will be for attached housing. This will vary between multi-unit development and apartment development, particularly as the notified PDP provides for heights of up to 20-40m. It is noted that even standalone housing in the Inner Wellington suburbs tends to be of a higher density than those located in the outer suburbs.

In the eastern, western, and southern housing areas there is stronger demand for standalone housing than for attached housing. This trend is like that shown in the 2022 HBA. However, as the notified PDP provides for a greater density of development in and around centres and train stations, it is expected that the demand for attached housing will surpass that for standalone housing in future iterations of the HBA.

2.2.4 Residential capacity – plan enabled, feasible and realisable

This section provides the assessment of residential development capacity calculated from the notified PDP. It is important to note that the PDP process is currently progressing through hearings and its provisions may change through this process. The capacity figures stated here are based on the notified provisions of the PDP. The development capacity provided by the final version of the plan may therefore differ from these figures.

Property Economics have developed a model identifying the theoretical development capacity, feasible development capacity and finally, realisable development capacity within Wellington City. The findings of this model have been provided in a report form, this is attached as Wellington City Appendix 2.

Since providing the November 2022 report, Property Economics have refined the capacity numbers presented to account for the spaces in buildings which will be for commercial use within centres and the central area. This is attached as Wellington City Appendix 3.

2.2.4.1 Theoretical capacity

The theoretical development capacity is identified for all residential and mixed-use zones by applying the maximum development capacity of the land based on their underlying zoning and development controls. The assessment includes two scenarios – an infill scenario – which includes development capacity that can be developed around existing buildings; and redevelopment, which assumes what can be built if sites were redeveloped. Both infill and redevelopment scenarios are then also assessed against development of different housing typologies, including standalone housing, terraced housing, and apartments.

For Wellington City, based on the underlying zoning and development rules of the notified PDP, the total theoretical capacity (including mixed used development) identified is 294,923 new dwellings across the city. This number excludes greenfield sites.

Potential greenfield developments have also been assessed through master-planning processes and all greenfield development is considered feasible and realisable. In Wellington City there are two areas with greenfield capacity, these areas have agreed approximate housing capacity of:

Lincolnshire Farm: 3,481Stebbings/Glenside: 960

Therefore, the total theoretical capacity of Wellington City provided by the notified version of the PDP, including the greenfield areas above is 299,364. This is comprised of 294,923 brownfield sites and 4,441 greenfield sites.

This is a sizeable uplift from the previous HBA theoretical capacity of approximately 104,941 dwellings, illustrating the significant increase in enabled residential development capacity within the city under the notified PDP.

2.2.4.2 Feasible capacity

To determine the feasible capacity, Property Economics have drawn on a range of development factors including location, land costs, building costs and sales values to inform what development scenarios are profitable (which was assessed at a 20% profit) - to indicate the extent to which the theoretical development capacity is feasible to develop at this point in time. The assessment also sought to determine the typologies which would be most profitable (and therefore more likely to be feasibly developed) across the city. The assessment has not factored in infrastructure-readiness.

Property Economics assessed feasibility based on a scenario where sales prices drop 10% from where they were in November 2022 and construction costs rise by 10%. This scenario is more reflective of the current market conditions than using raw data that had not been subject to the house price drops and construction cost increases experienced over the course of 2023.

This assessment determined that there is feasible capacity for a potential 95,001 new dwellings within the Wellington City market, excluding greenfield development. With greenfield development included the feasible capacity is 99,442. This represents approximately 32% of theoretical development capacity.

2.2.4.3 Realisable capacity

In addition to the feasibility assessment, Property Economics further sought to overlay policy and practical considerations, to consider what is likely to be developed by the market at that point in time.

The realisation rates essentially provide for the 'likelihood of development', taking into consideration dwelling typology, development options and greenfield competition, and endeavours to consider the risks associated with the development of certain typologies, and the motivation of developers.

Table 2.13 identifies the realisable capacity by typology, in relation to the proposed theoretical capacity figures enabled by the Proposed District Plan. This further assessment shows that while the proportion of developments which can be 'feasibly' undertaken is approximately 32% of the theoretical capacity, the realisable development (considering further market risks and measures) is smaller still at an approximate 24% realisation rate across the city. This results in a projected realisable capacity of 69,415. This excludes greenfield capacity, including greenfield capacity the realisable capacity is 73,856.

Table 2.13: Realisable capacity in Wellington City

Туре	Realisable capacity
	Total
Apartment	21,314
Standalone	15,772
Terraced	32,329
Greenfield	4,441
Total	73,856

This realisable capacity has been further broken down for the same growth catchments, identified in the demand section and includes realisation capacity figures for greenfield developments.

Table 2.14 - Realisable Capacity by Housing Catchment

Housing area	Realisable Capacity	Percentage of Theoretical Capacity
North Wellington	5,169	6%
West Wellington	25,406	35%
Wellington Central/CBD	15,466	28%
Inner Wellington	8,961	38%

South Wellington	7,148	23%
East Wellington	7,265	27%
Makara-Ohariu	0	0%
Greenfield	4,441	100%
Total	73,856	25%

2.2.5 Sufficiency of residential capacity

To determine the capacity of Wellington City to meet its projected housing needs in the short, medium and long terms, a comparison has been made between the demand for additional dwellings identified by Sense Partners, and the realisable capacity modelled by Property Economics.

Under the 50th percentile projection provided by Sense Partners, Wellington City is expected to require an additional 30,407 dwellings by 2051 including a competitiveness margin of 20% over the short and medium-term, and 15% over the long-term. The PDP provides Wellington City with a total capacity of 73,856 additional dwellings, which is approximately 43,000 more dwellings than the city needs under the projected demand.

Based on this, the PDP provides sufficient realisable development capacity to meet its projected housing needs over the next 30 years. In addition, as noted above, the infrastructure constraints that Wellington City currently has will potentially mean that capacity is lower than reported here. Market conditions have also changed since the PE reporting was commissioned. For example, interest rates have increased significantly and net migration in New Zealand is significantly higher than anticipated in the Sense Partners projections. Detailed impact of these macro-economic issues today is unknown. Future HBAs will provide the opportunity to further understand this and its impact on sufficiency of capacity.

Table 2.15 compares demand and capacity over the short, medium and long term to assess overall sufficiency of development capacity provided by the PDP.

Table 2.15: Residential development capacity sufficiency for Wellington City, 2021-2051

	2021-2024	2024-2031	2031-2051	TOTAL
Demand ¹	3,523	7,814	19,070	30,407
Capacity ²		73,	,856	
Balance	70,333	62,519	43,449	43,449

¹ Based on Sense Partners projections including competitiveness margin of 20% over the short and medium-term, and 15% over the long-term.

² Realisable development capacity.

Sufficiency	YES	YES	YES	YES
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Table 2.16 breaks this comparison of demand and capacity down by housing typology, while table 17 breaks the comparison of demand and capacity down by location.

The following tables do not include greenfield numbers of 4,441. Greenfield numbers have been calculated under a separate methodology, in consultation with landowners through different processes.

Table 2.16: Sufficiency by typology.

	Demand	Capacity	Balance	Sufficiency
Attached	15,665	53,643	37,978	YES
Standalone	14,742	15,772	1,030	YES
Total	30,407	69,415	39,008	YES

Table 2.17: Sufficiency by location.

	Demand	Capacity	Balance	Sufficiency
North	9,582	5,169	-4,413	NO
Central	6,370	15,466	9,096	YES
Inner	2,960	8,961	6,001	YES
Southern	2,664	7,148	4,484	YES
Western	5,028	25,406	20,378	YES
Eastern	3,672	7,265	3,593	YES
Makara-Ohariu	131	0	-131	NO
Total	30,407	69,415	39,008	YES

The above tables show that there is sufficient capacity to meet the demand in both attached and standalone houses. In every location, except the Northern and the Makara-Ohariu catchment, there is sufficient capacity to meet demand. The above tables exclude the greenfield capacity of 4,441 which is all located in the northern catchment. When the greenfield numbers are added to the northern catchment, demand is met. Despite this, the reason for undersupply in the northern catchment compared to demand is not necessarily representative of an undersupply of enabled capacity, but a result of the lower feasibility rate of intensification. This is driven by the difference in

land values, with properties closer to the City Centre typically being more valuable and therefore feasible to subdivide.

Demand Reconciled Capacity

The following tables are based on demand reconciled capacity. These figures represent another scenario whereby the model reconciles the realisable capacity against the demand by sorting each of the sites by profit and systematically allocating each of them to be "realised. The resulting capacity results are therefore a reflection of both the profitability of development and the market demand.

The numbers in the following tables exclude greenfield capacity which did not undergo an analysis of demand reconciliation.

Table 2.18 - Demand Reconciled residential development capacity sufficiency by Housing Type for Wellington City, 2021-2051

	Demand	Capacity	Balance	Sufficiency
Attached	15,665	55,445	39,780	YES
Standalone	14,742	18,953	4,211	YES
Total	30,407	74,398	43,991	YES

Table 2.19 - Demand Reconciled residential development capacity sufficiency by Housing Catchment for Wellington City, 2021-2051

	Demand	Capacity	Balance	Sufficiency
North	9,582	5,308	-4,274	NO
Central	6,370	25,740	19,370	YES
Inner	2,960	8,407	5,447	YES
Southern	2,664	6,756	4,092	YES
Western	5,028	21,853	16,825	YES
Eastern	3,672	6,334	2,662	YES
Makara-Ohariu	131	0	-131	NO
Total	30,407	74,398	43,991	YES

The above tables show a similar situation as to the scenario without demand reconciliation. However, capacity has increased overall, with the largest increase being in central Wellington. This reflects a change in the distribution of typology and size. In particular, there is a large shift in the Central Quadrant from large apartments as being the most profitable to a mix of sizes that favoured small-medium apartments, thereby resulting in a significant increase in capacity.

2.3 Business Assessment and findings

2.3.1 Business areas

The NPS-UDC requires us to identify the overall sufficiency of development capacity to meet our future demand for business over the short (3 years), medium (10 years) and long term (30 years).

For the purposes of this assessment, business land has been broken down into different business areas to help support analysis of demand and development capacity.

As with the previous HBA assessment, the areas assessed were based on 11 defined business clusters around Wellington City. These areas were categorised based on underlying zoning, in conjunction with established business characteristics and their boundaries. These areas and the types of businesses located within them are:

Table 2.5 - Business Areas

Business Area	Dominant Industry	Business Area	Dominant Industry
Kaiwharawhara	Light Industrial Retail	Tawa	Retail Commercial
Wellington City North (Central Wellington)	Retail Commercial Hospitality	Adelaide Road Corridor	Light Industry Retail Commercial
Te Aro	Retail Commercial Hospitality	Miramar	Retail Light Industry Commercial
Johnsonville	Retail Commercial Hospitality	Newtown	Retail Hospitality
Grenada	Industrial	Karori	Retail Commercial
Kilbirnie	Retail Commercial Hospitality	Ngauranga	Light industry Commercial
Lincolnshire Farm	Retail Commercial	Owhiro Bay	Commercial

2.3.2 Key Growth Drivers

In Wellington City population growth can be split by before 2014 and after 2014. Prior to 2014, population growth was strong but began falling around 2005, in line with national rates. However, following 2014, population growth has lagged that of both the national rate and the Wellington Region Rate. Despite this, Wellington City is still experiencing strong population growth rates, and this is a major driver of demand for business land and floorspace across the city. Population growth in Wellington City is primarily driven by inwards migration, with the majority coming from foreign countries followed by Auckland.

Wellington City's economy is dominated by the commercial and government sectors. This is the expected outcome of Central Government being concentrated in the city. Many of the commercial services that support central government also locate within Wellington city as they support the government sector.

Central Government is relatively price insensitive, meaning they are willing to pay what it takes to outcompete other sectors for office space. Those parts of the commercial sector which service Central Government, such as lawyers or accountants, can also compete for expensive office space. They can pass the cost on to Central Government through the fees charged for their services. Limited remaining commercial space means tough competition for other parts of the commercial sector, such as the tech sector.

2.3.3 Key business statistics and figures

Figure 2.10 identifies business trends (number of jobs and business typologies) in Wellington City in the five-year period between 2017 and 2022.

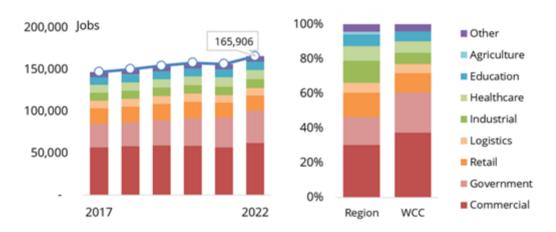


Figure 2.3: Employment trends in Wellington City, 2017 to 2022

As can be seen, the commercial and government sector makes up over half of the jobs in Wellington City. This is the expected outcome given the Central Government concentration in the city. The number of jobs in this sector has increased steadily year on year since 2017.

Those sectors which directly support residents, such as education and healthcare, have a smaller share of total employment. This is because many of the government and commercial sector workers commute in from other parts of the region.

2.3.4 Transport Network

The transport network across Wellington Region is oriented towards Wellington City. This is particularly the case for the rail network, with the Wellington City Train Station being the main station across the region and the last stop on all north island networks heading south. However, this is also the case for the road network with State Highway 1 and State Highway 2 starting/ending within Wellington City.

As a result, all transportation projects across the Wellington Region, including the Northern Corridor improvements, Riverlink in Lower Hutt City, and rail network investment, have a positive impact on employment in Wellington City. This therefore impacts on the demand for business floorspace.

The below graph shows the impact that two different transportation scenarios will have on employment activity in Wellington City, using number of jobs as a metric. Transport scenario 1 includes the Northern Corridor improvements, Riverlink, and rail network investments. Transport scenario 2 shows the impact of a Mass Rapid Transit system implemented as part of the Let's Get Wellington Moving Programme. As can be seen, both scenarios have a large impact on employment activity in Wellington City.

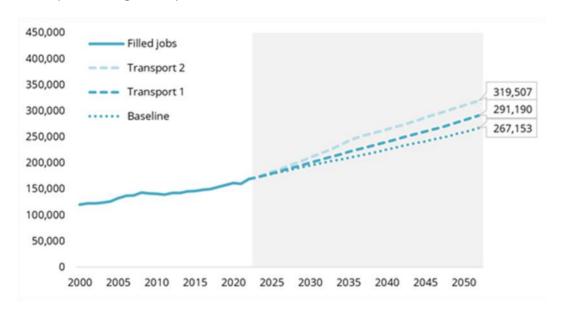


Figure 2.11 - Impact of transport improvements on employment activity, Wellington City

2.3.5 Market analysis and demand for business

Sense Partners have updated the business demand forecasts used in the 2019 HBA. Demand is based on Sense Partners 2022 population forecast and demand for business 'land' and 'floorspace' are broken down across seven core business sectors.

A model of economic activity was used to project region wide employment out to 2052. This model draws on job numbers by sector over the past 20 years and considers the relationship between different sectors over time and trends implied by the data.

In accordance with the NPS-UD, demand has been identified for the short (3), medium (10 and long term (30) year period.

Future business demand is determined by considering the key drivers of economic development, patterns of employment change and market analysis. Figure 13 below identifies anticipated changes to commercial activity over the next 30 years.

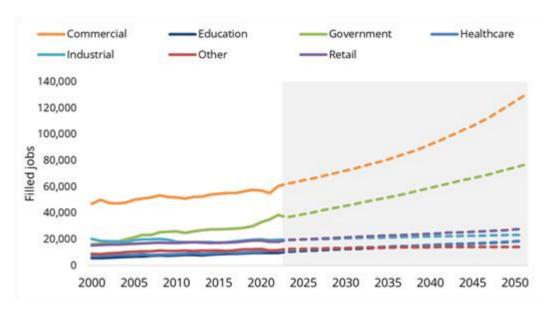


Figure 2.12: Employment in Wellington City, 2000 to 2052

Whilst Figure 2.12 identifies the changes in employment figures over time, Table 2.21 and 2.22 identifies how these employment figures translate into floorspace and land requirements.

Table 2.21 - Demand for business land and floorspace by business sector over the short, medium and long term

	Floorspace (m²)				Land (hec	tares)		
Туре	2021- 2024	2024- 2031	2031- 2051	Total	2021- 2024	2024- 2031	2031- 2051	Total
Commercial	123,868	289,025	825,785	1,283,677	2.6	6	17.1	25.6
Education	37,009	86,353	246,723	370,085	1.9	4.3	12.3	18.5
Government	70,234	163,880	468,229	702,343	1.4	3.3	9.3	14
Healthcare	31,169	72,728	207,795	311,693	1.6	3.6	10.3	15.5
Industrial	54,276	126,644	361,840	542,760	10.9	25.3	72.3	108.5
Other	90,62	21,144	60,411	90,617	0.5	1.1	3.0	4.5
Retail	34,743	81,067	231,621	347,431	4.6	10.8	30.9	46.3
Total	364,861	851,341	2,432,404	3,648,606	23.3	54.4	155.3	233

accordance with the NPS-UD, a buffer of 20% is added to the short and medium-term demand, and 15% is added to the long-term demand. The inclusion of this buffer provides an additional margin to support competitiveness. The resulting inflated demand is as follows:

Table 2.22 - Demand for business land and floorspace with competitive margin by business sector over the short, medium and long term.

	Floorspace (m²)				Land (hectares)			
Туре	2021- 2024	2024-2031	2031-2051	Total	2021- 2024	2024- 2031	2031- 2051	Total
Commercial	148,641	346,830	949,652	1,445,123	3.1	7.2	19.6	29.9
Education	44,410	103,624	283,732	431,766	2.2	5.2	14.2	21.6
Government	84,281	196,656	538,463	819,400	1.7	3.9	10.7	16.3
Healthcare	37,403	87,274	238,965	363,642	1.9	4.3	11.9	18.1
Industrial	65,131	151,973	416,116	633,220	13	30.4	83.2	126.6
Other	10,874	25,373	69,473	105,720	0.5	1.3	3.5	5.3
Retail	41,692	97,281	266,364	405,336	5.6	13	35.5	54
Total	432,433	1,009,010	2,762,765	4,204,207	27.9	65.2	178.6	271.7

2.3.6 Business Capacity – Plan Enabled, Feasible and Realisable

This section provides the assessment of business development capacity, and this follows a similar process to the residential capacity assessment in that the calculations are based on plan enabled development (including the notified IPI plan change).

The assessment undertaken by Property Economics looks at theoretical capacity for mixed-use and business areas based on their underlying zoning and development controls, and then a feasibility lens is applied to identify how much of that theoretical capacity could be realised.

The theoretical assessment considers scenarios for infill and redevelopment as well as identifying vacant land. The infill scenario identifies potential development capacity available alongside existing buildings, whilst vacant land is a sub-category of the redevelopment scenario.

Assumptions were made to help provide a more realistic assessment of development capacity. This included:

• using ratios to split development capacity between residential and business uses in areas that enable mixed uses

- appropriate site coverages to help provide a more realistic provision of the use of land including space to provide for parking and accessways to support shops, services and yard space
- additional site coverages applied for some sites
- heights of buildings used in industrial areas

The vacant land is arguably the most important in the short term as it is readily available and is currently zoned for business development.

However, while building heights in industrial zones enables muti storey development, an assumption of single storey development has been used across industrial areas to reflect the large warehouse and factory building typology which is predominate across this zone.

Further information on modelling process and assumptions can be found in the supporting HBA methodology document.

Theoretical and Feasible Business Capacity

Table 2.23 identifies the theoretical and feasible capacity of business floorspace by business areas.

Given the complexities in modelling different potential uses of business land, a Multi Criteria Analysis (MCA) has been used as a way of assessing the feasibility of development across business areas. The MCA uses a range of criteria to help identify relevant merits and constraints within business areas, to provide a picture of preferences for business development across the district.

The MCA was developed in the first HBA in 2019. Each business area is scored against a number of criteria, including costs of land, access to transportation links, access to services and access to the CBD. This scoring helps to identify the overall characteristics between business areas and therefore provides a metric against which the feasibility of development can be assumed.

Under the MCA criteria, the highest possible score is 70. As can be seen, all business areas, except Karori, scored above average (35) and the scores range from 30-63.

Table 2.23 - Business Capacity for Wellington City by Business Area. 2021-2051

Business Area	MCA Score	Existing Floorspace (sqm)	Infill (sqm)	Redev (sqm)	Vacant (sqm)
Adelaide Road	48	156,220	72,123	388,296	0
Wellington City North	55	363,077	265,057	808,010	2,719
Te Aro	53	948,722	757,038	4,270,102	0
Johnsonville	56	214,827	114,506	311,262	0

Business Area	MCA Score	Existing Floorspace (sqm)	Infill (sqm)	Redev (sqm)	Vacant (sqm)
Kaiwharawhara	63	121,975	51,439	112,279	3,171
Karori	30	59,005	13,241	47,496	0
Kilbirnie	53	282,756	112,307	365,207	18,420
Lincolnshire Farm	39	286,109	822,489	826,744	0
Miramar	46	251,511	53,118	183,841	1,328
Newtown	38	90,049	35,538	128,052	0
Ngauranga	47	214,623	3,423	20,855	9,658
Owhiro Bay	NA	58,535	16,206	22,660	0
Tawa	48	320,776	59,133	203,668	15,448
Grenada	54	375,001	67,911	149,492	0
Total	NA	3,743,187	2,443,528	7,837,964	50,744

Key characteristics from across these areas include:

- Kaiwharawhara scored highest out of all areas, with 63 out of 70. This reflects the proximity to the port and access to State Highway 1. In addition, a potential change to the road network may result from a possible relocation of the ferry terminal. This will improve connectivity for industry and may result in increased commercial demand. The Let's Get Wellington Moving proposals will likely improve public transport and connectivity to and around Kaiwharawhara.
- Wellington City North and Te Aro also scored high, with 55 and 53 respectively. These areas
 are attractive for a range of commercial businesses and government departments due to the
 proximity to the parliamentary precinct, the Central Railway Station, and the CBD.
- Johnsonville scored the highest out of the northern business areas. This reflects a highly accessible town centre, recent investments in services such as the library and railway station and large areas of underutilised spaces that offer potential for development.
- Karori and Newtown both scored the lowest out of all areas with scores of 30 and 38 respectively. Karori is limited by accessibility, with only one accessway in and out. The existing business areas currently support the local area but generally do not offer services beyond Karori. In addition, there are known three waters infrastructure constraints which limit development potential in the suburb.

2.3.7 Sufficiency of business capacity

Similar to residential development capacity, it is important to be realistic around the differences between current capacity enabled under the District Plan, its take-up and the current realisation of development.

Like other Districts in the Wellington Region, there is currently a gap between the bulk, height and scale of existing buildings across the District compared to what is enabled under the District Plan. While a greater scale of plan-enabled capacity is available, this may not be realised for some time.

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.

Table 2.24 shows theoretical business land demand (floorspace and land) against capacity over a 3-, 10- and 30-year period.

Table 2.6 - Sufficiency of business floorspace (m2)

Туре	2021-2024	2024-2031	2031-2051	TOTAL
Demand (inflated with 20%/15% buffer)	711,433	1,661,010	2,941,365	9,914,207
Development Capacity	Redevelopmer	7,837,964		
	Vacancy			50,744
	Infill			2,443,528
Total Development Capacity				10,332,236
Sufficiency				YES

This assessment demonstrates that there is more than sufficient business capacity to meet the expected demand over the next 30 years. However, further work is required to determine the appropriateness of this capacity to meet the demand required by all sectors.

Given the large amount of floorspace available throughout the city, meeting commercial and government sector demands is not expected to be an issue. However, meeting industrial demand may prove to be more difficult given the comparatively low amount of vacant land that is currently available. Industrial uses require land space and cannot make use of floorspace to the extent that other sectors can. It has been identified in the Regional HBA that an industrial land study will be undertaken by the Wellington Regional Leadership Committee to consider future industrial opportunities in a region wide context.

2.4 Infrastructure Capacity

Infrastructure capacity is an important consideration for determining feasible development capacity. The Property Economics report that has informed this HBA has not considered availability of infrastructure when determining feasible or realisable development capacity. The following subsections outline known infrastructure capacity information and what this may mean for enabling growth across the City

2.4.1 Three Waters

The 2019 HBA identified significant challenges with ensuring three waters infrastructure is able to support planned urban growth. Three waters infrastructure was identified as a particular constraint and that significant investment as well as new infrastructure will be required to enable anticipated growth. The key findings of the 2019 HBA's Infrastructure section is listed below:

- There are no significant issues that would have an immediate impact on development capacity.
- There are constraints across the three waters network that will impact on development capacity without intervention. These constraints vary in their scale and location.
- The three waters network is ageing in parts and some issues, such as water penetration into the wastewater network, are in part caused by the age of the network.
- Transport infrastructure is generally fit for purpose currently but increasingly there are strains on the network, and peak time congestion is problematic.
- The city has an extensive open space network but a finer grained analysis is required to adequately determine where increased investment is required, aligning with growth areas.

The 2019 HBA was assessed under the context of the old District Plan, which had significantly less plan-enabled development capacity than the PDP. The PDP has been informed by the 2021 Spatial Plan. Wellington Water Limited (WWL) prepared three waters assessments to inform the development of the Spatial Plan. These assessments identified that many catchments require significant/major network upgrades and investment to accommodate future growth. WWL's assessments concluded:

To accommodate future population growth in Wellington City Council area, there will need to be significant upgrades to 3-water infrastructure, with intervention needed to meet growth in the following way.

- Central City (in Te Aro, Adelaide Rd), Newtown, Johnsonville, Tawa immediate and significant intervention to meet short term growth forecasts to create development capacity in the 3-water networks.
- Newlands, Mt Cook, Mt Vic, Hataitai, Aro Valley, Berhampore, Island Bay, Khandallah, Ngaio, Crofton Downs - short term interventions to meet medium-term growth forecasts and create development capacity in the 3-water networks.
- Karori, Kelburn, Brooklyn, Thorndon, Churton Park, Lyall Bay, Kilbirnie, Miramar medium term intervention to create development capacity in the long term.
- Greenfields short to medium term structure planning in place to lead long term outlook for future development led by others.

The following map from Wellington Water's 2021 assessment identifies the upgrades necessary to enable planned growth:

LEGEND WCC SPATIAL PLAN 30.5ML System wide WW storage

Three Waters Upgrades to Support Growth

Figure 2.15: Three waters to support growth in Wellington City

As part of preparations for the 2024-34 Long Term Plan, WWL have advised WCC that by addressing existing infrastructure level of service deficit, growth will be able to be more readily enabled also. Much of Wellington's infrastructure is aging and due for renewal. Wellington also has a geography that is problematic for maintaining infrastructure and operating it efficiently.

WWL reporting on the Spatial Plan suggested that there were existing constraints in the three waters networks that would limit opportunities to enable growth. WWL have recently advised WCC that in the short-term they will generally still approve service connections for non-complex and smaller scale developments. WWL also note that network deficiencies can sometimes be addressed through use of onsite mitigation solutions, such as onsite detention tanks and pumps. WWL have advised that to enable medium- and long-term growth, significant upgrades to network infrastructure will be required. These upgrades are not budgeted for in the 2021-31 Long Term Plan.

In summary, infrastructure-readiness for three waters is assumed to be sufficient to enable short-term growth. In the medium and long terms, investment in three waters infrastructure will be necessary. Therefore, future Long Term Plans will need to accommodate appropriate renewal, resilience and growth programmes to enable sufficient growth. This should be recognised in appropriate infrastructure projects and programmes and the Infrastructure and Financial Strategies.

2.4.2 Local road network

Overall, the current state of the network provides a suitable level of service; however due to the anticipated population growth both within the city and regionally will add pressure on our local road network and change demands for travel modes. Increasing capacity on the City's local roads is limited due to the topography.

The Council's approach is to maximise the efficiency of existing corridors by reallocating space away from relatively inefficient private vehicle traffic and parking lanes to higher capacity public transport and active modes. Moving more people by public transport, walking, and cycling, will allow the Council to move more people through constrained road corridors.

2.4.3 State highway network

The main extent of highway in Wellington is SH1, with SH2 running from Ngauranga to Petone. SH1 extends from Wellington Airport to Tawa and Porirua and primarily serves as a transit corridor from Tawa to the Terrace Tunnel and from the Terrace Tunnel to Wellington Airport, SH1 functions as an urban connector road.

Waka Kotahi/ NZ Transport Agency has provided an assessment of the State Highway network. This is attached as Appendix 5.3 in the 2022 HBA and is still relevant. The assessment takes a regional focus, noting that many journeys on the state highway cross local authority boundaries and issues such as journey reliability, safety and resilience as well as mode shift impact the region. In Wellington Central, the interface with State Highway 1 will be a focus for Let's Get Wellington Moving including improving amenity for pedestrians through Te Aro.

Regional highway access to the port and other key destinations will also be reviewed. Development of the Kaiwharawhara port/ferry precinct to increase capacity for freight via ferries and rail may

have flow on effects for State Highway 1 that will need to be considered alongside opportunities for mode shift to rail.

The Northern Growth Area (Lincolnshire Farm) is expected to accommodate a substantial amount of new greenfield housing. A key consideration to this area is the business case for the Petone to Grenada link. An investigation into improving regional connectivity and resilience through a westeast connection will utilise work done for the Petone to Grenada link while investigating other routes. Any future connection will need to consider urban development potential and prioritise travel via public transport and active modes. New greenfield development in Upper Stebbings and Glenside West may become reliant on connections to State Highway 1 through the Churton Park/Glenside interchange for travel throughout the region. Waka Kotahi will work with the Council and Regional Council to ensure that the development is maximising opportunities to encourage use of active and shared modes. In the eastern suburbs from Hataitai to Miramar, the preferred transport interventions will be informed by the Let's Get Wellington Moving programme; namely the City Streets, MRT and state highway investigations. The Cobham Drive crossing and State Highway 1 Safer Wellington City Council Housing and Business Development Capacity Assessment – Housing update May 2022 61 Speeds review is in the three year programme and will improve safety on Cobham Drive and State Highway 1 and support active mode trips to and from the eastern suburbs with a shared path.

2.4.4 Public transport

Rail plays a significant role in providing access to the regional CBDs and growth to the north. Rail is a very efficient way to move large numbers of people over longer distances and we will continue to build on the region's established rail network which links communities to the north of the Wellington City CBD. The strategic focus for the rail network is to improve the frequency, capacity, reliability, safety and resilience of the current network while also looking to expand the network north, providing alternative travel options for those who travel inter-regionally, who would otherwise be using private vehicles.

The bus network also plays a critical role in moving significant numbers of people, providing access to centres and the core rail network in other parts of the region. On some key corridors in Wellington City bus infrastructure constraints and pinch points are making it more difficult to increase bus service frequency and capacity in response to growing demand. Significant investment in infrastructure, including a second CBD spine for public transport, terminals/layovers/depots and increased bus priority, is necessary to enable continued growth in public transport within these parts of Wellington City

2.4.5 Open Space

The 2019 HBA included an analysis of the city's open space and recreation network. The findings of this assessment are still valid. The assessment noted that Council provides an extensive parks and open space network across the city with a network of over 4200 hectares of reserves and over 365km of tracks. The Council currently has a target of ensuring that open spaces (a neighbourhood park, play space or other outdoor opportunity) are located within 600 metres or 10 minutes' walk of people. An analysis of that target against urban residential areas shows that 73% of the areas meet this target. The above assessment is coarse and does not measure, for instance, the quality or

size of the open space relative to the area it services. Therefore, a small neighbourhood park may be servicing an area of high density and cannot be reasonably said to be providing an adequate open space function. This is an area of further refinement for the council in how it measures the success of its open space provision. Wellington City provides 18.8 hectares of open space per 1000 people. This exceeds the national median of 17.3 hectares. However, in terms of actively maintained parks, Wellington only provides 2 hectares per 1000 people compared to 8.8 hectares nationally, and 1.1 hectares of sports fields compared to a national median of 2.3 hectares. Despite the large overall provision of open space, further analysis reveals that large portions of open space are hillsides and gullies that while important for landscape and ecological reasons, have limited utility for recreation purposes. This is reflective of the geographical characteristics of the city. A further issue is the quantity and quality of flat useable open space for recreation. As noted in the appended assessment "[w]hile the Outer Green Belt and the Wellington Town Belt provide a good foundation, the network of sports fields, community parks and neighbourhood parks is compromised by the quantity and quality of many of those spaces."

As further growth occurs in existing urban areas either new parks will be required, or investment will be required in existing parks to improve their quality and function. Particular attention will need to be paid to the central area of the city given the population growth to date in this area, and the anticipated growth that will occur in the future, the Council plans for such investment in parallel with other planning initiatives or budgeting for capital projects occurs through Long Term Plan and Annual Plan processes. Additionally, new housing areas resulting from greenfield developments are required to provide open space as part of their development. The Council also provides a range of recreational facilities across the city ranging from swimming pools, sports fields, recreation centres and multi-use facilities such as the ASB Sport Centre. There are a wide range of demands on recreational facilities, and the nature of this demand changes. Older facilities can also be difficult to re-purpose for changing demands.

2.4.6 Education

The Ministry of Education has provided an assessment of school rolls and capacity for the region attached as Appendix 5.2 in the 2022 HBA and is considered still relevant. Current school capacity varies across the district. The following capacity also includes state-integrated schools which are part of the education network but have special characteristics which may not appeal to all families. The information is drawn from the July 2022 rolls for all schools. By way of summary:

Wellington Central and South

- There are 16 state primary schools in the Wellington Central catchment. Of these 16; four are state integrated schools which has space for approximately an additional 353 students.
- Within the state primary network there is space for an additional 479 students;
- There are 4 secondary schools which service the Central and West catchments. Three of these are state schools and operate enrolment zones and are either at or over capacity. The remaining school is a state integrated school.
- Wellington Girl's College has recently been funded a redevelopment and 16 additional teaching spaces

Wellington West

- There are 7 state and two state integrated primary schools in this catchment. Within the state network there is space for 929 students and approximately 424 pare student spaces within the state integrated system.
- There are 4 secondary schools serving this catchment with all of them being single sex schools. Within the state schools there is space for 149 students and space for 217 students within the state-integrated schools.

Northern Wellington

- This area is a key growth areas as the Ministry anticipates significant housing growth in this
 area. Considerable investment has been made and will continue to be made within this
 catchment.
- There are 20 state and 3 state-integrated primary schools in the catchment with capacity for 1036 students in the state primary school system and 160 within the state-integrated primary schools.
- There are 3 state secondary schools which are all at or above capacity. Investment has been made to allow for additional capacity.

2.4.7 Infrastructure readiness

The NPS-UD requires Councils to identify infrastructure readiness to inform whether there is sufficient feasible and realisable development capacity. In general, many of the city's development areas are considered infrastructure ready. Some areas will require upgrades and investment to ensure plan-enabled growth can be converted into realisable development opportunities for the market to take up. The main infrastructure constraint is three waters. The delivery of Let's Get Wellington Moving is another, but its gradual delivery will enable more opportunities for high density development, making it a more attractive market prospect for that development typology. The Council's Long Term Plan needs to reflect this and appropriately fund the necessary upgrades to enable development over the next 30 years.

2.5 Conclusions and next steps

The Housing and Business Assessment has identified that there is a need to accommodate 30,407 additional dwellings and 597 hectares, or 691 hectares (NPS adjusted) hectares, of commercial land over the next 30 years. This report shows that there is more than sufficient residential housing capacity and business land capacity to meet the expected demand.

For residential housing capacity, there is a need for future HBA's to consider infrastructure constraints to a greater degree. This assessment has provided a high-level overview of infrastructure constraints which is sufficient to determine that infrastructure in the short and medium term can accommodate growth. However, it is unclear to what extent and whether longer term growth can be accommodated.

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 and in Wellington City and the Wellington Regional Leadership Committee is commissioning a piece of work to consider this in more detail.

This Housing and Business Assessment will form an evidence base that can be used to support the preparation of the Future Development Strategy and regional and district planning processes.