Rotorua Housing and Business Development Capacity Assessment 2024 Update

April 2025 – FINAL

m.e consulting

savvy CONSULTING

Rotorua Housing and Business Development Capacity Assessment 2024 Update

Prepared for

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Executive Summary

This Housing and Business Development Capacity Assessment ("HBA") has been prepared by Market Economics ("M.E") and Savvy Consulting in collaboration with Rotorua Lakes Council ("RLC") to provide a robust assessment of Rotorua's housing and business market in accordance with the requirements of the National Policy Statement on Urban Development 2020 ("NPS-UD"). This report provides a comprehensive, three-yearly update of RLC's first HBA published in 2021.

It includes a detailed analysis of housing and business demand and supply patterns, including recent trends and future projections of demand over the short, medium, and long term (2023-2053).[1] It quantifies capacity for additional housing and business development that is commercially feasible, serviced by infrastructure and reasonably expected to be realised. It addresses the sufficiency of that capacity to meet projected future demand for additional dwellings and business growth and it discusses the impact of Council planning and infrastructure on housing affordability and the competitiveness of the housing market as well as sufficiency of urban business zone capacity. A number of recommendations are provided to assist Council with future planning and decision making.

The tables below provide a high-level summary of the findings in this HBA, with some tables provided to compare and monitor results against the previous HBA 2021. In those comparison tables, arrows have been included to summarise the direction of change, and three colours are adopted to show whether that change is positive (green), a neutral outcome (orange), or a negative change (red). A glossary of key terms used in this report is provided at the end of the document.

Table 0.1 – Change in Total Urban Housing Demand, Capacity, Sufficiency Since HBA 2021

Measure/ Indicator	HBA 2021	HBA 2024	Change	Explanation/Driver
Attached (multi-unit) dwellings consented (calendar year)	37 (2020)	185 (2023)		The annual rate of dwelling supply has increased in Rotorua since the previous HBA, with new dwellings added from across different parts of the market. Within this, Rotorua's pattern of dwelling growth has gradually changed in response to a wider set of factors including patterns of household demand, construction sector capacity, economic conditions and involvement of different parts of the market in dwelling supply. Attached dwellings have accounted for an increased share of new dwellings due to greater household acceptance (including becoming a more attractive housing option when considering cost and location), increased market establishment within the construction sector and the ability to produce attached dwellings at a lower cost than larger
Detached dwellings consented (calendar year)	131 (2020)	225 (2023)		

[1] Housing demand in this HBA has been extended by one year to 2054 to assist RLC with other reporting processes.

				detached dwellings. Other parts of the market beyond the commercial developer sector have also delivered more attached dwellings to achieve higher dwelling yields and in response to changes in household composition driving increased demand for smaller dwellings.
Count of people on the social housing register	540 (June 2020)	900 (June 2023)		Affordability pressures at the lower end of Rotorua's housing market have increased the number of people on the social housing register since the previous HBA. However, the number of people has decreased since a peak during 2022, coinciding with the addition of further social housing. Despite this, Rotorua has the highest proportion of the population on the register in comparison to all other locations.
Impact of provisions on housing affordability				The Plan Change 9 (PC9) provisions are likely to encourage development patterns that contribute positively toward housing affordability through time in comparison to patterns of development that were likely to occur under the previous provisions. The District Plan now provides greater housing choice, meaning households are able make trade-offs between dwelling size, type, location and price, thereby improving their affordability relative to a more limited housing options that existed prior to PC9 (predominantly consisting of detached dwellings on full sites). The positive effects of PC9 will occur gradually through time as new dwellings are added to the stock, becoming more significant in the medium to long term, rather than any immediate effect on prices across the market.
Current housing shortfall (latent demand estimate)	1,500 dwellings	1,500 dwellings		A shortfall of 1,500 dwellings has been retained in the current assessment to apply a conservative approach in the short term. While dwelling growth has exceeded household growth since the previous assessment, indications of significant pressure at the lower end of the market remain. Recent additions to the social housing stock may reduce the latent shortfall through time.
Urban housing demand[2] (excluding	Long term: 8,200	Long term: 7,700		Projected long term dwelling demand remains high relative to estimates from other sources, with greater focus in the short term due to the immediate incorporation of latent demand. Long term demand has reduced from the previous HBA

[2] Medium Growth Future.

competitive-ness margin)				due in part to slower than projected household growth and a reduction in demand for non-resident household dwellings (both due to the lingering effects of Covid on parts of the tourism sector). A three-year shift in the demand series projection rebasing has also reduced demand between the assessments due to the higher weighting of growth into the earlier years of the underlying household projection series.
Plan enabled housing capacity (urban)	Short/ Medium term: 23,700	Short/ Medium term: 216,300		PC9 has substantially increased the development opportunity across nearly all of Rotorua's urban environment. It enables a greater range of dwelling typologies and sizes across most locations, increasing both the number of parcels with further development potential and the potential dwelling yields on these parcels. There are very large differences in yields between the newly enabled medium to higher density dwellings vs. the densities previously enabled (restricted mainly to detached dwellings on full sites) across most of the urban environment. While medium to higher density dwellings account for a large proportion of the plan enabled capacity, PC9 has also substantially increased potential detached dwelling yields through enabling smaller site sizes. Large increases in capacity are enabled through both intensification (infill and redevelopment) across the existing urban environment and through higher enabled yields within greenfield areas.
	Long term: 29,800	Long term: 280,500		Plan enabled capacity further substantially increases in the long term with the addition of sizeable greenfield housing areas identified through the FDS. Expansion of the higher density zones also adds further plan enabled capacity, in the form of higher density apartments, within the existing urban area in the long term.
Commercially feasible housing capacity[3] (urban)	Short/ Medium term: 7,300	Short/ Medium term: 35,700		The increased development opportunity has also increased Rotorua's feasible capacity from that of the previous HBA. Higher potential dwelling yields increase the feasibility of redeveloping sites through increasing the returns to developers and increasing alignment with a greater range of market demand. These drivers of feasibility are estimated to increase in importance through time with growth in demand and market establishment
	Long term: 20,900	Long term: 79,600		

[3] Market Growth Scenario.

				of attached and more intensive dwellings, although the feasibility of higher density dwellings is likely to remain limited for the commercial developer part of the market. Part of the increase in feasible capacity has also occurred through a greater number of sites having development potential. While many greenfield areas were feasible to develop under previous planning provisions, the smaller potential lot sizes and greater enabled dwelling mix increase the yield (and therefore total feasible capacity) within these areas.
Plan enabled, commercially feasible, infrastructure ready capacity (greenfield only)	Short term: 80	Short term: 2,000		Infrastructure networks have been expanded across further greenfield areas since the previous HBA. Together with the greater potential dwelling yields in these areas, this has increased the infrastructure-served capacity in the short term.
	Medium term: 2,900	Medium term: 8,300		Higher potential dwelling yields have also increased infrastructure-served capacity in greenfield areas in the medium term, with the spatial extent of networks similar between the current and previous HBA assessments.
	Long term: 3,930	Long term: 16,900		The additional greenfield areas identified through the FDS in in the long term also substantially increase infrastructure-ready capacity from that in the previous assessment. The timing and extent of FDS growth cells aligns with planned infrastructure provision, meaning there are no infrastructure constraints in these areas. The feasibility of developing some infrastructure-served greenfield areas is limited by the leasehold status of land.
Plan enabled, commercially feasible, infrastructure ready and reasonably expected to be realised	Short term: 1,700	Short term: 3,900 to 5,100		The market is likely to respond to the increased feasible development opportunity in Rotorua's urban environment, resulting in higher RER capacity from that in the previous HBA assessment. Higher yields are likely to occur within greenfield areas through smaller overall lot sizes and some increase in the dwelling mix to better align with patterns of demand. Increased

(RER) housing capacity (urban)	Medium term: 4,800	Medium term: 7,700 to 10,700		opportunity for intensification within the existing urban area is likely to increase RER, with significantly higher capacity occurring through redevelopment of only a minor portion of sites. As per the last HBA, RER capacity is substantially below enabled and feasible capacity as only a portion of feasible sites are likely to become available or be taken up by the market, with most development likely to occur at densities below that enabled by the provisions. The relative take-up of different typologies and densities is likely to be limited by the scale and timing of market demand. Development patterns are likely to gradually increase in intensity through time as the market becomes more established in different typologies. A range of RER capacities provide further rigour in testing the sufficiency of capacity under different patterns (urban expansion vs. urban intensification) of city growth.
	Long term[4]: 9,400	Long term: 19,200 to 33,800		
Urban housing development capacity surplus/ deficit (sufficiency)	Short term: -1,890	Short term: +300 to +1,600		A projected short term overall capacity surplus occurs due to expansion of infrastructure networks in greenfield areas, higher enabled yields on these areas, and increased development opportunity within existing urban areas. This is a substantial change from the last HBA assessment when a shortfall of total housing capacity was projected in the short term. The size of the surplus depends on the level of intensification within existing urban areas. There are some areas of shortfall in higher density typologies due to limited commercial feasibility where the market is small and not yet established. Some indications of a shortfall in the Central reporting area occur due to the absence of greenfield capacity, with this demand likely to be met instead in greenfield areas in other reporting areas.
	Medium term: -1,400	Medium term: +2,200 to +5,200		The projected capacity surpluses become larger in the medium term due to further infrastructure network expansion in greenfield areas and continued development within the existing urban area. This is a substantial change from the last HBA assessment when a shortfall of total housing capacity was projected in the medium term. Shortfalls in higher density typologies and the Central reporting area remain in this current HBA assessment due to limited feasibility for higher density dwellings and greenfield opportunities

[4] Market Growth Scenario.

				instead occurring in other reporting areas. Higher density demand could be met at a reduced intensity through other typologies (e.g. attached dwellings) which have sizeable projected surpluses.
	Long term[5]: -320	Long term: +10,100 to +24,700		The overall projected capacity surpluses increase further in the long term due to additional greenfield capacity provided under the FDS and continued intensification within the existing urban area. This is a substantial change from the last HBA assessment when a small shortfall of total housing capacity was projected in the long term. Attached dwelling surpluses increase substantially as feasibility increases from the market growth modelled in the long term. The feasibility of higher density capacity is likely to increase in the long term, with a surplus emerging under the urban intensification growth scenario (with shortfalls remaining under other scenarios).

Table 0.2 – Total Urban Environment Housing Demand, Capacity, Sufficiency Results by Dwelling Typology 2023-2054

	Time Period (Cumulative)	Detached Dwellings	Attached Dwellings	Apartment Dwellings	Total Dwellings (Max Combination)
Projected housing demand[6]	Short term	2,200	600	100	2,900
	Medium term	2,900	1,400	300	4,600
	Long term	3,900	3,000	900	7,700
Projected housing demand with the competitiveness margin[7]	Short term	2,700	700	100	3,500
	Medium term	3,600	1,600	300	5,500

[5] Market Growth Scenario.

[6] Note: data and methodology limitations mean demand estimates are inherently uncertain. A range of demand projections are discussed in Section 3.2.

[7] A competitiveness margin is a margin of development capacity beyond the expected demand that tier 1 and tier 2 local authorities are required to provide, that is needed to support choice and competitiveness in housing and business land markets.

	Long term	4,900	3,300	900	9,100
Plan enabled housing development capacity	Short term	57,100	103,700	203,900	216,300
	Medium term	57,100	103,700	203,900	216,300
	Long term	71,300	127,700	263,300	280,500
Plan enabled and commercially feasible housing development capacity	Short term	25,700	26,400	70	35,700
	Medium term	25,700	26,400	70	35,700
	Long term	40,800	72,200	6,900	79,600
Plan enabled, commercially feasible and infrastructure served housing development capacity (total)	Short term	22,400	20,200	70	29,400
	Medium term	25,700	26,400	70	35,700
	Long term	40,800	72,200	6,900	79,600
Plan enabled, commercially feasible and infrastructure served housing development capacity (greenfield only)	Short term	1,000	2,000	0	2,000
	Medium term	4,400	8,300	0	8,300
	Long term	8,500	16,700	0	16,900
Plan enabled, commercially feasible, infrastructure ready and reasonably expected to be realised (RER) housing capacity	Short term	2,800 to 3,400	1,100 to 1,800	0	3,900 to 5,100
	Medium term	5,400 to 6,800	2,300 to 3,900	0	7,700 to 10,700
	Long term	9,600 to 13,400	9,000 to 18,800	600 to 1,600	19,200 to 33,800
Housing development capacity surplus/deficit (sufficiency)	Short term	+70 to +700	+400 to +1,000	-100	+300 to +1,600
	Medium term	+1,800 to +3,200	+800 to +2,300	-300	+2,200 to +5,200
	Long term	+4,700 to +8,500	+5,700 to +15,500	-300 to +700	+10,100 to +24,700

The above tables indicate there are large overall projected housing capacity surpluses in Rotorua's urban environment, which become larger in the medium and long term. Shortfalls in capacity are limited to higher density dwellings and occurring generally across typologies within the Central reporting area.

Shortfalls in higher density dwellings are due to limited feasibility for this type of development for the commercial developer part of the market and are not due to planning constraints or a lack of infrastructure capacity. The market for higher density dwellings is not yet established in Rotorua, with developments unable to achieve sufficient revenue to offset construction costs. The market size is small for this type of development and is projected to become larger in the long term. The capacity assessment has identified a very large development opportunity relative to demand for higher density dwellings in Rotorua. It is applied in central areas at a scale and spatial extent that provides significant scope for the market.

Further planning provision for higher density development is unlikely to increase feasibility and remove projected shortfalls. Spatial expansion to the areas would necessarily occur in locations that are further from areas of central amenity and therefore less likely to be feasible. The exception may be enabling ground floor residential uses in some commercial areas near the edge of the City Centre. Increased height provisions for higher density buildings would also be above what the market would be able to sustain.

The Central reporting area shortfalls generally occur due to an absence of greenfield capacity within this location, meaning all demand is assessed against only intensification capacity. It is likely that a significant portion of this demand would instead be met within greenfield areas in other parts of the urban environment.

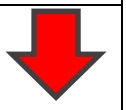
Table 0.3 - Total Urban Environment Housing Demand, Capacity, Sufficiency Results by Location Type 2023-2054

	Time Period	Existing Urban	Greenfield and Underutilised Urban Land	Total Urban Environment
Projected housing demand[8]	Short term	1,000 to 1,100	1,900	2,900
	Medium term	1,500 to 1,800	2,800 to 3,100	4,600
	Long term	1,900 to 3,900	3,900 to 5,800	7,700
Projected housing demand with the competitiveness margin	Short term	1,200 to 1,300	2,300	3,500
	Medium Term	1,900 to 2,200	3,300 to 3,600	5,500

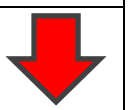
[8] Medium future.

	Long term	3,200 to 4,600	4,600 to 5,900	9,100
Plan enabled housing development capacity	Short term	194,900	21,400	216,300
	Medium term	194,900	21,400	216,300
	Long term	225,300	55,300	280,500
Plan enabled and commercially feasible housing development capacity	Short term	24,900	10,800	35,700
	Medium term	24,900	10,800	35,700
	Long term	58,300	21,200	79,600
Plan enabled, commercially feasible and infrastructure served housing development capacity	Short term	24,900	4,500	29,400
	Medium term	24,900	10,800	35,700
	Long term	58,300	21,200	79,600
Plan enabled, commercially feasible, infrastructure ready and reasonably expected to be realised (RER) housing capacity	Short term	1,200 to 2,500	2,600	3,900 to 5,100
	Medium term	2,000 to 5,000	5,700	7,700 to 10,700
	Long term	8,700 to 23,300	10,500	19,200 to 33,800
Housing development capacity surplus/ deficit (sufficiency)	Short term	+10 to +1,200	+300 to +400	+300 to +1,600
	Medium term	+200 to +2,800	+2,000 to +2,400	+2,200 to +5,200
	Long term	+6,500 to +18,800	+3,600 to +5,900	+10,100 to +24,700

Table 0.4 – Change in Total Urban Business Land Demand, Capacity, Sufficiency Since HBA 2021

Measure/ Indicator	HBA 2021	HBA 2024	Change	Explanation/Driver
Urban business zone total employment projection (jobs filled)	Long term: 6,840	Long term: 6,930		This HBA 2024 has relied on the same 'base' employment projections as used in the HBA 2021.Those projections have been rebased at the sector level to March 2023 actuals and extrapolated to 2053. The rebased employment projections have a period of strong growth in the short-medium term (driven by the expected recovery of tourism related sectors following Covid-19), followed by the previously projected growth path from 2026 to 2050, and a continuation of this growth trend to 2053. The result is a minor increase in long term employment in urban business zones.
Urban business zone land demand (including competitive-ness margin)	Long term Retail: 10.8 ha	Long term Retail: 12.3 ha		Overall, short term growth for Retail, Tourist Accommodation and Industrial land is now higher, driven by the projected recovery of several sectors post Covid-19.[9] For Commercial demand, land demand is lower in the short term as many industries that fall within this category were not impacted by Covid-19, and in fact some, especially professional services and health care and social assistance jobs, increased faster than projected. A consequence of the employment rebasing approach is that there is a small correction in these sectors (either a stabilising or minor reduction) in the short term while other parts of the economy recover. Medium term growth is however broadly similar and long term growth is slightly lower on account of employment growth gradually slowing over time. Total (cumulative) growth over the long term is slightly higher than in the HBA 2021 on account of achieving a similar long term employment level, but off a lower base in 2023.
	Long term Commercial: 41.0 ha	Long term Commercial: 40.7ha		
	Long term Accom.: 6.2 ha	Long term Accom.: 9.3ha		
	Long term Industrial: 36.2 ha	Long term Industrial: 40.5ha		
	Long term Total: 94.1 ha	Long term Total: 102.8 ha		

[9] There is some vacant capacity for retail and tourist accommodation that can absorb this demand without generating demand for vacant land. However, the demand model ties land demand to employment growth. This is dealt with in more detail in the body of the Part 3 of the report.

Urban business zone total net developable vacant land	Short-Medium term: 54.8 ha	Short-Medium term: 52.5 ha		This HBA 2024 identifies 2.3ha less vacant short-medium term business land than in the HBA 2021. This minor net reduction is a combination of take-up of vacant land but also some demolition of buildings and some changes in what was included/excluded. Overall, long term vacant business land has increased a significant 133.3ha compared to long term vacant business land in the HBA 2021 on account of the FDS 2024 identifying more greenfield growth areas than the Spatial Plan which preceded it.
	Long term: 107.3 ha	Long term: 240.6 ha		
Urban business zone vacant land development capacity by category[10]	Long term Retail: 13.3 ha	Long term Retail: 23.9 ha		PC9 and the FDS 2024 have made a positive contribution to business development capacity in urban business zones compared to the Operative District Plan and 2018 Spatial Plan applicable at the time of the HBA 2021. These changes to planning documents provide more certainty on the direction of future growth in the urban environment.
	Long term Commercial: 37.2 ha	Long term Commercial: 87.7 ha		
	Long term Accom.: 7.3 ha	Long term Accom.: 8.6 ha		
	Long term Industrial: 57.2 ha	Long term Industrial: 103.3 ha		
Urban business zone development capacity[11] surplus/ deficit (sufficiency)	Long term Retail: 2.5 ha	Long term Retail: 11.6 ha		PC9 and the FDS 2024 have increased the long term surpluses (sufficiency) of business land capacity compared to the HBA 2021. While the HBA 2024 shows a minor shortfall of development capacity to meet expected demand (plus the margin) for Tourist Accommodation when measured in vacant land terms, there is a long term surplus when measured in floorspace terms (and this floorspace surplus is larger than under the HBA 2021 thanks to increased building heights enabled through PC9.
	Long term Commercial: -3.8 ha	Long term Commercial: 47.0 ha		
	Long term Accom.: 1.2 ha	Long term Accom.: -0.7 ha		
	Long term Industrial: 21.0 ha	Long term Industrial: 89.8 ha		

[10] Preferred Scenario – Alternative Capacity Scenario (excludes double counting of capacity across categories).

[11] Ibid.

Non-residential building consents in the district show a more diverse pattern of development in 2023 compared to 2020. While industrial and storage buildings still account for a large share of building consent activity, investment in new retail, office and health service buildings has become more prevalent. It suggests development (or redevelopment) is starting to occur across a broader range of business zones in the urban environment.

CBRE consider that the supply of prime (new) office space in the CBD and suburban centres remains limited relative to demand. The same applies for prime retail space. Retail vacancies in the CBD have continued to drop slowly but is still higher than in other CBDs in the North Island. The oversupply of lower grade retail and office tenancy space indicates potential for redevelopment to deliver more prime tenancy space, but location is key. Colliers attribute the high vacancy rate for retail premises with an oversized retail footprint in the CBD and consider that retail supply should be encouraged to concentrate into a smaller core area. Development of a inner-city master plan (and implementation plan) and associated plan change that better supports the CBD core is included as a recommendation for Council in this HBA.

Between 2023 and 2053, it is estimated that around 87.2ha of developable zoned land will be required to accommodate employment growth seeking an urban business zone (102.8 when the competitiveness margin is added. This is made up of demand for 12.3ha of Retail land, 40.7ha of Commercial land, 9.3ha of Tourist Accommodation land and 40.5ha of Industrial land by 2053. It is evident that demand for industrial land and premises remains strong in Rotorua, with vacant supply to meet this demand still limited.

Projected Retail and Tourist Accommodation land demand in the long term is likely overstated as it is driven by short term employment recovery following Covid-19 impacts, with vacant retail tenancy space (and motels not currently being used for tourism) able to absorb some of that short term demand (reducing the vacant land needed for new development). Nonetheless, there is at least sufficient vacant land capacity (plan enabled, infrastructure served and suitable) to cater for projected short term demand for urban business zones (inclusive of the competitiveness margin) out to 2026 across all land use categories. The same sufficiency applies when considered in floorspace terms.

By the medium term (2033), there are modelled shortfalls in vacant land development capacity for Industrial, Commercial and Retail demand, with capacity for Tourist Accommodation still sufficient. These shortfalls (related to planning but not infrastructure constraints) are only minor and when measured in floorspace terms, there is a surplus of development capacity for Commercial development (particularly above ground floor space) which is considered a more relevant measure of sufficiency for that land use category.

On the one hand, there is likely to be some additional capacity in the Heavy Industrial Zone that has not been captured in the HBA business modelling which would suggest sufficient capacity in the medium term to meet expected demand for industrial activity as a whole. However, the majority of industrial land demand in Rotorua is for Light Industrial Zone locations, and on that basis, the shortfall is expected to be real and likely understated.

The minor medium term shortfall of development capacity to meet expected Retail land demand is not expected to need a planning response. As above, more than half of the medium term Retail land demand is expected to occur in the short term (as a result of employment recovery) and there is a high level of retail vacancies (particularly in the inner-city) that are able to accommodate some of that growth. When this vacant premises capacity and redevelopment potential is included, it is expected that there is at least

sufficient development capacity (vacant land) already provided in the District Plan to meet that Retail demand.

The FDS 2024 has identified large areas of greenfield Light Industrial Zone and City Entranceway Tourism Zone. Including this capacity in the long term shows large surpluses of development capacity to meet expected demand for Industrial, Commercial and Retail growth (albeit that the Commercial and Retail capacity is not centres-based). The FDS signals that two of the Light Industrial Zone growth areas are identified to meet short-medium term Industrial demand. This HBA recommends that a plan change(s) is initiated to implement that staging as this addresses the expected shortfall of (Light) Industrial development capacity projected in the medium term. A consequence of those plan changes is that a limited amount of Commercial and Retail capacity anticipated in the Light Industrial Zone, will make a minor contribution towards meeting medium term Commercial and Retail demand.

While this HBA has found a minor shortfall of Tourism Accommodation development capacity in the long term, more than half of that demand will occur in the short term and there are some existing vacant (under-utilised) motels that will absorb some of that demand without taking up vacant development capacity. This indicates that there is likely to be sufficient land development capacity over the long term. Importantly, there is at least sufficient capacity in the long-term when measured in floorspace terms. As such, no planning response is considered necessary.

Table 0.5 – Urban Environment Business Demand, Capacity, Sufficiency Results (Ha) 2023-2053 – Alternative Capacity Scenario

	Industrial	Commercial	Retail	Accommodation
Projected business land demand (cumulative)	Short term: 13.0 ha	Short term: 5.4 ha	Short term: 4.0 ha	Short term: 4.5 ha
	Medium term: 22.9 ha	Medium term: 14.3 ha	Medium term: 6.9 ha	Medium term: 6.0 ha
	Long term: 34.2 ha	Long term: 34.8 ha	Long term: 10.4 ha	Long term: 7.8 ha
Projected business land demand with the competitiveness margin (cumulative)	Short term: 15.6 ha	Short term: 6.5 ha	Short term: 4.7 ha	Short term: 5.4 ha
	Medium term: 27.5 ha	Medium term: 17.2 ha	Medium term: 8.3 ha	Medium term: 7.2 ha
	Long term: 40.5 ha	Long term: 40.7 ha	Long term: 12.3 ha	Long term: 9.3 ha
Plan enabled (vacant and net developable) business land	Short term: 27.1 ha	Short term: 15.4 ha	Short term: 8.3 ha	Short term: 8.6 ha
	Medium term: 27.1 ha	Medium term: 15.4 ha	Medium term: 8.3 ha	Medium term: 8.6 ha

development capacity (cumulative)[12]				
	Long term: 134.0 ha	Long term: 83.2 ha	Long term: 22.1 ha	Long term: 8.6 ha
Plan enabled, infrastructure ready and suitable business land capacity (cumulative)	Short term: 27.1 ha	Short term: 15.4 ha	Short term: 8.3 ha	Short term: 8.6 ha
	Medium term: 27.1 ha	Medium term: 15.4 ha	Medium term: 8.3 ha	Medium term: 8.6 ha
	Long term: 134.0 ha	Long term: 83.2 ha	Long term: 22.1 ha	Long term: 8.6 ha
Business land development capacity surplus/deficit (sufficiency)	Short term: 11.5 ha	Short term: 8.9 ha	Short term: 3.6 ha	Short term: 3.3 ha
	Medium term: -0.4 ha	Medium term: -1.9 ha[13]	Medium term: -0.01 ha	Medium term: 1.4 ha
	Long term: 93.6 ha	Long term: 42.5 ha	Long term: 9.7 ha	Long term: -0.7 ha[14]

Table 0.6 – Summary Table – Impact of Planning

Issue	Summary
How do the relevant councils support the provision of infrastructure (e.g. planning decisions)?	Rotorua's FDS growth cells align with the timing and spatial extent of planned infrastructure network expansions. Development has occurred since the previous HBA ahead of planned infrastructure in some growth cell areas (such as in the Eastern reporting area) where local infrastructure has been provided by developers. RLC have assessed the ability for infrastructure networks to accommodate growth through intensification within the existing urban area. Infrastructure networks, at the catchment level, are able to support the projected long-term growth applied in the sufficiency assessment. The preferred growth scenario is slightly above the Statistics New Zealand High Series projection, with a similar level of net growth. It is noted that the widespread development opportunity for intensification across the urban environment may limit the ability to align the location and timing of additional infrastructure capacity with patterns of growth.

[12] Preferred Alternative Capacity Scenario.

[13] Although sufficient development capacity in floorspace terms.

[14] Although sufficient development capacity in floorspace terms.

How does the district plan contribute towards meeting the current and likely future demands for housing from Māori?	As discussed in more detail below, PC9 has significantly increased housing development opportunity throughout Rotorua's urban environment which may benefit those Māori that own residential properties and is likely to benefit those Māori seeking market rentals, and those requiring the support of social housing. In addition, PC9 introduced more enabling density standards for papakāinga development and removed the requirement for this form of development to occur adjacent to marae. This is expected to increase the development opportunities on a range of whenua Māori already zoned across the urban environment. Looking forward, the FDS 2024 has identified additional whenua Māori for urban housing rezoning in the Ngongotahā and Eastern reporting areas. Some of these areas are signalled in the FDS for upzoning in the short-medium term.
How does the district plan contribute towards meeting the current and likely future demands for housing from different groups in the community (e.g. elderly, students, low-income households, renters, homeowners)?	The HBA has found that Rotorua's District Plan (as modified by the PC9 intensification provisions) along with the FDS 2024, provides the market with a substantially greater development opportunity, enabling an expanded range of dwellings in comparison to past patterns of development assessed in the HBA 2021. It also encourages the market to deliver an increased range of dwellings, which are likely to better align with long term patterns of housing demand. A greater dwelling mix will provide increased housing choice, which will gradually improve housing affordability across different parts of the market through enabling households to make viable trade-offs between dwelling size, type, location and price. While the Plan does not require the delivery of affordable dwellings, or dwellings for specific areas of demand, they increase the flexibility for different parts of the market to deliver a range of dwelling types and sizes. The same development opportunity applies to the profit-driven commercial developer and other parts of the market (e.g. social housing), with sites able to be developed more intensively and at a higher yield. Importantly, the assessment has found sizeable development opportunity in relation to the level of relative demand across a range of locations within the urban environment.

1 Introduction

This report is the Housing and Business Development Capacity Assessment ("HBA") 2024 for Rotorua District. It provides an update on the HBA 2021. The requirement for this three-yearly update is set out in the National Policy Statement for Urban Development 2020 ("NPS-UD"). The report complies with the requirement for Tier 2 territorial authorities to assess the demand for housing and business land in urban environments, and the development capacity that is sufficient to, at least meet that demand in its district in the short, medium, and long term.

1.1 HBA Objectives

The objectives of this report[15] are to:

- Update the HBA 2021.
- Provide robust information on the demand and supply and capacity of urban housing and business land in Rotorua;
- Quantify the development capacity that is sufficient to meet expected demand for housing and business land in the urban environment in the short, medium and long term;
- Incorporate information and feedback from the housing and business development sectors;
- Provide information on the likely impact of council planning and infrastructure decisions on future affordability and competitiveness of the housing market; and
- Inform housing bottom lines, Resource Management Act ("RMA") planning documents and decision making, the next Future Development Strategy ("FDS") and the Ten Year Plan ("LTP").

1.2 Approach

This report has been prepared jointly by M.E and Savvy Consulting, and in doing so, provides continuity in approach from the HBA 2021, as well as continuity across PC9 and the draft FDS which M.E and Savvy were also involved in. The development of an HBA is a data intensive exercise that draws on Council's own data and a range external data sources. It also requires considerable input of Council staff time to help agree on assumptions, advise on infrastructure, and sign-off on the wide range of intermediate and final outputs of the modelling. This HBA is therefore a collaborative effort with RLC and has also benefited from input and advice from the Bay of Plenty Regional Council and staff at the Ministry for the Environment.

The HBA demand and capacity modelling adheres to the requirements set out for HBAs in the NPS-UD as well as the latest HBA Guidance. Except where identified and discussed within this report, the same broad methodologies used for modelling housing and business demand and capacity in the HBA 2021 have been

[15] As set out in clause 3.20 of the NSP-UD.

used for this HBA 2024, although these have been updated where needed. The updates reflect the new long-term urban environment (discussed below), the current planning and zoning framework (discussed below), the current parcel boundaries, the current count (baseline) of existing urban dwellings, the current survey of vacant business land, current construction costs and sales prices, the latest consents data and more. Council also provided an update of parcels to be excluded from development capacity.

Some inputs to the modelling in 2021 have not changed and have carried over to the HBA 2024 modelling. These include the physical constraint and hazard maps that apply in the Rotorua urban environment. Council's resident population, household and employment projections (prepared by Infometrics) have also been retained, but rebased and extrapolated to the meet the time frame of this HBA (i.e. 2023-2053). The approaches for rebasing projections are discussed in more detail in Parts 2 and 3 of the report. The same preferred household growth future (of the range available in the Infometrics projections) has been retained as the preferred projection. This is the RLC's medium growth future, which closely aligns to the Statistics New Zealand High growth series.

As per the HBA 2021 (and guidance), the assessment of demand, capacity and sufficiency is limited to the same mix of urban residential, business and mixed-use zones (although there have been some name changes and a range of changes to the provisions of those zones that impact on development capacity). This approach excludes any Rural Residential, Rural Lifestyle, Settlement or General Rural Zones which collectively make up the 'rural environment'.

As the first 'update' of the RLC HBA, a key objective of this report was to identify changes that have occurred between 2020 (the base year of the HBA 2021) and 2023 (the base year of the new HBA 2024). This monitoring role was important to Council. As such, sections have been included throughout the report to provide a discussion of key changes since the HBA 2021. This includes an audit of Council's responses to the recommendations of the HBA 2021 report (included in Appendix 12).

Other changes in scope since the HBA 2021 are the addition of a new section on Māori Housing Demand and a more tabular structure to the Executive Summary (in accordance with updated guidance). While the HBA 2021 was published in two documents: a Main Report[16] and a Technical Report[17], this HBA 2024 is single document, supported by 12 appendices. Where relevant, cross references to the HBA 2021 report are included, but the report has still been prepared as a standalone document. The exception to that is the Housing Market Analysis. This was a large component of the HBA 2021, and for brevity, analysis and discussion in that section has not been repeated in the HBA 2024. This is on the basis that much of the data relied on the HBA 2021 Housing Market Analysis remains the most current data available at the time of preparing this report. That said, a short Housing Market Analysis section is included in this report where up to date data was available. The next HBA update is expected to be able to return to a full Housing Market Analysis.

[16] See HBA 2021 Main Report here.

[17] See HBA 2021 Technical Report here.

1.3 Changes in Rotorua's Planning Documents Compared to HBA 2021

Since the HBA 2021 was published, there have been some key changes to RLC's planning documents and policy that affect the housing and business development capacity of the Rotorua urban environment.

1.3.1 Plan Change 9 (Housing for Everyone)

PC9 introduced changes to the District Plan that gave effect to Policy 5 of the NPS-UD[18] and incorporated the recently enacted Medium Density Residential Standards ("MDRS") into relevant residential zones (being Residential 1[19] and 2[20] of the then Operative District Plan). The RMA also provided limited scope for other changes to the District Plan to be included in PC9 that would be supportive of, or consequential to Policy 5 and the MDRS. As a tier 2 authority with an acute housing need, PC9 proceeded as an Intensification Planning Instrument under the RMA.

The MDRS had immediate legal effect from the date of notification of PC9 (20 August 2022), except where qualifying matters applied. Qualifying matters introduced in PC9 were exclusion of MDRS in the Residential 3[21] Zone and locations of historic heritage and flooding risk. Other than the MDRS and qualifying matters, the scope of PC9 (decisions version) included (but was not limited to):

- more enabling height rules in the Residential 2, City Centre and Commercial zones;
- design focussed policies and matters of discretion for residential developments not permitted by MDRS;
- Strengthening design considerations for commercial and city centre development, and requirement for a consent for new buildings and larger external alterations;
- Provision for residential units above ground floor in more commercial zones;
- More enabling density standards for papakāinga and removal of a requirement for this form of development to occur adjacent to marae;
- Addressing issues identified with the management of flooding under the District Plan, including clarifying rules and changes to impervious area percentages;
- Amendments to private access requirements to enable more housing;
- More enabling minimum site size standards for residential subdivision;
- Strengthening consideration of geothermal issues in the context of intensification of development in the Rotorua Geothermal System.

[18] NPS-UD Policy 5: enable heights and density of urban form commensurate with the greater of: the level of accessibility by existing or planned active or public transport to a range of commercial activities and community services; or relative demand for housing and business use in that location.

[19] This was the Low Density Living zone, subsequently renamed Medium Density Residential Zone in PC9.

[20] This was the Medium Density Living zone, subsequently renamed High Density Residential Zone in PC9.

[21] This was the Ōhinemutu, Whakarewarewa, Ngāpuna (Cultural Village) Zone, unchanged by PC9.

- Reducing the amount that developers need to pay for reserve contributions in the context of the other contributions that are now payable under the Development Contributions Policy (discussed below)
- Changes to the rules for retirement villages.
- Changes that gave effect to the National Planning Standards (including zone names).

Some of these changes addressed key issues that had already been identified in the District Plan for review. PC9 became operative on the 2nd of March 2024. As it was notified prior to the base year of the HBA 2024 (i.e. June 2023), it was technically able to be taken into account in the medium and long term of the capacity assessment under NPS-UD requirements.[22] The effect of MDRS was able to be taken into account in the short, medium and long term housing capacity assessment. At Council's request, the development opportunity of PC9 was also applied in the short term as it was operative by the start of the assessment. As discussed throughout Part 2 and 4 of this report, PC9 has had a significant positive impact on housing development capacity in Rotorua's urban environment.

1.3.2 Rotorua Future Development Strategy 2024

Under Subpart 4 of the NPS-UD, RLC was required to prepare a Future Development Strategy ("FDS") to promote long term strategic growth planning, provide at least sufficient housing and business capacity to meet expected long term demand, and assist with the integration of planning decisions and infrastructure planning and funding. Requirements of the FDS were to take into account the HBA 2021 findings and recommendations, consider different spatial scenarios to achieve long term growth, articulate iwi aspirations for urban development, spatially identify physical constraints to growth and locations in which development capacity will be provided over the long term.

RLC developed the FDS in parallel with PC9 and collaboratively with Bay of Plenty Regional Council. It was formally adopted by RLC in November 2023 and published in March 2024, superseding the Council's 2018 Spatial Plan. A link to the FDS 2024 can be found here. As the draft FDS was notified just prior to the base year for this HBA 2024, it was technically able to be taken into account in the long term of the capacity assessment under NPS-UD requirements.[23] For clarity, while the FDS included a staging plan - with growth areas identified as being suitable for rezoning in the short to medium or long term - the HBA 2024 includes all identified growth areas as long term capacity only. Future updates of the HBA would be able to include some FDS growth areas in the short or medium term depending on whether plan changes for rezoning have become operative or were notified at that time of that HBA.

Like PC9, the FDS 2024 has had a significant positive impact on long term housing and business development capacity in Rotorua's urban environment. This impact is discussed throughout the HBA report.

1.3.3 Development Contributions Policy

RLC introduced a new development contributions policy that came into effect from the 1st of December 2022. A summary of the 2022-2031 development contributions policy can be found here, noting it has also

[22] NPS-UD Clause 3.4(1)(b).

[23] NPS-UD Clause 3.4(1)(c).

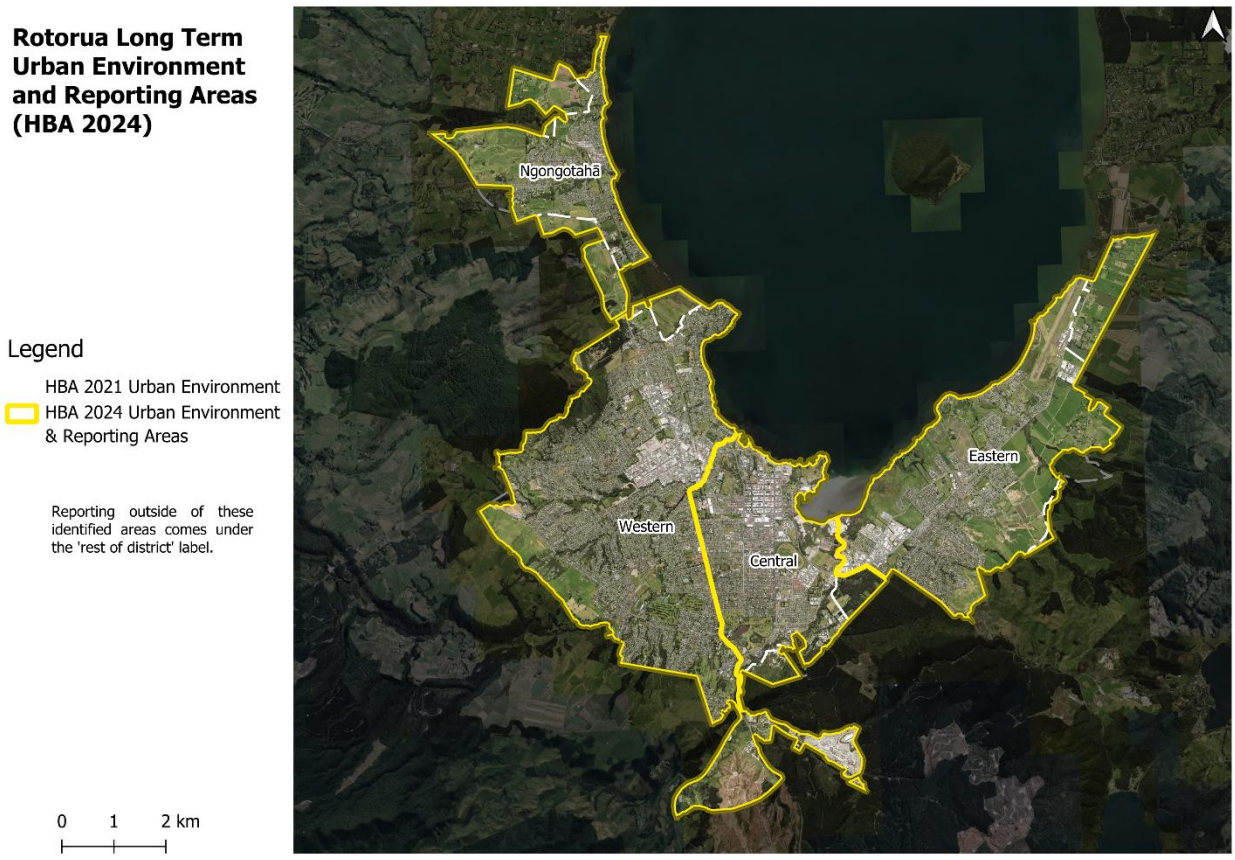
undergone its first review in July 2024. The introduction of the development contributions policy was a response to the pressure that growth (new subdivision and development) was placing on Council assets and services, and the need for significant investment in new or upgraded assets and services to meet the demands of that growth. The purpose of the policy is to ensure that a fair, equitable, and proportionate share of the cost of that infrastructure is funded by development.

As development contributions impact the cost of development for landowners, these additional costs have been factored into the commercial feasibility modelling for housing capacity, as set out in Section 6 of this report.

1.4 Urban Environment

An HBA is an assessment of the demand for housing and business land in urban environments, and the development capacity that is sufficient to meet that demand in the short, medium, and long term. The urban environment of Rotorua has been defined in collaboration with Council and is illustrated in Figure 1.1. The urban environment is defined with long term growth in mind, hence the urban environment area has expanded since the HBA 2021 to include the greenfield growth areas identified in the FDS 2024 discussed above.

Figure 1.1 – Urban Environment 2021 and 2024, Including Reporting Area Boundaries



1.5 Stakeholder Engagement

Under clause 3.21 of the NPS-UD, preparation of an HBA must seek and include information and comment from the development sector, providers of development and additional infrastructure and anyone else who has information that may materially affect the calculation of development capacity.

The timing of this HBA 2024 closely follows the extensive public consultation, submissions and hearings processes for both PC9 and the FDS. It also follows the 2024 public hearings on the MHUD consent applications for contracted emergency housing in Rotorua. Residents, iwi and hapū groups, developers, community housing providers, Kainga Ora, MHUD, and development and additional infrastructure providers in Rotorua all participated in those public processes. They were also supported by a range of technical reports. The following is an extract[24] of an audit of recent engagement and consultation carried out by RLC, commissioned from Roam Consulting.

Rotorua Housing Engagement and Consultation Audit, November 2024, Roam Consulting

The Rotorua Housing Engagement and Consultation Audit reviews the breadth, depth, and effectiveness of recent community engagement initiatives related to housing within the Rotorua Lakes District. This audit examines the community engagement activities conducted to inform the Council's housing strategies, specifically focusing on the Future Development Strategy and Plan Change 9. The Council's overarching aim in undertaking this audit was to ensure that the community's diverse perspectives were adequately represented, and gaps in engagement were identified to enhance future consultations.

Over the past few years, the Council has engaged with a variety of groups including iwi and hapū, developers, community support groups, government agencies, educational institutions, and business organisations. Each group contributed distinct insights on housing needs, preferences, and challenges, reflecting a spectrum of issues from housing affordability to cultural land use considerations. Engagement methods varied widely to maximise reach and effectiveness. These included public consultations, workshops, online platforms, focus groups, and targeted stakeholder meetings. Through these initiatives, the Council sought to address the critical need for housing in Rotorua.

timeline of engagement reveals extensive efforts to address housing challenges, particularly in recent years as Rotorua's housing demand intensified. Stakeholder feedback highlighted issues such as the high costs and delays associated with development, limited affordable housing options, inadequate rental protections, and infrastructure challenges. Iwi and hapū voiced the importance of cultural considerations, especially around papakāinga housing and ancestral land management. Developers emphasised regulatory barriers and infrastructure delays, while community support groups identified the struggles faced by low-income families, renters, and marginalised communities in accessing stable, affordable housing.

[24] Taken from the Executive Summary.

That stakeholder engagement shaped the drafting and final decisions on PC9, the FDS and the contracted emergency housing consents, which in turn inform this HBA.[25] RLC documents are available that summarise the extensive engagement specifically on PC9 and the FDS.[26]

In addition to recent Council-led stakeholder engagement, this HBA has also taken into account a number of recent reports commissioned by RLC. Some of these reports also engaged extensively with relevant development stakeholders, with that feedback documented in those reports. These include, but are not limited to:

- CBRE – Rotorua Central Business District 2023 Vacancy Survey (and other reports)
- Colliers – Inner-city Retail Study and Improvement Plan, January 2024.
- Colliers – Rotorua Retail Strategy, March 2024.
- Place Collective – Inner City Residential Analysis, Strategy and Action Plan, July 2024.
- Place Collective – South Fenton Precinct, Development Feasibility Report, December 2024.
- MRCagney, Martin Jenkins, Colliers ("MRCagney et al") – Rotorua Industrial Sector – Economic and Land Assessment, November 2024.
- DCA Architects – Rotorua Inner City Review of Revitalisation Initiatives 2006-2020, March 2021.
- Rotorua NZ/Rotorua Business Chamber – Rotorua Business Pulse, April 2023.

RLC consider that the feedback provided throughout those recent public processes and targeted research was sufficiently current and comprehensive to satisfy clause 3.21 of the NPS-UD. RLC, Bay of Plenty Regional Council, M.E and Savvy agreed that further stakeholder engagement at the time of preparing the HBA 2024 would risk engagement fatigue and would be unlikely to present any new information not already captured through those processes and available for consideration in the preparation of this HBA.

1.6 Report Structure

This report is structed in 4 parts. This structure is consistent with the HBA 2021. Part 1 provides the update of the Housing Market Analysis carried out for the HBA 2021 (where applicable). It includes the latest data on residential dwelling consents and new data on the social housing register for Rotorua. Housing demand has been updated and is set out in Section 3. A new section for this HBA is an assessment of Māori housing demand. That is included in Section 4. Part 2 contains the latest assessment of housing development capacity and sufficiency as well as a discussion on the impacts of planning decisions and infrastructure. Part 3 of the report focusses on supply patterns on business zoned land. This is followed by sections on demand, capacity, suitability and sufficiency of urban business zoned land. Part 4 of this HBA contains overall conclusions and recommendations. A number of appendices complement sections in the main body of the report. A glossary of commonly used terms is included at the end of the document.

[25] M.E was directly involved in PC9 (including the hearings) and M.E and Savvy were involved in the drafting of the FDS. There were meetings with the technical advisory group where changes to commercial feasibility modelling assumptions were discussed and tested. Savvy was directly involved in the MHUD consent hearing. As such the authors of this report had firsthand knowledge of the feedback provided (and data shared) through submissions, the technical working group and other engagement/consultation.
[26] See for example Section 6.4 of this PC9 S42A Report and this FDS report.

Part 1 – Housing Market Assessment

ROTORUA
LAKES COUNCIL

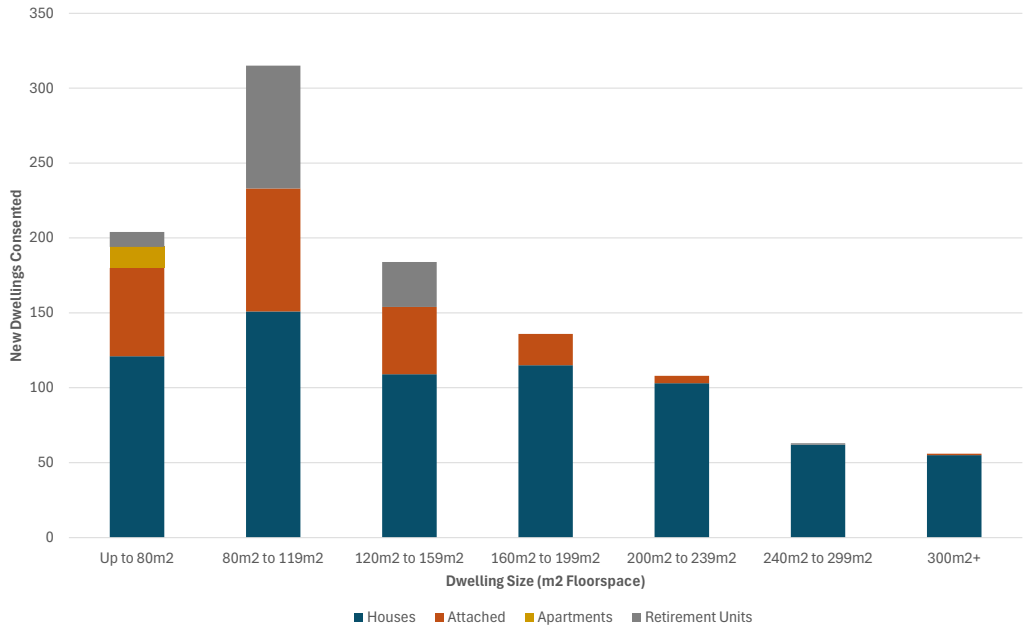
2 Housing Supply – Recent Trends

This section examines recent trends in additions to the Rotorua dwelling estate and updates components of the Housing Market Analysis contained in the HBA 2021.[27] Construction activity provides several important indicators for the housing market. Dwelling consents issued is a key indicator of the scale, value and typologies of those additions, as most consents issued do manifest as new dwellings within the following 12-24 months. New social housing forms an important part of total new dwelling supply in Rotorua, and this is also examined. A key focus of this section is trends that have occurred since the HBA 2021.

2.1 Dwelling Consent Trends

Over the past three years (to June 2023) there were an estimated 1,100 new dwellings consented within Rotorua District. More recently (2000 to 2023) a slightly higher share of new dwellings was consented within the urban environment (around three-quarters, 75%), than during the past decade (72%), with the remainder in smaller settlements and rural areas.

Figure 2.1 – Total New Dwellings Consented in Rotorua District by Typology and Dwelling Size: July 2020 to June 2023



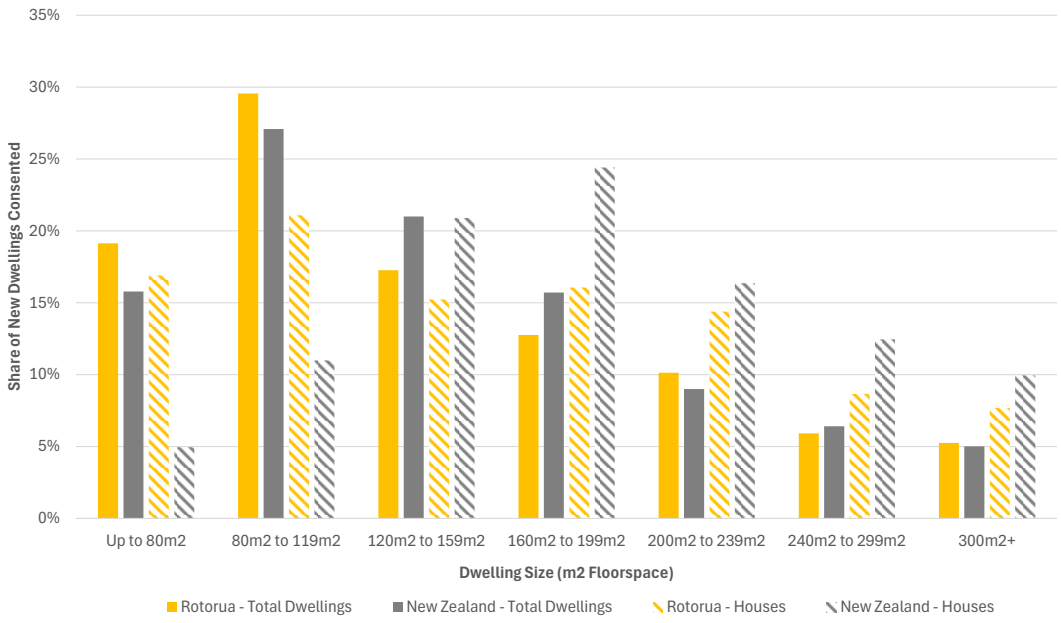
Source: Statistics New Zealand, Building Consent Data, 2023 (Customised data for M.E Ltd).

[27] Much of the Housing Market Analysis (Part 1) of the HBA 2021 was dependent on Census data (with other aspects relying on customised CoreLogic data). In the absence of new Census 2023 data at the time of preparing this report, it has been decided to provide a comprehensive update of the Housing Market Analysis in the next HBA update.

The size and type of recent new dwellings consented in Rotorua District is shown in Figure 2.1. Around two-thirds of the dwellings were standalone houses, with over half of the houses below 160m2 in floorspace. Standalone houses made up a larger share of new dwellings in Rotorua than nationally, where they accounted for less than half (48%) of new dwellings. Attached dwellings (excluding apartments) accounted for the next largest share at one-fifth of the consented dwellings in the district. These were generally smaller sized dwellings than standalone houses, with around two-thirds below 120m2 in floorspace.

The distribution of Rotorua's new dwelling consents by dwelling size are compared to that of New Zealand in Figure 2.2 for total dwellings and standalone houses. Despite houses accounting for a higher share of consents, Rotorua generally has a smaller dwelling size distribution than the national average. This is mainly due to the differences in the size distribution of houses, where Rotorua's new houses are more concentrated into the smaller dwelling sizes. Around 38% of Rotorua's new houses had a floorspace of less than 120m2, compared to 16% nationally. This is likely to be due to a combination of factors including the construction of minor dwellings within already urbanised areas (with smaller dwellings concentrated into these areas generally), a greater focus on smaller dwellings within the social housing part of the market, and differences in the dwelling demand and value profile between Rotorua and other main urban centres.

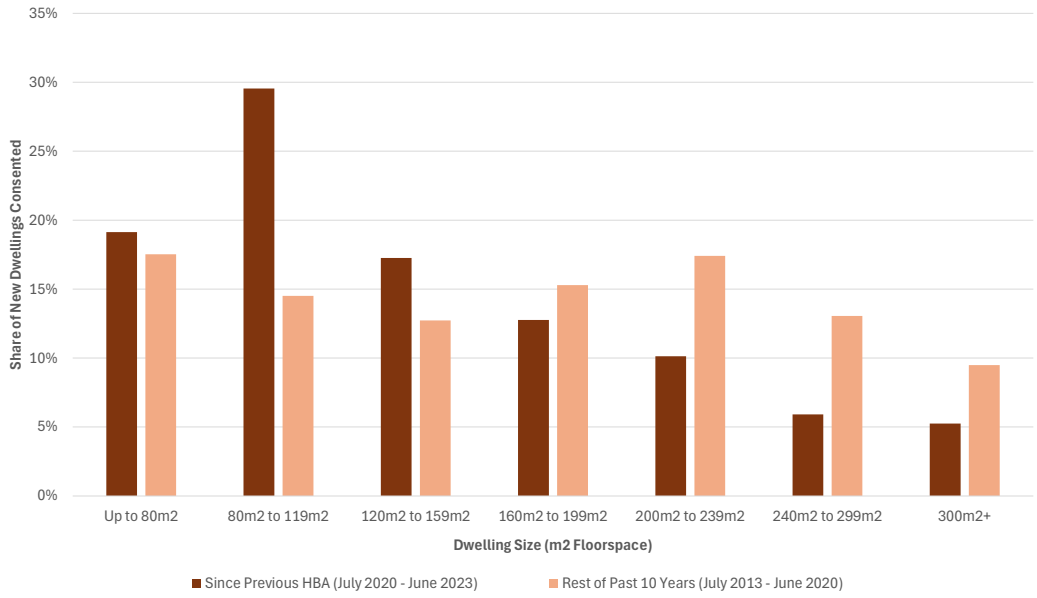
Figure 2.2 – Distribution of Total New Dwellings by Size in Rotorua District and New Zealand: July 2020 to June 2023



Source: Statistics New Zealand, Building Consent Data, 2023 (Customised data for M.E Ltd).

Rotorua's recent new dwellings have become increasingly focused on smaller dwelling sizes in comparison to past patterns of development. The graph below (Figure 2.3) shows the distribution of new dwelling consents by size since the previous HBA (July 2020 to June 2023) and for the rest of the past 10 years (July 2013 to June 2020). This has occurred through a combination of decreases in the sizes of houses consented together with increases in the dwelling mix to include a greater proportion of attached dwellings (which are typically smaller in size). Decreases in the size of new houses has also occurred nationally, but to a greater extent in Rotorua.

Figure 2.3 – Size Distribution of New Dwellings Consented in Rotorua District



Source: Statistics New Zealand, Building Consent Data, 2023 (Customised data for M.E Ltd).

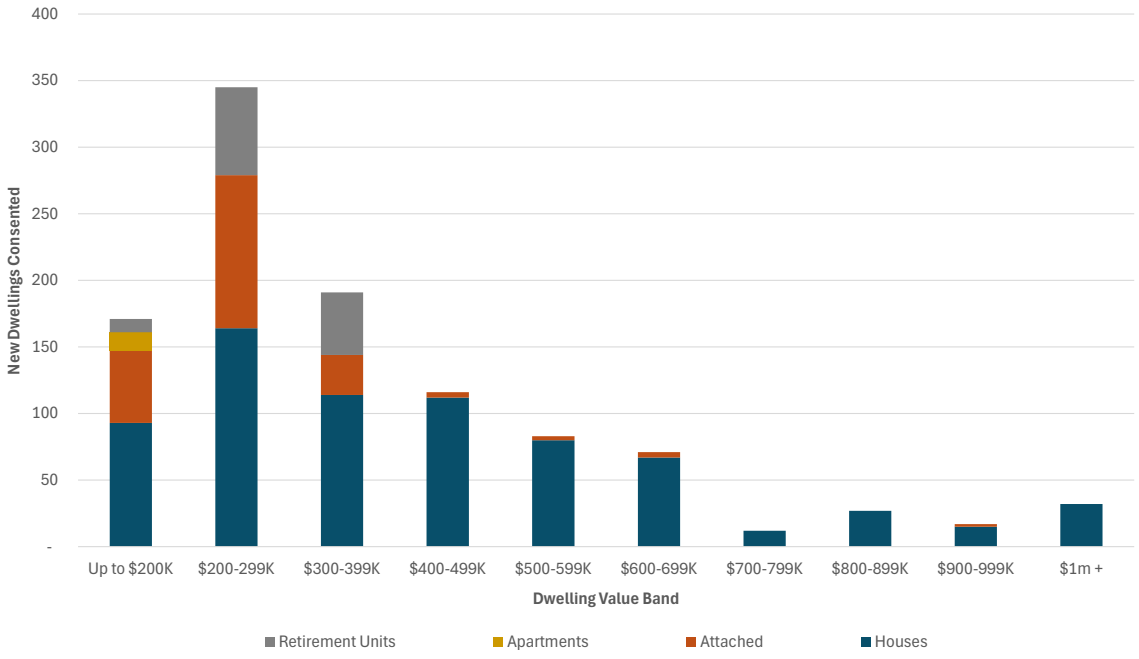
The changes in patterns of new dwelling development are increasingly observed across Rotorua's urban environment. While new dwellings are still dominated by detached dwellings, there are increasing examples of medium density multi-unit attached dwelling developments, with a number of these occurring through redevelopment of parcels containing older dwelling stock. Examples of these types of recent developments are shown below in Figure 2.4.

Figure 2.4 – Examples of Recent Attached Housing Developments

Changes in Rotorua's dwelling size distribution and typology mix have contributed to changes in the value distribution of new dwelling consents. Figure 2.5 shows the number of new dwellings consented by dwelling type and value of works band[28] in Rotorua District since the previous HBA (July 2020 to June 2023); Figure 2.6 shows the value distribution of these consents compared to that of consents over the rest of the previous 10 years (July 2013 to June 2020).

Although construction costs have increased, the consent value distribution of recent new dwellings since the previous HBA is lower than that of the rest of the previous 10 years. Increasing shares of attached dwellings (which have a lower value distribution due to their smaller size) together with decreases in the size of standalone houses have contributed to these changes.

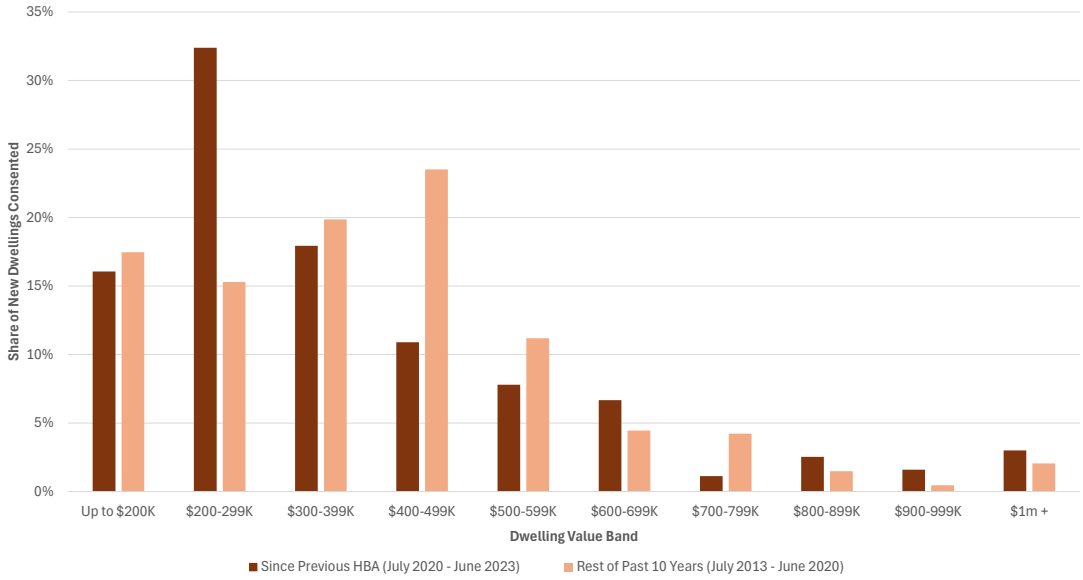
Figure 2.5 – New Dwellings Consented by Value of Works Band: Rotorua District July 2020 to June 2023



Source: Statistics New Zealand, Building Consent Data, 2023 (Customised data for M.E Ltd).

[28] This is the estimated value band of the dwelling construction cost as reported in the building consent. It does not include the value of land or other development costs not contained within the building consent. Consent values have been inflated to June 2023 dollar values.

Figure 2.6 – Consent Value of Works Band Distribution of New Dwellings Consented in Rotorua District



Source: Statistics New Zealand, Building Consent Data, 2023 (Customised data for M.E Ltd).

2.2 Existing and Planned Social Housing Supply

There are other parts of the market beyond the profit-driven commercial developer sector that make important contributions to Rotorua's dwelling supply. These include social and community housing providers and other developers (e.g. Iwi) that are driven by other objectives than only sufficient profit, or have different development models (e.g. dwellings constructed for rental returns rather than profit gained from sales revenue). These parts of the market also respond to the same development opportunity provided by planning, although may have differences in patterns of development[29] to that delivered by the commercial developer part of the market.

Social housing forms an important part of Rotorua's dwelling supply. Kāinga Ora is the main supplier of public housing in New Zealand and in Rotorua District. Other social housing providers active in the district include Emerge Aotearoa, Wera Charitable Trust, Link People, Habitat for Humanity, Home in Place and the Salvation Army. In September 2024 Kāinga Ora had a total managed stock of 831 dwellings[30], amounting to around 3% of Rotorua's dwelling stock, with further dwellings supplied by other social housing providers. The Ministry of Housing and Urban Development[31], identified 1,087 active social housing places in Rotorua as of August 2024.

The number of social housing dwellings managed by Kāinga Ora has increased in Rotorua over the past few years, following little change in the number over previous years. Since the 2021 HBA, Kāinga Ora has been an active participant in PC9 and the preparation of the FDS with the aim of ensuring that a well-functioning

[29] For instance, sites may be developed in a way that seeks to maximise dwelling yield. This may produce more intensive dwellings that would be unlikely to generate sufficient profit to be commercially feasible development options for a profit-driven private developer.

[30] Kāinga Ora, 2024, *Housing Statistics – Managed Stock September 2024 report,* 8 November 2024.

[31] Statement of evidence by Will Barris, 22 October 2024, paragraph 5.3.

urban environment is achieved, as required by the NPS-UD. They have also been investing heavily on Rotorua's public housing stock.

Table 2.1 summarises the change in Kāinga Ora managed dwellings in comparison to Rotorua's total dwelling stock across the 2021 and 2024 HBAs. During this period (June 2020 to June 2023), there was a net increase of 117 Kāinga Ora dwellings, which accounted for up to 13%[32] of the total growth in urban dwellings[33] during this period. Tables 2.2 and 2.3 provide a summary of Kāinga Ora's position and focus in Rotorua at the time of the HBA 2021 and an update of that position in 2024 (as supplied by Kāinga Ora).[34]

The Kāinga Ora managed dwelling stock has increased by a further 61 dwellings from June 2023 to September 2024, bringing the total number to 831 dwellings. Evidence recently presented in Rotorua by the Ministry of Housing and Urban Development indicated there are a further 300 to 310 dwellings within the Kāinga Ora pipeline by December 2025[35].

Table 2.1 – Summary of Change in Rotorua Kāinga Ora Managed Dwellings and Total Dwellings: 2021 HBA to 2024 HBA

Year	Urban Dwellings	Total Dwellings	Kainga Ora Managed Dwellings	Estimated Kainga Ora share of urban dwellings
June 2020 dwellings (2021 HBA)	24,704	29,950	653	2.6%
June 2023 dwellings (2024 HBA)	25,592	30,959	770	3.0%
Net Change (June 2020 to June 2023)	888	1,009	117	13.2%

Source: M.E Ltd - 2021 and 2024 Rotorua HBAs; Kainga Ora, Housing Statistics - Managed Stock.

At the 2023 Census, the role of Kāinga Ora within Rotorua's total dwelling stock is relatively consistent with the national average, managing around 3% of the total dwellings[36]. However, more recently, it has accounted for a higher proportion of the recent dwelling supply in Rotorua than nationally. The net change in Kāinga Ora managed dwelling stock over the past 5 years (October 2019 to September 2024) compares to 10% of Rotorua's dwelling consents issued over the same period, in comparison to 4% nationally[37].

[32] It is noted that part of this increase may have occurred through the Kāinga Ora purchase/lease of existing dwellings.

[33] It has been assumed that the growth in Kāinga Ora dwellings has occurred within the urban environment rather than the rest of the district.

[34] We note that there is some variation in data supplied by Kāinga Ora including in this section. This may be driven by data being prepared for different purposes or at different times.

[35] Statement of evidence by Will Barris, 22 October 2024, paragraph 6.4. The evidence reports 310 dwellings, but it is assumed that this does not include 10 dwellings that were added between the June 2024 and September 2024 Kāinga Ora reports as the September 2024 report was released after the date of evidence.

[36] This is a comparison of the Census 2023 total dwelling count with the Kāinga Ora total managed dwelling stock as at March 2023.

[37] This provides an indication of the relative size of Kāinga Ora in the dwelling supply. However, it is important to note that this is indicative only as new dwelling consents are not net changes in dwellings (as some dwellings would be demolished as part of the development) and not all consented dwellings are constructed. Kāinga Ora statistics represent net changes in dwelling stock, but may also include a component of dwellings added to the managed stock through incorporation of existing dwellings into the Kāinga Ora portfolio together with the construction of new dwellings.

Table 2.2 – Kāinga Ora – Update of Current Portfolio and Pipeline Developments

HBA 2021	HBA 2024
Own/manage 770 lettable public houses	Own/manage 943 lettable public houses
80% of portfolio is standalone houses	70% of portfolio is standalone houses
11 new dwelling units under construction, 6 contracted, 137 in procurement, 30-50 in planning stages.	163 new dwelling units under construction, 42 contracted, 46 in procurement, 120-125 in planning stages.
Key focus for Rotorua going forward:	
Continue to redevelop and increase the supply of public housing using their existing portfolio of properties.	Renewing our portfolio to reduce the age of the stock and enhance its performance.
Look for opportunities to increase supply on land purchased (or leased) from other landowners.	Supporting the wind down of emergency housing motels in Rotorua.
Urgently address demand for transitional public housing.	Divesting assets and land that is not required for Public Housing to enable more housing outcomes in the city.
Increase in short term supply aimed at addressing waiting list (housing register), with medium and long term investment expected to help with projected demand growth.	

Table 2.3 – Summary of Kāinga Ora Focus Going Forward

HBA 2021 Focus	HBA 2024 Focus
• Continue to redevelop and increase the supply of public housing using their existing portfolio of properties.	• Renewing the portfolio to reduce the age of the stock and enhance its performance. • Supporting the wind down of emergency housing motels in Rotorua.

• Look for opportunities to increase supply on land purchased (or leased) from other landowners. • Urgently address demand for transitional public housing. • Increase in short term supply aimed at addressing waiting list (housing register), with medium and long term investment expected to help with projected demand growth.	• Divesting assets and land that is not required for Public Housing to enable more housing outcomes in the city.

There is also significant direct government investment in different parts of the market, beyond the provision of social housing, to support dwelling supply in Rotorua. The scale of this investment was examined recently during the contracted emergency housing resource consent applications hearing during late 2024. Evidence presented by the Ministry of Housing and Urban Development[38] showed that nearly 60% of the dwellings within Rotorua's consenting process had a level of direct government investment in their construction. The proportion of dwellings with government investment has increased over the past two years.

2.2.1 Social Housing Register

The social housing register includes those who are eligible for social housing and need to be matched to a suitable property. Figure 2.7 shows that the number of people on the housing register in Rotorua District increased persistently between late 2018 through to a peak in June 2022 (1,044 people registered), after which there was a period of rapid decline to the end of 2022, followed by relative stability through to February 2024, and a further minor decrease to June 2024.

Between June 2020 (the baseline for the HBA 2021) and June 2023 (the baseline for the HBA 2024 update), the net increase in the count of people on the register in Rotorua was 359 (an increase of 66%). That is, an increase from 540 registered in June 2020 to 899 registered in June 2023. The latest data shows that the number of people on the register is now down to 793 (June 2024).

[38] Statement of evidence by Will Barris, 22 October 2024, paragraph 5.14.

Figure 2.7 – Count of People on the Social Housing Register – Rotorua District

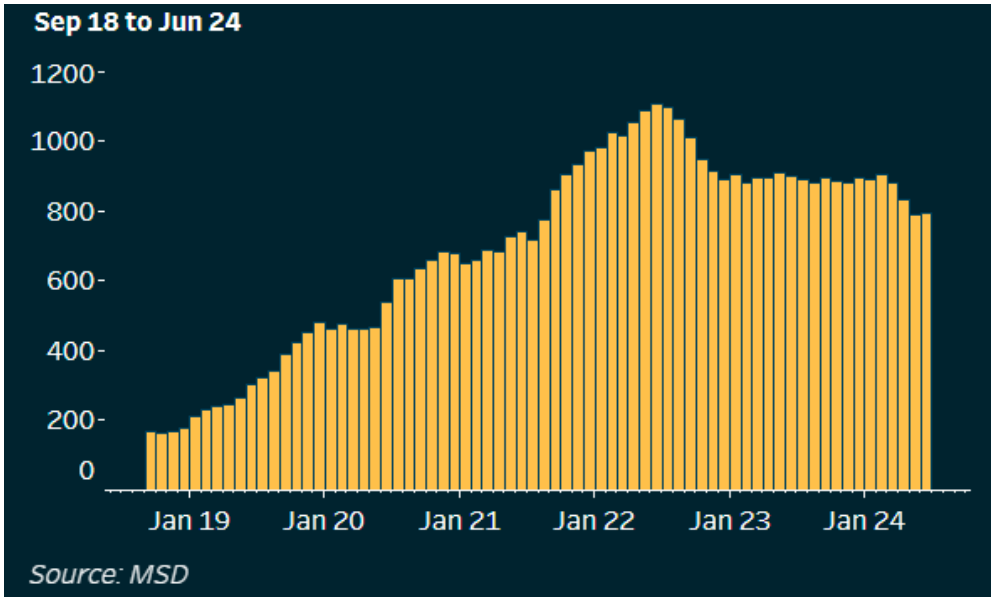


Figure 2.8 shows how Rotorua District compares against other territorial authorities in terms of the net change in the count of people on the housing register in the last 12 months (year ending June 2024). As shown above, between June 2023 and June 2024, the count in Rotorua has decreased by 106 (12%).[39]

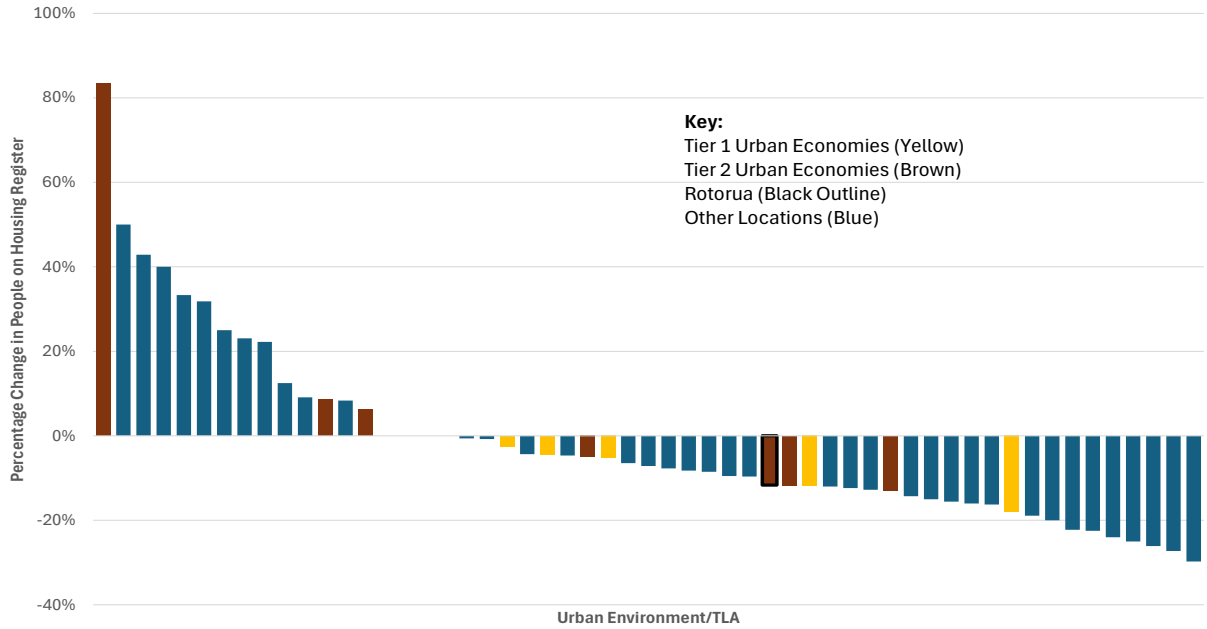
The majority of territorial authorities also achieved a decrease during that period,[40] and Rotorua's decrease sits around the middle of that range.

Relative to the national average, Rotorua District has historically had significantly more people per 10,000 residents on the housing register (Figure 2.9), highlighting that social housing demand is a significant housing issue for the district, and the highest of all territorial authorities in the country (shown in orange in Figure 2.10 although equal with Gisborne District). Between June 2020 and June 2023, the net increase in the ratio of people on the register/10,000 residents in Rotorua was 45 (an increase of 64%). That is, an increase from a ratio of 70/10,000 residents registered in June 2020 to a ratio of 115/10,000 residents registered in June 2023. The latest data shows that the ratio of people on the register is now down to 101/10,000 residents (June 2024). The national average ratio in June 2024 is 44/10,000 residents.

[39] Part of this fall may be driven by overcrowding where additional family members are accommodated within existing households to reduce costs. The Ministry of Social Development has also removed a number of households from the public housing register that either occur in multiple locations or who have sourced alternative accommodation. While this has decreased the number of households on the register, it may not necessarily reflect improved housing access or affordability.

[40] In 18 territorial authorities, the number of people on the housing register increased in the 12 months ending June 2024.

Figure 2.8 – Housing Register Annual Change by TA, YE June 2024 – Rotorua Focus



Source: Ministry of Social Development, Housing Register.

Figure 2.9 – Number of People on the Social Housing Register per 10k Population

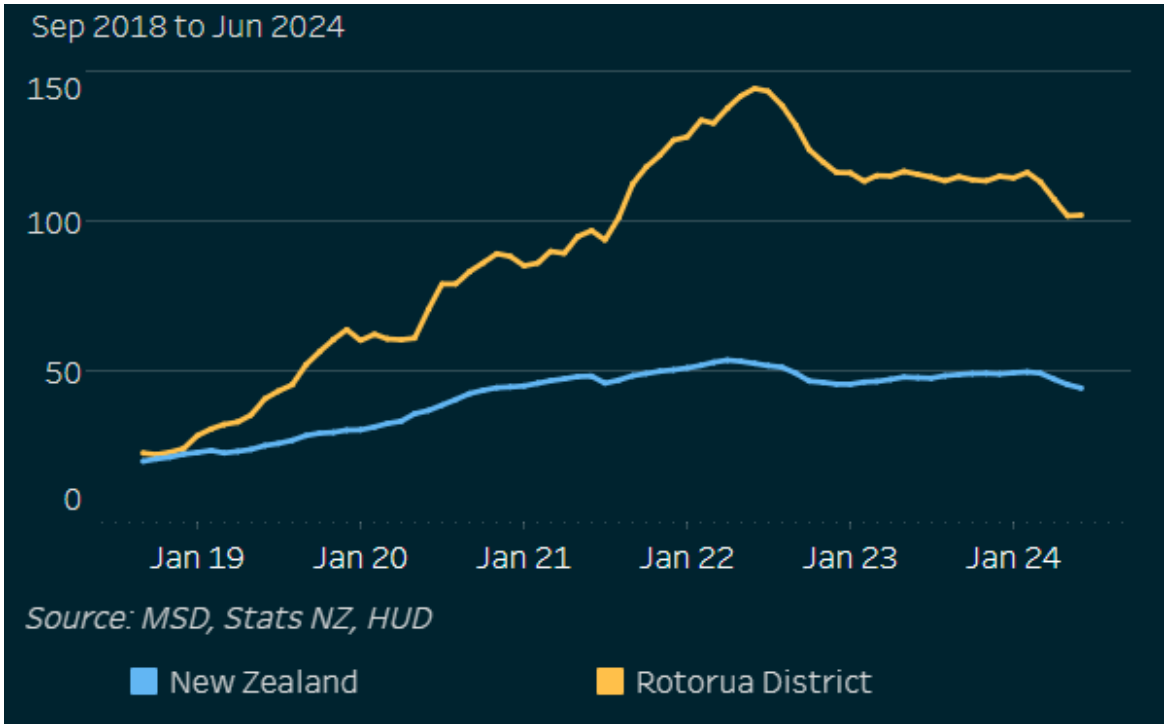
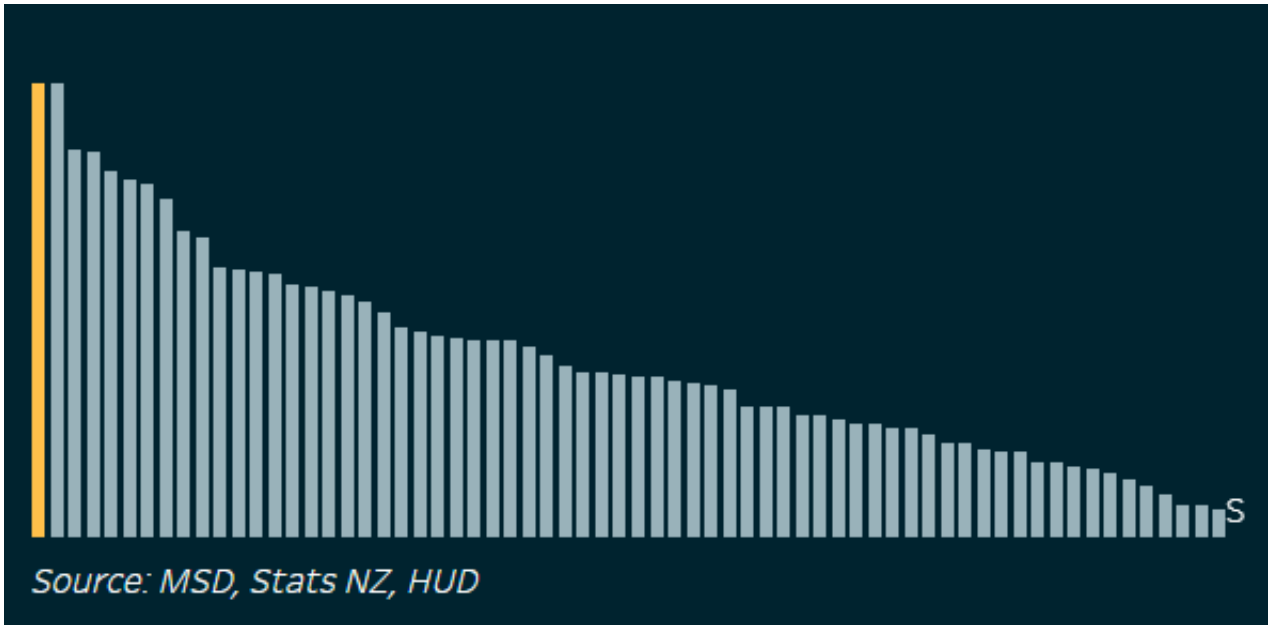


Figure 2.10 – Ratio of People on Housing Register/10,000 by TA, YE June 2024 – Rotorua Focus



3 Housing Demand

The section presents estimates of demand for housing in Rotorua District in the short, medium and long term. It takes account of expected growth in household numbers, and the socio-demography of household growth, to identify total and additional demand for housing within the district, in relation to dwelling types, and locations within the urban environment.

An overview of the approach taken to modelling demand for dwellings within Rotorua's urban environment is provided below. The key stages of assessment are outlined , with further technical detailed contained within the 2021 HBA. This sub-section also focuses on the main updates to the demand assessment that have occurred since the previous HBA. The next sub-section presents the updated district resident household projections, which form the largest component of demand and a comparison to alternative projection series. The remainder of this section presents the updated projected demand for total dwellings by type and location within the urban environment, including the updated housing bottom lines.

3.1 Approach

M.E have undertaken an analysis to estimate the current and future projected demand for dwellings within Rotorua's urban environment. The technical approach meets the core requirements of the NPS-UD to estimate demand for different types of dwellings by location and type.

The updated assessment contained in this report builds off previous modelling developed during the 2021 HBA as well as further technical analysis undertaken to inform Rotorua's FDS and PC9. The approach identifies the core drivers of dwelling demand within the local market context to project demand for urban dwellings in the short, medium and long term.

The key analytical stages of our dwelling demand modelling approach are summarised in this report, with further, more detailed technical information contained within the 2021 Rotorua HBA. The following list identifies the main stages, with the remainder of this sub-section then describing the technical updates to our approach that have occurred since the 2021 HBA.

The key stages of the demand modelling include:

- Establishing the drivers of demand for dwellings. During this stage the main drivers of demand for urban dwellings in Rotorua and their relative contributions to demand are identified. Resident households form the largest component of demand, with significant demand also occurring from visitors and for holiday dwellings (non-resident households). The current structure of demand is estimated through triangulation of total dwellings within the latest Ratings Database with estimated resident households and dwelling occupancy status (Statistics New Zealand ("SNZ"), Census), with consideration of information on visitor household dwellings.
- Projected household demand. As above, resident households form the largest component of current and future demand for urban dwellings. The Council-supplied district-level projections

(produced by Infometrics Ltd for RLC in 2020) have again been adopted in this analysis as the starting point for this component of demand, and have been rebased by M.E as set out below.

- Spatial allocation of dwelling demand by location across Rotorua. M.E have distributed the Council-supplied household projections spatially across broad geographic catchments[41] (by closest SA2 alignment[42]) within the district using M.E's Rotorua Household Demand Model. The first stage of distribution of demand across the four reporting areas and the remainder of the district occurs during this process.
- Estimation of the urban component of demand. This stage of the analysis estimates the urban and non-urban[43] components of current and projected demand. Spatial integration between the zoning extent and Ratings Database[44] identifies the distribution of the current dwelling base across these categories. In line with the 2021 HBA, a conservative approach has been taken in the later sufficiency assessment by, at this stage, increasing the propensity for urban components to grow faster than non-urban components which is consistent with recent dwelling consent trends.
- Projected non-household demand. The other non-resident components of dwelling demand within each spatial area have also been projected. The 2021 HBA spatial structure of this component of growth has been retained f and is discussed further below.

3.1.1 Updates to Dwelling Demand Projections Since 2021 HBA

M.E have undertaken a number of key updates to the projected future dwelling demand since the 2021 HBA as listed below:

- Rebasing of demand projections and updated estimation of existing dwelling stock. It is important to understand the existing level of demand in 2023 in relation to that projected during the previous HBA, particularly within the context of the 2020 projections that contained a relatively high share of growth occurring within the short term. The actual levels of growth were significantly impacted by changes in the local economy as a result of Covid-19. M.E have examined these changes to the current existing dwelling demand base since the 2021 HBA through a combination of datasets, which is set out in Appendix 1. An important part of this involved updating the existing dwelling stock estimation, which was undertaken as a detailed analytical exercise by RLC and supplied to M.E.

[41] It is important to distribute demand at a broad level rather than on a more refined spatial basis. This enables sufficient flexibility within the assessment to reflect patterns that are generally observed in the market where demand arises at a broad scale, with households able to meet that demand through a series of choices and trade-offs within different options within the broader areas. The disaggregation of the urban environment into the four catchment areas provides sufficient structure to understand the important locational balances between demand and capacity within different parts of the urban environment without the assessment assuming full substitutability across the urban area.

[42] Rotorua contains 42 Statistical Area 2s (SA2s) which form the spatial resolution of projections within the Model. These have been allocated to the closest reporting area during this stage of the analysis, with some containing both urban and non-urban population.

[43] Non-urban demand refers to all dwelling demand outside of the urban environment assessed as part of the HBA. It includes demand for rural dwellings, lifestyle dwellings, as well as dwellings within smaller rural settlements (including the Rural Village Zone and Lakeside Settlements Zone) that are outside of the extent of the main urban environment. Non-urban dwelling demand was examined by M.E to inform Rotorua's FDS, which contains technical documentation and analysis on this component of demand.

[44] This includes analysis of dwelling type and land use fields together with the ratings parcel location relative to the Zone.

In summary, M.E have re-established the current existing dwelling base from which future net changes in demand area projected. Although the existing base is lower than previously projected for 2023, we have assumed that the same level of projected net growth in resident households (from 2023 onwards) will apply from the current lower starting position. We have also assumed that the non-resident household component of demand, albeit reduced between 2020 and 2023, will recover to reflect the previously estimated structure by the end of the short term.

- Updated Dwelling Mix Modelling. M.E have re-examined the projected future dwelling mix by typology. This is an important update that reflects substantive changes in the development opportunity enabled through PC9. Dwelling demand projections in the previous HBA reflected likely responses to the existing provision that predominantly consisted of lower density dwellings, with limited opportunity for changes in household preferences and ability to make trade-offs between different dwelling options that are likely to become increasingly available through time.

  As a starting point, we have examined the updated dwelling demand modelling undertaken during the PC9 process within the context of emerging development patterns within Rotorua as well as other urban economies that are likely to provide important indications of future activity. These typology structures have been applied to the updated dwelling demand projections. A key aspect is the further disaggregation of attached dwelling demand into lower (duplex/attached/terraces) and higher (low-rise and higher density apartments) intensities that broadly correspond to the different types of development opportunity across Rotorua's urban environment.

  This stage of the modelling also incorporates the gradual changes in dwelling demand patterns as a result of underlying changes in household demographics and structure. The effect of changes in household size and type were calculated within our Rotorua Household Demand Model applied during the 2021 HBA and are applied in this assessment for consistency.

- Updated estimation of latent demand. M.E have reassessed the level of existing latent demand that was applied during the 2021 HBA. A combination of updated data sources that provide estimates of this component have been examined, as well as the changes observed in different datasets that would change the net level of latent demand applied in the earlier assessment. These include updated evidence presented during the recent Contracted Emergency Housing consent hearings[45] in October 2024, as well as changes to the estimated dwelling stock in comparison to resident household growth and building consents for new dwellings. Based on our assessment, we have retained the same level of latent demand applied in the previous HBA.

- Comparison of applied projected households with updated alternative projection sources. M.E have re-examined the final projected households in relation to the most recent household projections produced by SNZ. This includes a comparison of the current and projected future total number of households as well as the net increases in households in the short, medium and long term contained within each set of projections. This is set out in a following sub-section.

- Long term time period updated to 2054. While the 'long term' in the NPS-UD is a 30 year period, and this was adopted in the HBA 2021, RLC have requested that the long term time period is

[45] Statement of Evidence by William Barris (MHUD) and Shamubeel Eaqub (Economics), October 2024.

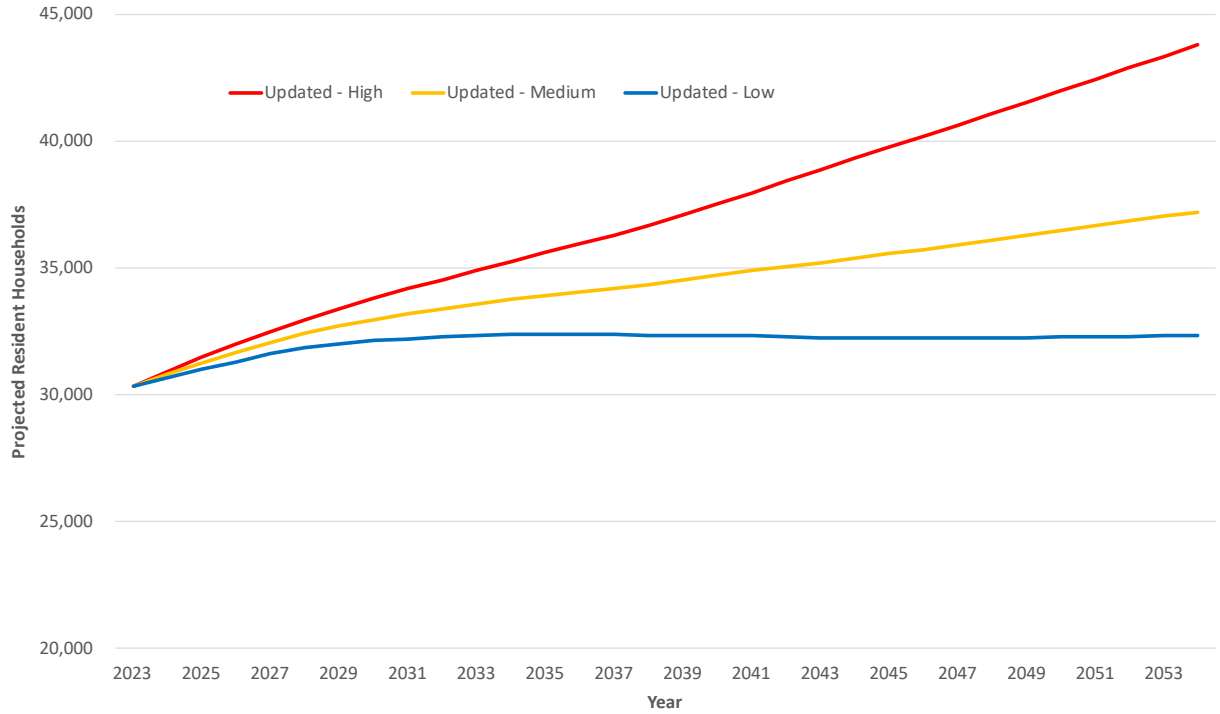
increased by one year to include 2054 for housing demand modelling. This is to assist with Council's infrastructure planning horizons.[46]

3.2 Total District Projections

3.2.1 Resident Household Projections

Resident households form the largest driver of dwelling demand in Rotorua District and are projected to account for around 93% of the growth in dwelling demand over the long term. The district's current and projected future resident households are shown in Figure 3.1 based on RLC's rebased projections. In 2023, there was an estimated existing demand base of 30,400 resident households across Rotorua District as a whole. Under a medium-series projection, resident households are projected to increase by 4% (+1,300 households) in the short term (2023-2026) to 32,000 households, by 11% (+3,200 households) in the medium term (2023-2033) to 33,600 households, and by 23% (+6,900 households) in the long-term (2023-2054) to 37,200 households.

Figure 3.1 – RLC's Rotorua District Resident Household Projections: 2023-2054



Source: Resident household projections were originally produced by Infometrics Ltd (2020) for Rotorua Lakes District Council. These have been re-based by M.E Ltd based on estimated changes in resident households (2020-2023).

The projected level of resident household growth is substantially higher under the RLC high-series projections, with the differences in the level of growth between the projection series increasing through

[46] Housing demand and sufficiency modelling in this report therefore uses a 2023-2054 housing outlook. This also applies to the Housing Bottom Lines discussed in Section 3.4. Business demand and sufficiency modelling in Part 3 of this report relates to the standard 30 year long term (2023-2053). However, however employment projections under pinning Part 3 demand modelling have been supplied to RLC out to 2054.

time. Over the long term (2023-2054), the level of projected net growth (+44%; +13,400 households) under the high-series projection is nearly double that projected under the medium-series, resulting in a total projected number of households (43,800 by 2054) that are 18% higher.

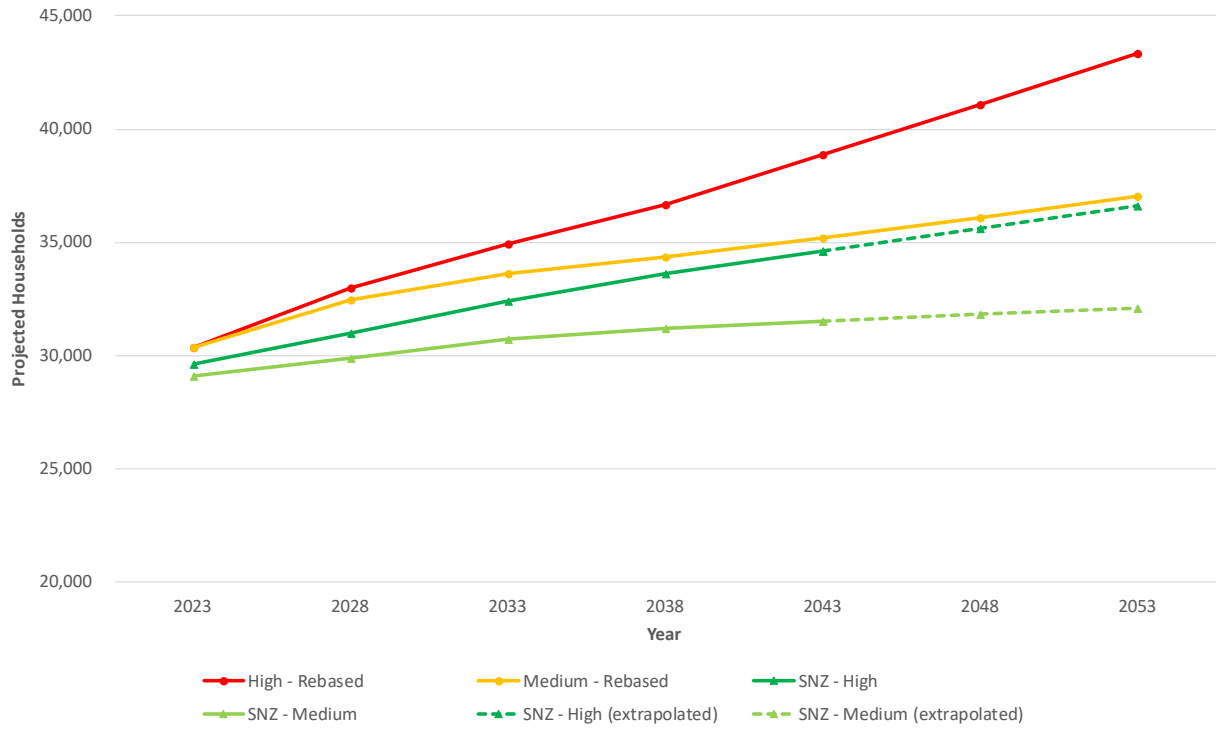
3.2.2 Comparison of HBA Projections to Statistics New Zealand Projections

RLC have adopted the rebased medium-series projections discussed above for application as the base case or preferred growth projection within this HBA. Both the projected total number and level of net growth contained in this projection series is high relative to the households projected for the district within the most recent SNZ projection series.

The total projected resident households for the district under each projection series are shown below in Figure 3.2, with the corresponding net changes in projected household numbers in the short, medium and long term shown in Figure 3.3.

The rebased RLC medium-series projections sit significantly above the SNZ medium-series projections, with an increasing difference in the long term. In the long term, the rebased projections have a resident household base 16% higher than the SNZ medium-series projections, with over twice the level of growth in households across this period. The rebased RLC medium-series projections have a long term net increase of 6,900 households, compared to only 3,100 under the SNZ medium-series projections.

Figure 3.2 - Comparison of Total Projected District Households by Projection Series: Rebased RLC Projections and SNZ Projections

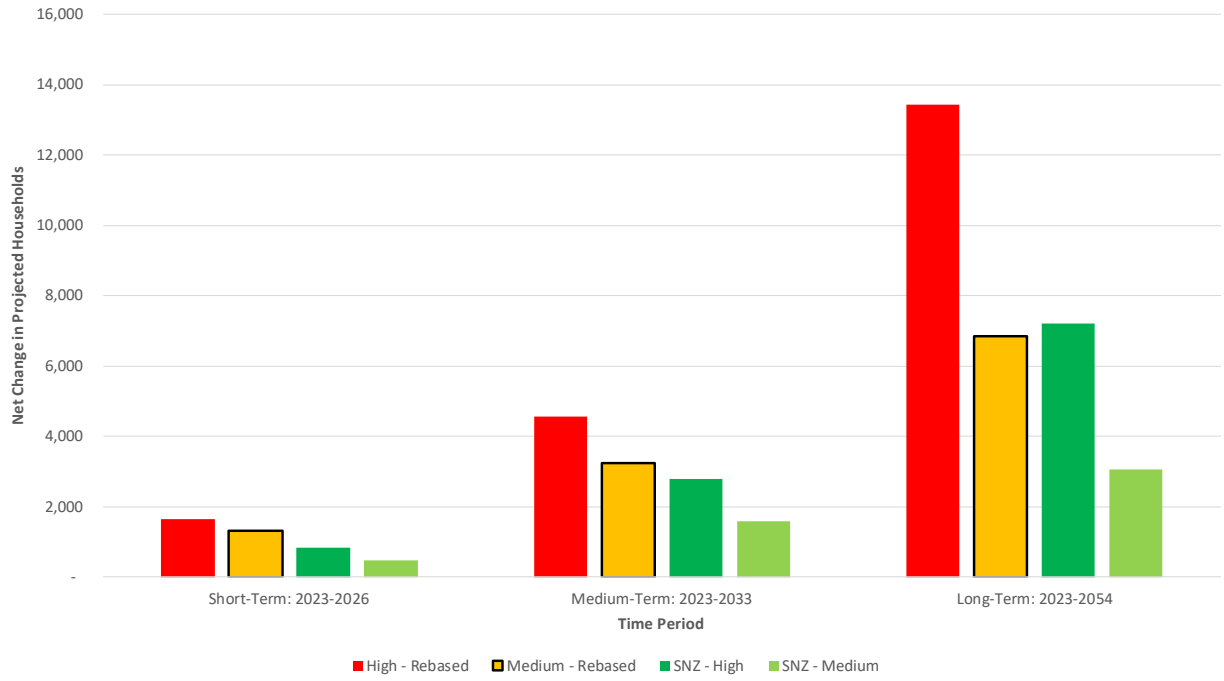


Over the long term, the rebased RLC medium-series projections are similar in net growth and total dwellings to the SNZ high projections. At 2054, they sit slightly above (+1%) the SNZ projections, with a similar level

of projected net increase. The rebased RLC medium-series projections are higher than the SNZ high projections in the short to medium terms, due to the higher level of growth within the short term.

The rebased RLC high-series projections are very large in terms of long term projected total households and net growth in comparison to both the SNZ medium and high-series projections. With a long term projected 43,800 households, they are over a third (+36%) higher than the 32,000 households extrapolated from the SNZ medium-series projections. Their level of long term projected growth (+13,400 households) is over four times that of the SNZ medium-series projections (+3,100 households). These differences in projected growth are important as they would produce significantly different outlooks for Rotorua.

Figure 3.3 - Comparison of Projected Net Change in District Households by Projection Series: Rebased RLC Projections and SNZ Projections



3.3 Total Urban Housing Demand by Location

The above detailed analysis of resident housing demand has been for the district as a whole. In accordance with clause 3.24 of the NPS-UD, the HBA must also estimate demand for additional housing in the urban environment, and in different locations within that urban environment by dwelling type. This is not limited to resident household dwellings. Total urban dwelling demand is required to assess the sufficiency of residential capacity against where households and other dwelling purchasers typically seek to locate within the district and urban environment.

This sub-section estimates the total demand for dwellings within the urban environment from the different components of demand over the short, medium and long term. It includes the urban component of projected resident households (which assumes one household per dwelling) as well as the urban component of non-resident dwelling demand.

3.3.1 Latent Housing Demand

Rotorua continues to have a housing shortage, resulting in a shortfall of dwellings where demand is not currently being met. This shortfall has been incorporated into the assessment as a latent demand for housing within the Rotorua urban environment, which has been applied in full for the short term. This means that urban housing development capacity will need to be sufficient to at least cover projected new demand for dwellings as well as the component of latent demand that has not been supplied in the years leading up to 2023.

The level of latent demand was estimated at 1,500 dwellings within the 2021 HBA.[47] It was based on the range of dwellings (1,500 to 1,750 dwellings) estimated in the MHUD assessment (March 2020) of Rotorua's housing demand and supply, with verification of the likely position within this range through examination and cross-tabulation of key datasets (SNZ occupied dwellings and household types, Ratings Database dwellings and Infometrics Projected dwellings).

A latent demand of 1,500 dwellings is also applied in this 2024 HBA assessment. The net increase in resident households has been lower than the net increase in newly constructed dwellings (as estimated through building consents). This may indicate a slight decrease in latent demand as part of the increased dwelling supply has occurred from the social housing provider component of the market, which would contribute toward meeting latent demand. However, we consider it is appropriate in the short term to take a conservative approach by retaining the previously estimated latent demand of 1,500 dwellings. This assumption will be important to reassess in the next HBA once further planned social housing in the pipeline is delivered and forms part of the available housing stock.

3.3.2 Total Housing Demand – Medium Growth Future (Preferred)

A total of 31,000 dwellings is estimated in Rotorua District in 2023, with 83% or 25,600 of those within the defined urban environment (refer Figure 1.1) and 5,400 (17%) in the rural environment (Table 3.1). This is according to the medium growth future. By 2054 (the long term), total district dwelling demand is projected to reach 39,900 dwellings, with 33,300 in the urban environment. The urban-rural structure remains broadly similar over time, with a slightly greater share in the urban environment by 2054, due to a slightly faster projected growth rate and inclusion of latent demand within urban reporting areas.

Table 3.1 - Total Dwelling Projections by Location 2023-2054 (Medium Growth Future)

Reporting Area	2023			2026			2033			2054		
	Resident Dwellings	Non-Resident Dwellings	Total Dwellings	Resident Dwellings	Non-Resident Dwellings	Total Dwellings	Resident Dwellings	Non-Resident Dwellings	Total Dwellings	Resident Dwellings	Non-Resident Dwellings	Total Dwellings
Central	7,000	100	7,100	7,700	200	8,000	8,300	200	8,500	9,500	300	9,800
Western	11,700	300	12,000	12,800	400	13,300	13,400	500	13,900	14,200	500	14,700
Eastern	4,400	40	4,400	4,800	100	5,000	5,200	100	5,300	5,900	200	6,100
Ngongotahā	2,000	20	2,100	2,300	60	2,300	2,400	70	2,500	2,700	80	2,800
Total Urban Environment	25,100	500	25,600	27,700	800	28,500	29,300	900	30,200	32,300	1,000	33,300
Rural Environment	5,300	100	5,400	5,500	200	5,700	5,800	200	6,000	6,400	200	6,600
District Total	30,400	600	31,000	33,200	1,000	34,200	35,100	1,100	36,200	38,700	1,200	39,900

The net change in dwelling demand (including resident houses and holiday homes) by location within the urban environment is summarised in Table 3.2, and for the district overall in Figure 3.4 over the 2023-2054

[47] Refer HBA 2021, Section 2.7.1.

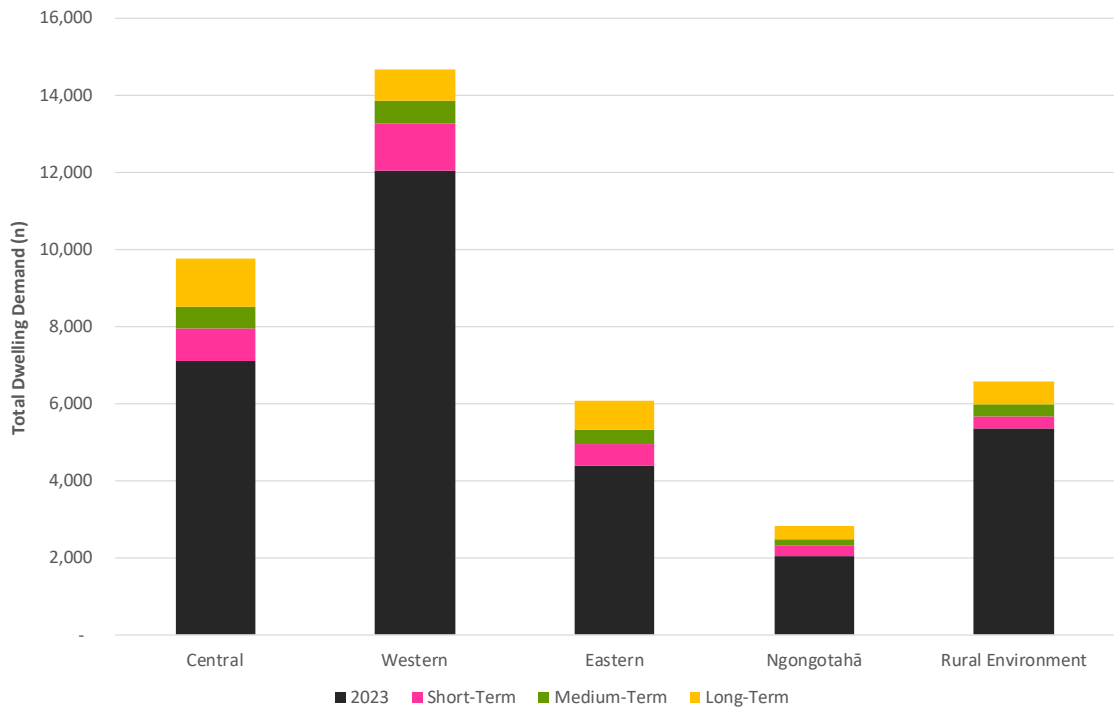
period (medium growth future). Within the urban environment, there is a projected net increase in demand for 2,900 additional urban dwellings in the short term, 4,600 additional dwellings in the medium term, and 7,700 additional dwellings over the long term. This includes latent demand for dwellings, which accounts for over half of the net increase in demand in the short term.

Table 3.2 – Net Change in Dwelling Demand by Urban Environment Location 2023-2054 (Medium Growth Future)

Reporting Area	Net Change in Dwelling Demand			Share of Urban Demand Growth		
	2023-2026	2023-2033	2023-2054	2023-2026	2023-2033	2023-2054
Central	900	1,400	2,700	30%	31%	34%
Western	1,200	1,800	2,600	42%	40%	34%
Eastern	600	900	1,700	19%	20%	22%
Ngongotahā	300	400	800	9%	9%	10%
Total Urban Environment	2,900	4,600	7,700	100%	100%	100%

Figure 3.4 shows that currently, the Western area accounts for an estimated 39% of district dwellings and nearly half 47% of total urban dwellings (2023). This is followed by the Central area with 23% of district housing (28% of urban housing), then the Eastern area (14% of district housing and 17% of urban housing) and lastly Ngongotahā (7% of district housing and 8% of urban housing) (Table 3.1).

Figure 3.4 – Total Dwellings by Urban and Rural Environment 2023-54 (Medium Growth Future)



Over time, the Central, Eastern and Ngongotahā areas are projected to capture an increasing percentage share of district dwelling demand growth, while the Western area and the rural environment, are projected to capture a reducing percentage share across the time periods. However, the Western area still accounts for the largest share of growth in the short to medium term as a result of its existing larger population base.

Over time, the share of demand growth in the Central area is projected to increase, with this area accounting for the largest share of demand growth in the medium to long term.

It is important to note that this assessment estimates the distribution of growth in demand for dwellings, with the eventual pattern of realised growth influenced by the range of housing choices by type and location supplied across different parts of the urban environment. The increased development opportunity within central areas is likely to encourage a greater share of growth to occur within central areas. Concurrently, the share of growth realised in more peripheral parts of the urban environment will also depend upon the level of greenfield development opportunity and take-up in these locations. Greater greenfield opportunity may see an increase in the share of demand met within the Eastern and Ngongotahā reporting areas.

3.3.3 Urban Environment Dwelling Demand by Dwelling Type

The projected change in dwelling demand by dwelling type across the urban environment is summarised in Table 3.3. A higher preference shift scenario is applied in line with that modelled during the urban intensification assessments to inform the FDS and PC9.

It is estimated that Rotorua's existing dwelling demand base is currently heavily focused toward detached dwellings, which account for 84% of the existing demand base. Attached dwellings, ranging from suburban scale attached pairs of dwellings and duplex pairs, up to terraced housing, account for nearly all of the remainder, with an estimated 14% share of current demand. Apartments are estimated to currently only account a minor portion (1%) of the existing demand base and are not yet well established within Rotorua.

In line with other urban economies, greater shares of Rotorua's dwelling demand is expected to occur as attached dwellings, with gradually decreasing shares as detached dwellings. This is likely to occur as households respond to the likely gradual changes in dwelling supply and make trade-offs in housing in relation to price, location, size and type[48]. Detached dwellings are projected to account for a gradually decreasing share of demand through time, making up 76% of total dwelling demand in the long term. Under this scenario, there is a total projected demand for an additional 3,900 detached dwellings in Rotorua's urban environment over the long term.

The share of demand for attached dwellings is projected to increase gradually over the medium to long term. Most of this is likely to occur as medium density attached dwellings, which have a total projected increase in demand for an additional 3,000 dwellings over the long term. Analysis of patterns of recent dwelling construction activity in Rotorua indicate that this dwelling type is currently becoming more established within the local market. Excluding retirement dwellings, attached dwellings accounted for around one-third (32%) of new dwelling consents over the past 5 years, compared to only 13% over the previous five years.

Demand for apartments is projected to increase gradually through time within Rotorua's urban environment. Apartment demand is expected to experience greater demand growth during the long term as the market for this typology becomes more established, with a long term projected growth for an additional 900 apartment dwellings. This market is not yet well established in Rotorua within the

[48] A more detailed technical assessment of the modelled change in demand for dwelling types is available in the technical assessments undertaken in 2022 to inform Plan Change 9.

commercial profit-driven developer sector but may be led by developers in other parts of the market such as social housing.

Table 3.3 – Urban Environment Dwelling Demand by Dwelling Type 2023-2054 (Medium Growth Future)

Dwelling Type	Dwelling Demand				Net Change		
	2023	2026	2033	2054	2023-2026	2023-2033	2023-2054
Detached	21,600	23,800	24,500	25,500	2,200	2,900	3,900
Attached/Duplex	3,700	4,300	5,100	6,700	600	1,400	3,000
Apartments	300	400	600	1,200	100	300	900
Total	**25,600**	**28,500**	**30,200**	**33,300**	**2,900**	**4,600**	**7,700**
	Demand: Share by Dwelling Type				**Net Change: Share by Type**		
Detached	84%	83%	81%	76%	75%	62%	50%
Attached/Duplex	14%	15%	17%	20%	22%	31%	39%
Apartments	1%	1%	2%	4%	4%	7%	12%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Tables 3.4 and 3.5 show the distribution of total dwelling demand and demand growth by dwelling type within each location across Rotorua's urban environment over the short, medium and long term. Attached dwellings account for higher shares of the demand within the Central reporting area than other parts of the urban environment. Attached dwellings are projected to continue to account for higher shares of growth within this area, with a gradual increase in the share as apartment dwellings through time.

Detached dwellings account for a higher share of the demand within the other reporting areas and are likely to continue to account for the bulk of demand in these areas through time. However, a gradually increasing portion of demand in these areas is likely to occur as attached dwellings through time. This is likely to be focussed toward less intensive, medium density attached dwellings, with a smaller focus on apartments. Over the long term, between half and two-thirds (61%) of the growth in demand for attached dwellings is likely to be occurring across these reporting areas. These types of dwellings are likely to form an important part of Rotorua's housing mix across the urban environment, including within suburban areas, as they cover a range of dwellings that offer viable housing options for a sizeable share of the household base.

Growth in apartment demand is projected to be focussed into the Central reporting area, particularly in the short and medium term. In the long term, the market may be able to sustain apartments in limited areas of higher amenity within other reporting areas.

Table 3.4 – Total Dwellings by Location and Type 2023-2054 (Medium Growth Future)

Reporting Area	Dwelling Typology			
	Detached	Attached/Duplex	Apartments	**Total**
	2023			
Central	4,500	2,400	200	**7,100**
Western	11,000	1,000	100	**12,000**
Eastern	4,200	200	-	**4,400**
Ngongotahā	1,900	200	-	**2,100**
Total Urban Environment	**21,600**	**3,700**	**300**	**25,600**
	2026			
Central	5,000	2,700	200	**8,000**
Western	12,000	1,200	100	**13,300**
Eastern	4,700	300	-	**5,000**
Ngongotahā	2,100	200	-	**2,300**
Total Urban Environment	**23,800**	**4,300**	**400**	**28,500**
	2033			
Central	5,200	3,000	400	**8,500**
Western	12,200	1,500	200	**13,900**
Eastern	4,900	400	-	**5,300**
Ngongotahā	2,200	300	-	**2,500**
Total Urban Environment	**24,500**	**5,100**	**600**	**30,200**
	2054			
Central	5,600	3,500	600	**9,800**
Western	12,400	2,000	300	**14,700**
Eastern	5,200	700	100	**6,100**
Ngongotahā	2,300	400	100	**2,800**
Total Urban Environment	**25,500**	**6,700**	**1,200**	**33,300**

Table 3.5 – Growth in Total Dwellings by Location and Type 2023-2053 (Medium Growth Future)

Reporting Area	Dwelling Typology				Share of Typology Demand Growth			
	Detached	Attached/Duplex	Apartments	**Total**	Detached	Attached/Duplex	Apartments	**Total**
	Short-Term				Short-Term			
Central	500	300	60	**900**	22%	50%	55%	**30%**
Western	1,000	200	40	**1,200**	46%	32%	30%	**42%**
Eastern	500	80	-	**600**	22%	12%	9%	**19%**
Ngongotahā	200	40	-	**300**	10%	7%	6%	**9%**
Total Urban Environment	**2,200**	**600**	**100**	**2,900**	**100%**	**100%**	**100%**	**100%**
	Medium-Term				Medium-Term			
Central	700	600	200	**1,400**	24%	41%	53%	**31%**
Western	1,200	500	100	**1,800**	42%	36%	31%	**40%**
Eastern	700	200	40	**900**	24%	15%	10%	**20%**
Ngongotahā	300	100	20	**400**	10%	8%	6%	**9%**
Total Urban Environment	**2,900**	**1,400**	**300**	**4,600**	**100%**	**100%**	**100%**	**100%**
	Long-Term				Long-Term			
Central	1,000	1,200	400	**2,700**	27%	39%	50%	**34%**
Western	1,300	1,000	300	**2,600**	35%	34%	31%	**34%**
Eastern	1,000	500	100	**1,700**	27%	18%	13%	**22%**
Ngongotahā	400	300	60	**800**	12%	9%	7%	**10%**
Total Urban Environment	**3,900**	**3,000**	**900**	**7,700**	**100%**	**100%**	**100%**	**100%**

3.3.4 Competitiveness Margin Applied to Urban Dwelling Demand

Clause 3.22 of the NPS-UD requires that a competitiveness margin of 20% in the short and medium term and 15% in the long term be added to projected demand for assessing the sufficiency of capacity in Tier 1 and Tier 2 urban environments. It is important to recognise that the competitiveness margin is in effect provision for additional land or development opportunity for feasible housing capacity and the infrastructure to support it, but it is not anticipated additional dwelling supply as at 2026, 2033 or 2054. The core reason for the additional land capacity or development opportunity is to provide a land/development opportunity supply buffer in case housing demand is higher than anticipated, with a view also to place downward pressure on land prices.[49]

Table 3.6 and 3.7 show medium growth dwelling projections in the urban environment by location inclusive of the competitiveness margin. Total growth in the short term is 3,500 dwellings, increasing to 5,500 in the medium term and 9,100 in the long term. It is these dwelling projections (with the margin included) that form the basis of the sufficiency assessment, discussed later in Section 9.

Table 3.6 – Total Urban Dwellings by Location and Type Including Margin (Medium Growth Future)

Reporting Area	2023				2026				2033				2054			
	Detached	Attached/ Duplex	Apartments	Total	Detached	Attached/ Duplex	Apartments	**Total**	Detached	Attached/ Duplex	Apartments	**Total**	Detached	Attached/ Duplex	Apartments	**Total**
Central	4,500	2,400	200	**7,100**	5,100	2,800	300	**8,100**	5,400	3,100	400	**8,800**	5,900	3,700	700	**10,200**
Western	11,000	1,000	80	**12,000**	12,200	1,200	100	**13,500**	12,500	1,500	200	**14,200**	12,800	2,000	400	**15,200**
Eastern	4,200	200	20	**4,400**	4,800	300	30	**5,100**	5,000	400	50	**5,500**	5,500	800	100	**6,400**
Ngongotahā	1,900	200	10	**2,100**	2,100	200	20	**2,400**	2,300	300	30	**2,600**	2,400	400	80	**3,000**
Total Urban Environment	**21,600**	**3,700**	**300**	**25,600**	**24,300**	**4,400**	**400**	**29,100**	**25,200**	**5,300**	**600**	**31,100**	**26,500**	**7,000**	**1,200**	**34,700**

Table 3.7 – Growth in Total Urban Dwellings by Location and Type Including Margin (Medium Growth Future)

Reporting Area	Detached			Attached/Duplex			Apartments			**Total**		
	2023-2026	2023-2033	2023-2054	2023-2026	2023-2033	2023-2054	2023-2026	2023-2033	2023-2054	2023-2026	2023-2033	2023-2054
Central	600	900	1,300	400	700	1,300	60	200	500	1,000	1,700	3,100
Western	1,200	1,500	1,700	200	500	1,100	30	100	300	1,500	2,200	3,100
Eastern	600	800	1,300	80	200	600	10	30	100	700	1,100	2,000
Ngongotahā	300	400	600	50	100	300	10	20	60	300	500	900
Total Urban Environment	**2,700**	**3,600**	**4,900**	**700**	**1,600**	**3,300**	**100**	**300**	**900**	**3,500**	**5,500**	**9,100**

3.4 Housing Bottom Lines 2023-2054

Clause 3.6(1) of the NPS-UD requires that "the amount of development capacity that is sufficient to meet expected housing demand plus the appropriate competitiveness margin" in the short-medium and in the long term is clearly stated in each district of a tier 2 urban environment. The Housing Bottom Line is to be based on the amount of "feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin". Once determined, the Housing Bottom Lines must be inserted into the District Plan and Regional Policy Statement.

[49] Further discussion of the competitiveness margin is contained in Section 2.7.3 of the HBA 2021.

The following are the calculated Housing Bottom Lines for the Rotorua urban environment for the short, medium and long term.[50] They are based on the analysis set out in Section 3.3.4 above and are driven by Council's preferred medium growth future. Sufficient zoned and infrastructure-served, feasible development capacity is required to meet demand to accommodate the following number of projected additional dwellings in each time period:[51]

i. Short-Medium Term (10 years, 2023-2033): an additional 5,500 dwellings.

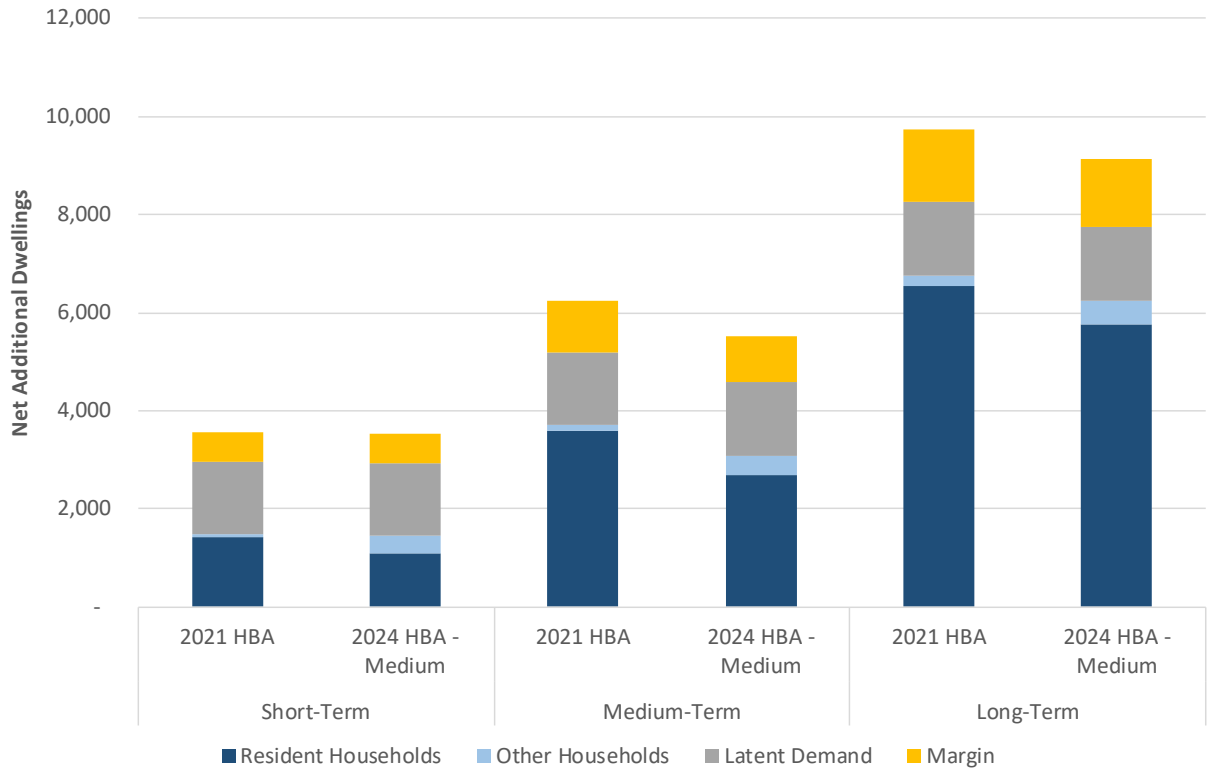
ii. Long Term (21 years, 2033-2054): an additional 3,600 dwellings.

iii. Combined Total Long Term (31 years, 2023-2054): an additional 9,100 dwellings.

3.5 Comparison to 2021 HBA

The 2024 HBA projected dwelling demand growth is compared to the level of dwelling demand growth in the 2021 HBA in Figure 3.5 below. The graph shows the total projected demand for the urban environment, by component of demand and inclusive of the competitiveness margin.

Figure 3.5 – Comparison of Projected Dwelling Demand Growth in 2021 HBA and 2024 HBA



[50] As discussed previously, RLC have requested that demand projections are extended to 2054. As such, the Housing Bottom Lines adopt a 31 year period, rather than the recommended 30 year long term period.

[51] If Council's growth projections are updated, these Housing Bottom Lines would also need to be updated, as would this HBA.

Projected dwelling demand is lower in the 2024 HBA than projected in the 2021 HBA. This is largely due to the differences in the distribution of household demand growth through time within each study. An important component is the high level of household growth projected for the short term (between 2020 and 2023) in the 2021 HBA. While the same net growth within the projection series has been applied within the 2024 HBA (as outlined above), a reduced share of the updated study period occurs within the period of high growth contained within the original RLC household projections.

Overall, the projected growth in the short term is very similar, although with a different structure in relation to the components of growth. A lower share of growth is projected from resident households, with a greater proportion from non-resident households as tourism demand is assumed to increase with a recovery from Covid-19. Over the long term, the total projected net increase is 6% lower, amounting to 600 fewer dwellings, including those contained within the margin.

Although the total projected net increase in demand is lower, the total dwelling demand projected for 2054 is slightly higher, at 33,300 dwellings, in comparison to 33,000 projected for 2050 in the 2021 HBA.

4 Māori Housing Demand

The NPS-UD has specific reference to Te Tiriti o Waitangi, with the intention of meeting the needs of Māori living in urban environments. Under Objective 5 and Policy 9 of the NPS-UD, local authorities must ensure iwi/Māori are engaged in processes to prepare plans and strategies that shape urban environments. Assessing Māori housing demand in HBAs is a requirement under section 3.23(2) of the NPS-UD. Including analysis of Māori housing demand, aspirations and barriers in this HBA is intended to help RLC to better consider these factors in their decision-making, help progress housing initiatives that improve housing outcomes for Māori and further strengthen relationships with mana whenua.

4.1 Mana Whenua – Rotorua Context

The Rotorua district is the ipukarea (ancestral home) of Te Arawa iwi and hapū, with Raukawa and Ngāti Tūwharetoa also having ancestral connections in parts of the district.

Te Arawa is a confederation of iwi and hapū with mana whenua throughout the Rotorua district (and beyond). Most Te Arawa iwi and hapū have entered into Treaty settlements and are represented by post-settlement entities. The exception is Ngāti Whakaue, a large Te Arawa iwi with mana whenua throughout most of the Rotorua urban area, who have not yet completed their comprehensive Treaty settlement, and are reflected as:

- Pukeroa Ōruawhata Trust who has received partial Treaty settlement including the return of lands within the Pukeroa Ōruawhata block- (which comprises the central business district and surrounding areas); and
- Te Kōmiti Nui o Ngāti Whakaue who was mandated some years ago to negotiate a comprehensive settlement. A partial settlement (a share in the CNI forestlands) has been received but the entity is not currently in negotiations with the Crown.

4.2 Relevant Housing Related Plans and Strategies

The Rotorua district has a relatively high proportion of Māori land retained in Te Arawa ownership. A distinctive feature of the Rotorua district is the extent of Māori traditional kāinga (settlements) that remain thriving centres of hapū and whānau community living. Uniquely, those traditional kāinga are in the urban and rural area (urban kāinga include Ngāpuna, Whakarewarewa and Ōhinemutu).

With many Te Arawa people returning home to Rotorua the need for housing and in particular papakāinga and kōeke (elder) housing is increasing. The RLC has recognised this and with the assistance of key stakeholders has been helping to enable more papakāinga and kōeke housing development throughout the district.

The following provides a summary of relevant plans and strategies related to housing that have been developed by, or in collaboration with, iwi, hapū and local Māori communities.

4.2.1 Te Matakitenga a Te Arawa | Te Arawa 2050 Vision

This is a key guiding document for Tāngata Whenua and expresses Te Arawa iwi and hapū aspirations at a strategic level.[52] Te Matakitenga describes the unique strengths and values of Te Arawa, and sets out goals within seven key strategic areas. Te Matakitenga and Te Tūāpapa[53] encapsulate some of the key aspirations and values of Te Arawa – to enable sustainable growth that ensures social, cultural and economic wellbeing for communities, while ensuring the protection, restoration, and mana of taonga tuku iho. These aspirations for housing and growth were documented in the Rotorua FDS 2024 (discussed below).

4.2.2 He Papakāinga, He Hapori Taurikua | A Strategy for Homes and Thriving Communities

The HBA 2021 referred to this Strategy, which had a key focus on papakāinga and kōeke housing. It included a work program that sought to ensure significant development of Papakāinga in the Rotorua District. While this Strategy is now superseded by the FDS 2024, it is worth noting that two of the key actions have been implemented by RLC, since that time and are discussed briefly here. These actions were to "*provide development expertise to assist landowners to achieve their papakāinga goals*" and to "*identify funding and financing mechanisms for papakāinga development*". RLC has responded to these actions by:

- Developing a more enabling rule framework for papakāinga development through PC9 (now operative). At a high-level, these changes encompassed the following:
    - Deleting the performance standard that required papakāinga to locate on land that adjoins or is adjacent to a Marae.
    - Aligned the framework for papakāinga in residential zones with the MDRS and policy intent of the NPS-UD.
    - Enabled a greater density of papakāinga development in rural zones.
    - Clarified the activity status, and appropriate scale and intensity of non-residential activities that form part of a papakāinga development in rural zones.
- Developing a Papakāinga Toolkit. Due to be completed in June 2025, the Toolkit will:
    - Be a practical resource designed to assist iwi, hapū, and Māori in planning and developing papakāinga on ancestral land.
    - Focus on providing guidance on planning, design, and consenting
    - Help navigate challenges such as land ownership, funding, and RLC processes, operations/management, aiming to empower iwi and hapū.

Other outcomes sought from this Strategy were more quantified in nature and related to increasing housing options for Māori to live within their rohe, increasing kōeke housing available, increasing the

[52] View the full document here: https://www.tearawavision.nz/

[53] The Te Tūāpapa o nga Wai o Te Arawa sets out Te Arawa values in relation to the long term aspirations for the Te Arawa lakes.

number of dwellings designed for multi-generational households, increasing the number of new papakāinga homes built on Māori freehold land (with a target of 50 over the short term) and increasing home ownership rates among Māori in the district. These same outcomes are now captured (carried over) in the FDS (specifically outcome 8.4 (Housing Choice Meets Diverse Needs) and 8.5 (Te Arawa Reo, Tikanga and Values). These outcomes, including the effectiveness of the changes to the papakāinga provisions in the District Plan and the Papakāinga Toolkit, will continue to be monitored over time, including in future HBA updates.

4.2.3 Te Rautaki Whakawhanake i te Āpōpō o Rotorua | Future Development Strategy 2024

The FDS 2024 is now the core Strategy for managing housing (and business) growth in Rotorua District, including delivering on iwi housing aspirations and outcomes. As noted above, the Te Arawa 2050 Vision was a guiding document and in accordance with NPS-UD requirements, iwi had direct input to the development of the Strategy.

Mana Whenua Engagement on Housing and Other Development Aspirations

There was a strong focus on engagement with mana whenua from the outset, with workshops to understand aspirations for urban growth alongside challenges and constraints. Three workshops in 2022 were supplemented with numerous one-on-one engagements with various iwi and hapū groups. In these sessions, iwi and hapū shared their whakaaro, values and aspirations. A key function of the FDS under the NPS-UD is to include a clear statement of iwi and hapū aspirations for urban development. In order to ensure that all relevant iwi within Rotorua were given the opportunity to engage, there were a further four targeted consultation hui/workshops held around the start of the submission period in mid-2023 in the following key locations:

- Central Area (Ngongotahā to the Puarenga Stream)
- Eastern Area- (Tikitere to Ngāpuna)
- Rural Area- (Otaramarae south to Rotomā)
- Southern Area- (Whakarewarewa to Reporoa)

Iwi and Hapu Housing and Other Development Aspirations

At a high-level[54], iwi aspirations for housing and growth captured in the FDS 2024 are focussed on protecting and enhancing the natural environment as change and growth happens in both urban and rural areas. This includes through the use of green infrastructure, restoration of the mauri of lakes and rivers, and protection of native species and cultural landscapes. Te Arawa iwi and hapu seek compact urban development which delivers safe, socially and physically connected communities, neighbourhoods and centres. There is a desire for iwi and hapu communities to flourish and thrive, including through provision of warm, dry and affordable housing. Removing or reducing existing development over time that is not compatible with traditional papakāinga to facilitate redevelopment of these sites in a more holistic way (not limited to whanau housing) has also been identified. Core to these aspirations is a desire for more

[54] Iwi and hapu housing and growth aspirations are discussed in more detail in Sections 5.4-5.6 of the Future Development Strategy 2024.

integrated and coordinated decision making around housing and wider-development growth, that fosters stronger participation by iwi and hapu in decision making processes.

Location specific iwi and hapu aspirations that relate to existing and future housing development include (but are not limited to)

- a desire for heavy industry to be relocated from the land surrounding the Ngāpuna cultural village because of the negative impacts of these activities on residents in the papakāinga there.
- A general desire to retain the scale and character of the Ohinemutu and Whakarewarewa cultural villages.
- Growth of affordable modern housing in Ngongotahā, including redevelopment of industrial land for housing close to the commercial centre and establishing papakāinga on whenua Māori in and around Ngongotahā.
- Development of more papakāinga housing in the wider East side of Rotorua (and provision of greater local employment opportunities in the Eastern area).
- Continued or new development of papakāinga in a range of locations in the rural environment including at Tikitere, Lake Rotoiti and Lake Tarawera.

The FDS seeks to deliver on these iwi and hapu aspirations through a range of outcomes,[55] including (but not limited to) providing for greater intensification over the long term (building on the changes already enabled by PC9) which should provide greater diversity and choice of housing stock, strengthening the centre network (and providing for growth within centres), greater investment in public transport, active travel routes and infrastructure, providing more appropriate locations for industrial growth to encourage the relocation of heavy industry and identifying new land (including whenua Māori) suitable for urban development in the short, medium and long term.[56]

4.3 Quantitative Assessment of Māori Housing Demand

This section provides brief analysis of a range of quantitative datasets (indicators) that are readily available, that relate to Māori housing demand (and supply), and that are specific to Rotorua District.[57] Where available, changes since the HBA 2021 baseline (June 2020, or alternatively the time at which the HBA 2021 was prepared) and the current HBA baseline (June 2023, or drafting period (late 2024)) have been measured. Future updates of this HBA will monitor ongoing changes to these indicators. This will also assist in monitoring the outcomes sought by the FDS 2024 with respect to iwi and hapu housing and development aspirations.

[55] Refer Section 8 of the FDS 2024 for a full discussion of expected outcomes of the adopted growth strategy.

[56] It is noted that the FDS 2024 does not enable the aspirations of Ngāti Rangiteaorere to establish a significant new residential community at Tikitere as this was not considered to contribute to a well-functioning urban environment over the long term. However, the District Plan still provides opportunities for papakāinga development to occur in Tikitere and further urban-scale growth in Tikitere can be revisited in future updates of the FDS.

[57] While there are some indicators that are at a regional level (i.e. Bay of Plenty Region), this HBA has chosen not to include those as Rotorua's contribution/role in those regional statistics is unknown.

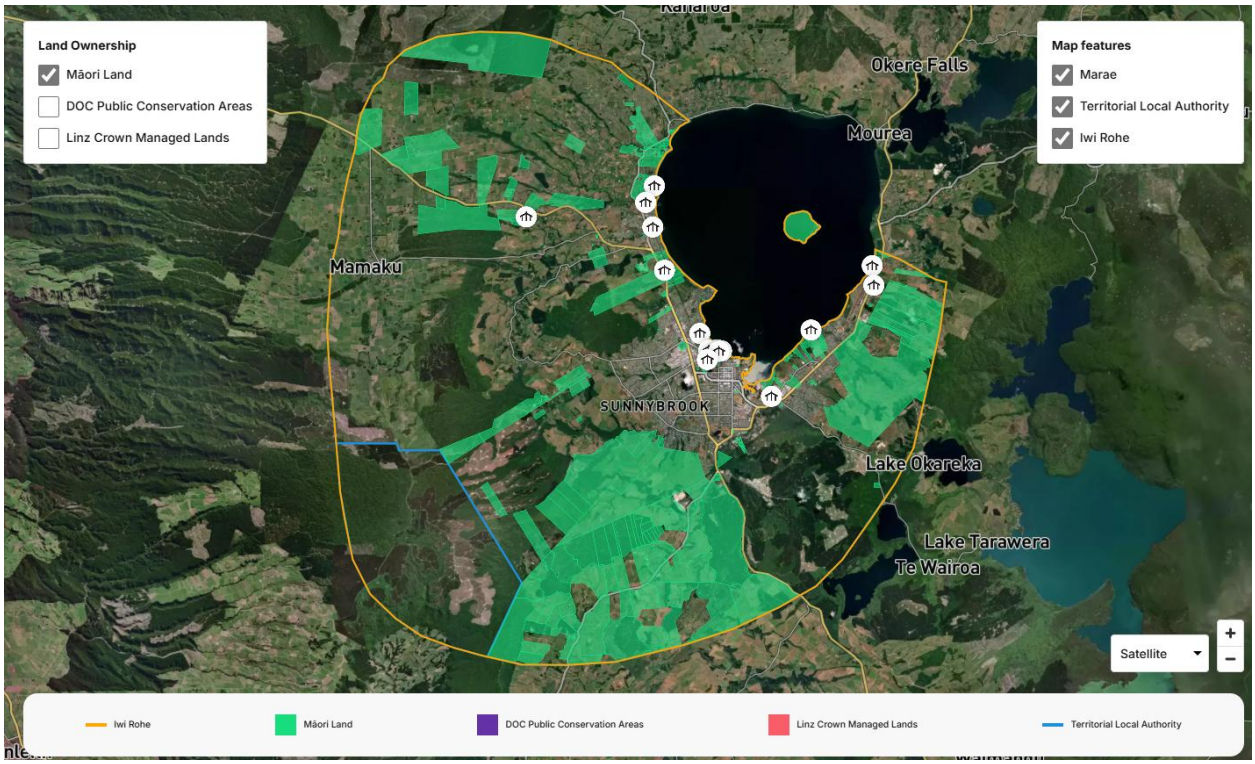
4.3.1 Iwi Affiliation Statistics Not Limited to Those Residing in their Rohe

This sub-section collates data (where available) from the Te Whata dashboard[58] on iwi who whakapapa to:

- Ngāti Whakaue (Te Arawa),
- Ngāti Rangiwewehi (Te Arawa),
- Ngāti Kearoa-Ngāti Tuara,
- Ngāti Uenuku-Kōpako (Te Arawa), and
- Ngāti Tura- Ngāti Te Ngākau.

These iwi have been selected because their respective rohe span (and overlap) the Rotorua urban environment, and specifically the housing areas of that urban environment. Te Rohe o Ngāti Whakaue (Te Arawa) - as mapped by Te Puni Kokiri – is shown in Figure 4.1 and Te Rohe o Ngāti Rangiwewehi (Te Arawa) is shown in Figure 4.2. Te Puni Kokiri have not defined a rohe boundary for Ngāti Kearoa-Ngāti Tuara and Ngāti Uenuku-Kōpako (Te Arawa), so are not mapped below. Further, the Te Whata dashboard does not currently contain any data on Ngāti Tura- Ngāti Te Ngākau. So while this HBA acknowledges the relevance of that iwi to urban Rotorua, their data is not captured in Table 4.1 below.[59]

Figure 4.1 - Te Rohe o Ngāti Whakaue (Te Arawa)



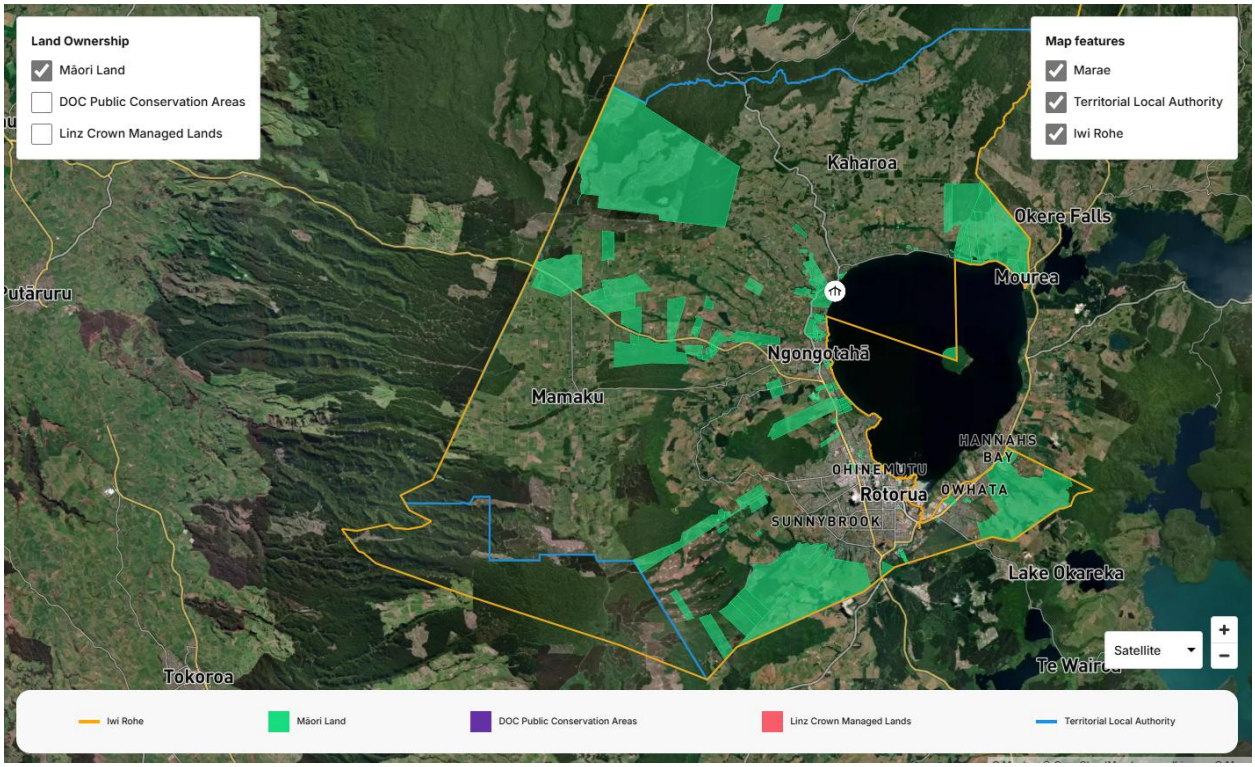
While there are other iwi that whakapapa to whenua within Rotorua District, including (but not limited to) Te Rohe o Ngāti Rangiteaorere (Te Arawa) centred around Tikitere and Te Rohe o Tūhourangi (Te Arawa)

[58] https://tewhata.io/ngati-whakaue-te-arawa/

[59] Future updates of this HBA can check if there are any changes in data available for Ngāti Tura- Ngāti Te Ngākau.

beginning south of Rotorua urban environment, and including the Heavy Industrial Zones, these iwi have been excluded below only on the basis that their rohe are outside the urban environment. This does not mean that whānau Māori living outside of those rohe who may wish to return home will not seek housing in Rotorua's urban environment in the future (and contribute to Māori housing demand).

Figure 4.2 - Te Rohe o Ngāti Rangiwewehi (Te Arawa)



The following data (Table 4.1) is not limited to whānau Māori living inside Te Rohe o Ngāti Whakaue, Te Rohe o Ngāti Rangiwewehi, Te Rohe o Ngāti Kearoa-Ngāti Tuara, and Te Rohe o Ngāti Uenuku-Kōpako. This is relevant as it may indicate the total scale of housing demand should whānau Māori living outside their rohe wish to return home.

Table 4.1 – Key Statistics (Available) for Iwi Affiliated with Urban Housing Areas in Rotorua District 2023

Indicator	Ngāti Whakaue	Ngāti Rangiwewehi	Ngāti Kearoa-Ngāti Tuara	Ngāti Uenuku-Kōpako
Marae within rohe	16	2	Not Specified	Not Specified
Affiliated Population (2013)	8,337	2,835	Not Specified	474
Affiliated Population (2023)	19,152	6,474	1,857	2,346
Population Increase (2013-2023)	129.7%	128.4%	Not Specified	394.9%
Share Living in Rotorua District (2023)	34.7% (6,646)	33.6% (2,175)	33.3% (618)	39.4% (924)

Share Living in Bay of Plenty Region (2023)	47.7% (9,136)	47.5% (3,075)	41.8% (776)	51.0% (1,196)
Share Living Outside Rotorua District (2023)	65.3% (12,506)	66.4% (4,299)	66.7% (1,239)	60.6% (1,422)
Mobility – Share who were in the same residence 5 years ago (2023)	38.9%	38.8%	38.6%	37.6%
Mobility – Share who were in the same residence 1 year ago (2023)	77.6%	77.7%	78.8%	77.2%
Median age (2023)	26.1	26.0	25.9	27.1
Family Type – Couple without children (2023)	14.7%	14.6%	16.3%	14.0%
Family Type – Couple with children (2023)	56.4%	55.2%	52.8%	55.0%
Family Type – One parent with children (2023)	28.9%	30.1%	31.1%	31.0%
Household Type – One family household (2023)	75.9%	75.6%	75.8%	73.1%
Household Type – Two family household (2023)	11.9%	13.2%	12.1%	11.8%
Household Type – Three+ family household (2023)	1.8%	1.7%	0.8%	3.1%
Household Type – Other multi-family household (2023)	5.1%	4.8%	6.1%	5.8%
Household Type – One person household (2023)	5.3%	4.7%	5.5%	6.1%
Family Size – Share that lived in families with 3 or more children (2023)	32.8%	31.4%	28.8%	35.9%
Home Ownership – Hold in family trust (2023)	5.2%	5.1%	4.8%	5.6%
Home Ownership – Own or partly own (2023)	30.0%	28.9%	29.6%	27.7%

Home Ownership – Do not own (2023)	64.8%	66.1%	65.3%	66.7%
Dampness – Share living in a dwelling that is always or sometimes damp (2023)	34.7%	36.0%	35.6%	40.2%
Crowding – share living in a crowded or severely crowded dwelling (2023)	21.5%	21.7%	23.6%	23.0%

Table 4.1 shows a relatively similar demographic and statistical profile for all four iwi. Ngāti Whakaue is the larger of the four. Ngāti Uenuku-Kōpako has the fastest population growth rate in percentage terms, although this is off a low 2013 base population. They are also the iwi most concentrated in Rotorua District in 2023.

Home ownership rates are slightly higher for Ngāti Whakaue, and while this is slightly higher than the average for all Māori, it is well below the average ownership rate of all New Zealand. Ngāti Uenuku-Kōpako has the lowest home ownership rate relative to the other iwi and has the highest share of population living in damp homes. Ngāti Rangiwewehi have a slightly higher share of households living in 2-family homes, and slightly less living in single person home relative to the other iwi. This indicates slightly different housing needs.

For those needing homes for a family with children, around a third of each iwi require homes that provide space for 3 or more children, with Ngāti Uenuku-Kōpako having the highest share among the iwi (close to 36%). Overcrowding dwelling statistics are high for all iwi (and relatively more so for those who whakapapa to Ngāti Kearoa-Ngāti Tuara) although these shares are not dissimilar to the average of all Māori. However, the overcrowding shares for all iwi are well above the average for all New Zealand suggesting challenges accessing dwellings that match their household needs.

4.3.2 Māori Population

This sub-section returns to data specific to Rotorua District. It provides information on who may require housing, and the relative scale of current (2023) Māori housing demand. Based on the Census 2023 – Usually Resident Population by Ethnic Group (Grouped Total Responses), there were a total of 32,199 residents in Rotorua District that identify with or have a sense of belonging to being Māori. Ethnicity is self-perceived, and a person can belong to more than one ethnic group, and as a consequence, the total responses across all ethnic groups is greater than the actual usually resident population in Rotorua in 2023.

Pro-rata across all responses,[60] Māori account for 35% of the total in Rotorua District.[61] However, when expressed as a share of the total resident population,[62] those that affiliate with being Māori make up a

[60] I.e. assuming no double counting.

[61] We note that Table 2.3 of the HBA 2021 Main Report estimated a pro-rata share of 31% as at 2020 and provides a comparison across all ethnic groups.

[62] And allowing for double counting.

larger share of the district total (43.5%). This metric is well above the national average (17.8% in 2023) and Rotorua District is ranked 10th across all territorial authorities in 2023 when comparing the share of total resident population that identify as Māori.

Of those that identified as being Māori in Rotorua District in 2023, this represents 3.6% of all New Zealand residents that identify as being Māori (noting that Rotorua's total usually resident population accounts for just 1.5% of the national population in 2023, so the number of whānau Māori living within the district is relatively more significant in the national context).

Another statistic gathered in the Census 2023 was whether residents had Māori descent. This data does not double count residents. In 2023, Rotorua District was home to 33,534 residents with Māori descent (a 45.3% share of the total resident population and an increase from 42.3% in 2018. The national average for Māori descent was 19.6% in 2023 – further highlighting the significance of Rotorua's Māori community.

4.3.3 Māori Population Projections

This sub-section also relates to data specific to Rotorua District. It contains 2018 based population projections for those identifying with Māori ethnicity in the district, sourced from SNZ. This data provides an indication of the number of whānau Māori who may require housing in the future, although is expressed as resident population not as dwelling projections. Two growth projections are included – a medium growth series and a high growth series – each of which have different growth characteristics. Figure 4.3 shows that under a medium growth series, natural increase is projected to slow over time, and there is a net loss of migration from 2023. While inter-ethnic mobility increases slowly, the total projection is for a declining net population growth each five years, starting at net growth of 3,100 for the period 2018-2023, decreasing to net growth of 2,000 for the period 2038-2043.

Under a higher growth series (Figure 4.4), growth from natural increase is projected to rise each five years. While growth from net migration decreases after the 2018-2023 period, it remains positive. The combined effect is net population growth of 4,500 Māori between 2018-2023, increasing to growth of 4,800 between 2038-2043. Figure 4.5 shows the total Māori ethnicity population projection for Rotorua District under each scenario (from a 2018 base). The total increase ranges between 11,500-21,800 (a 38-72% increase).

Figure 4.3 – Māori Affiliated Pop. Projections – Growth Characteristics – Medium Projection

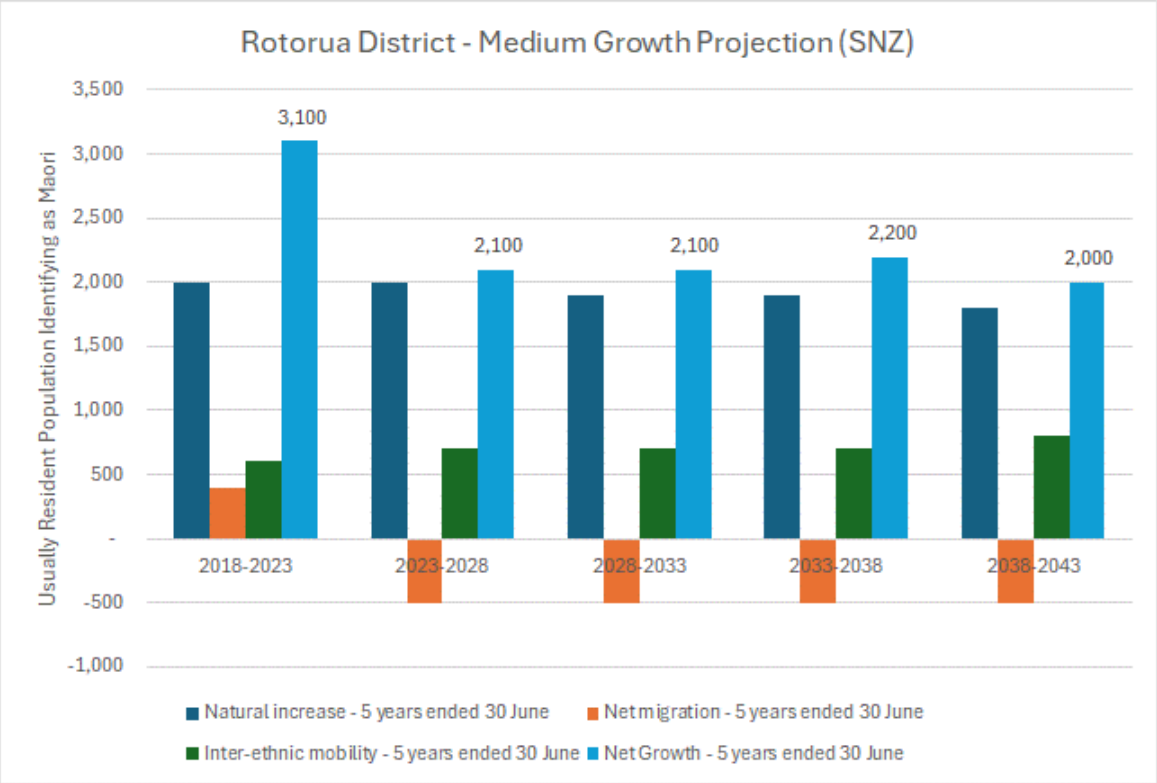


Figure 4.4 – Māori Affiliated Pop. Projections – Growth Characteristics – High Projection

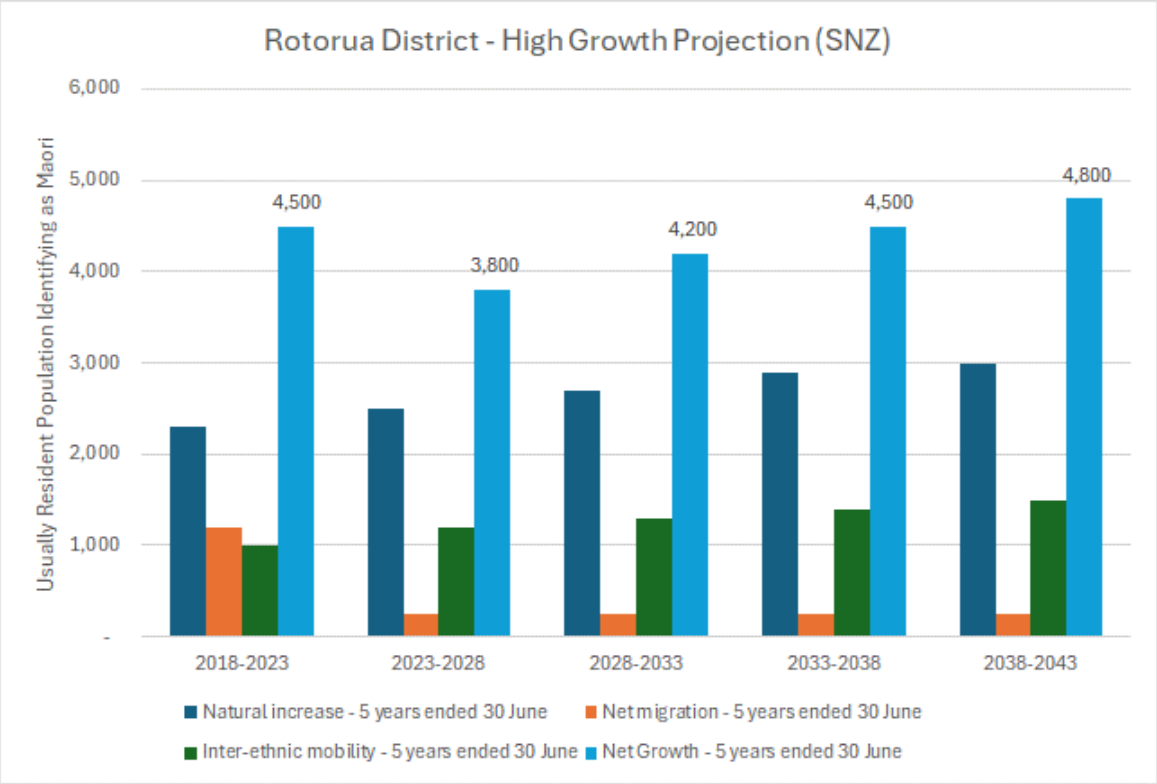
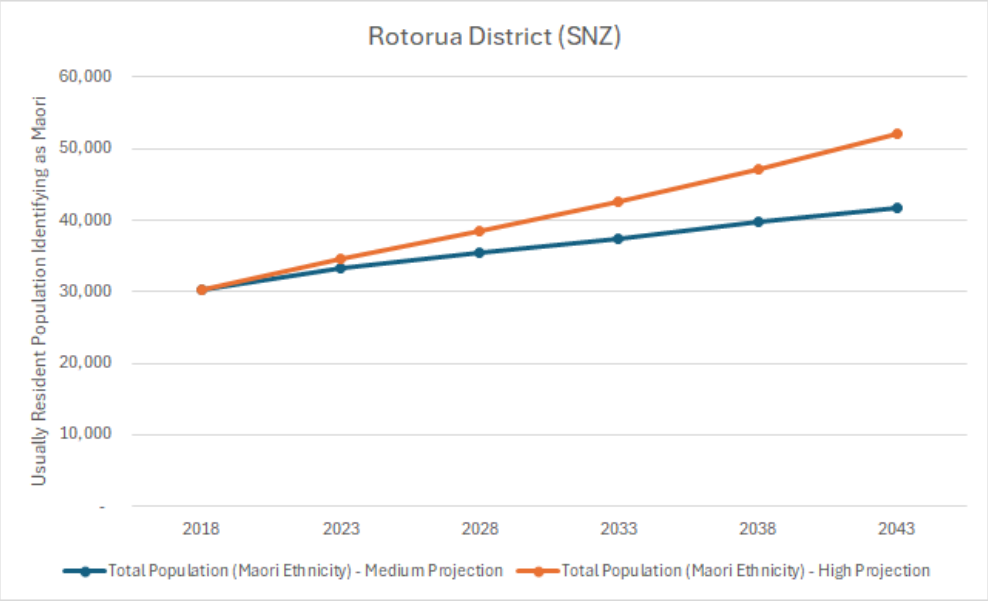


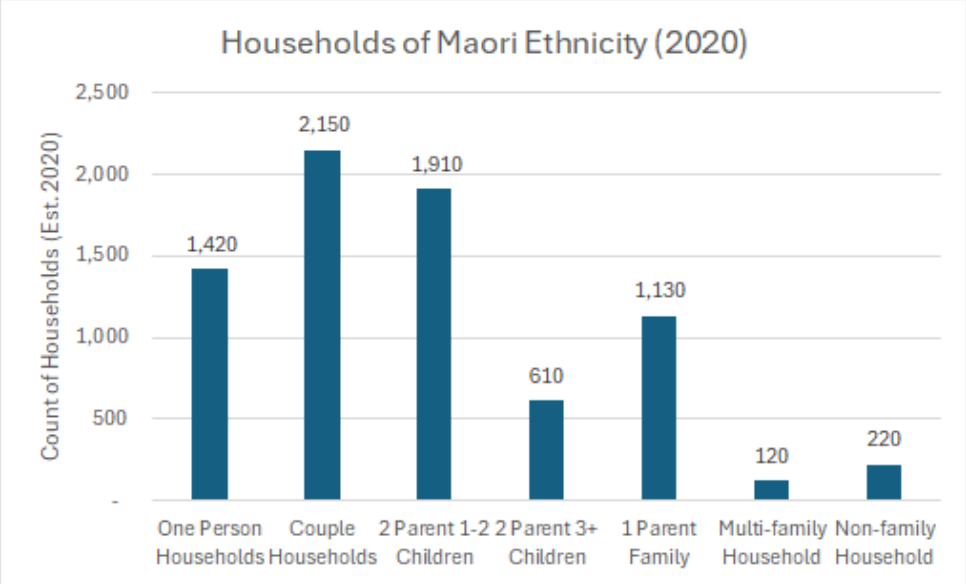
Figure 4.5 – Māori Affiliated Pop. Projections Total Resident Pop. – Medium & High Projection



4.3.4 Māori Households by Type and Estimated Dwelling Demand

Figure 4.6 provides estimates of resident household counts in Rotorua District that have Māori ethnicity. This graph is based on data contained in the HBA 2021 which scaled 2018 Census data up to the 2020 household estimate for the district. It shows that while couple households are the single largest household type, collectively, families with children (2 parent or single parent) made up the largest share of Māori households at 48% in 2020.

Figure 4.6 - Household by Type and Māori Ethnicity, Rotorua District, 2020 (Source HBA 2021)



Other data contained in the HBA 2021 on Māori ethnicity for the total district included:

- Māori households occupied an estimated 7,820 dwellings in the district in 2020.

- This accounted for 27% of the estimated total resident dwellings in the district in 2020.
- Based on the preferred medium growth future, households of Māori ethnicity were projected to demand an additional 440 dwellings in the short term across the total district (to 2023), increasing to 1,060 additional dwellings in the medium term (to 2030) and 1,550 additional dwellings in the long term (to 2050).

4.3.5 Māori Living in Crowded and Non-crowded Housing

Based on Census 2023 data for Māori living in Rotorua District, approximately 7,700 Māori were living in crowded, or severely crowded dwellings (Figure 4.7).[63] That is 29% of the total Māori population.[64]

Figure 4.7 – Number of Māori Living in Crowded and Non-crowded Housing in Rotorua District 2023

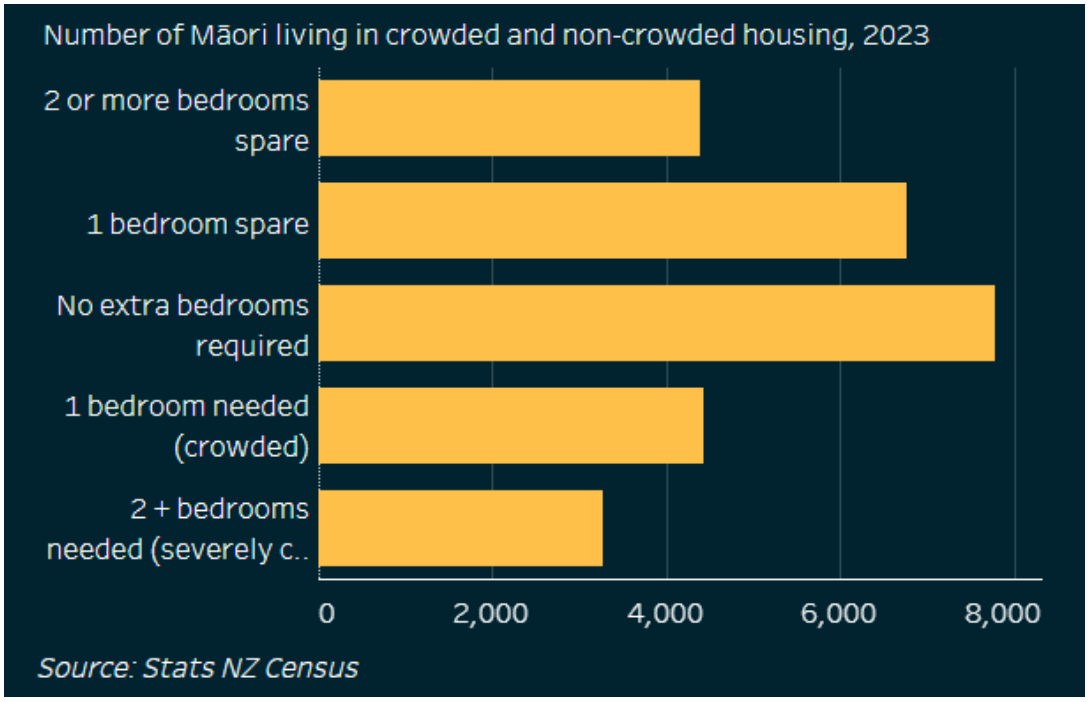
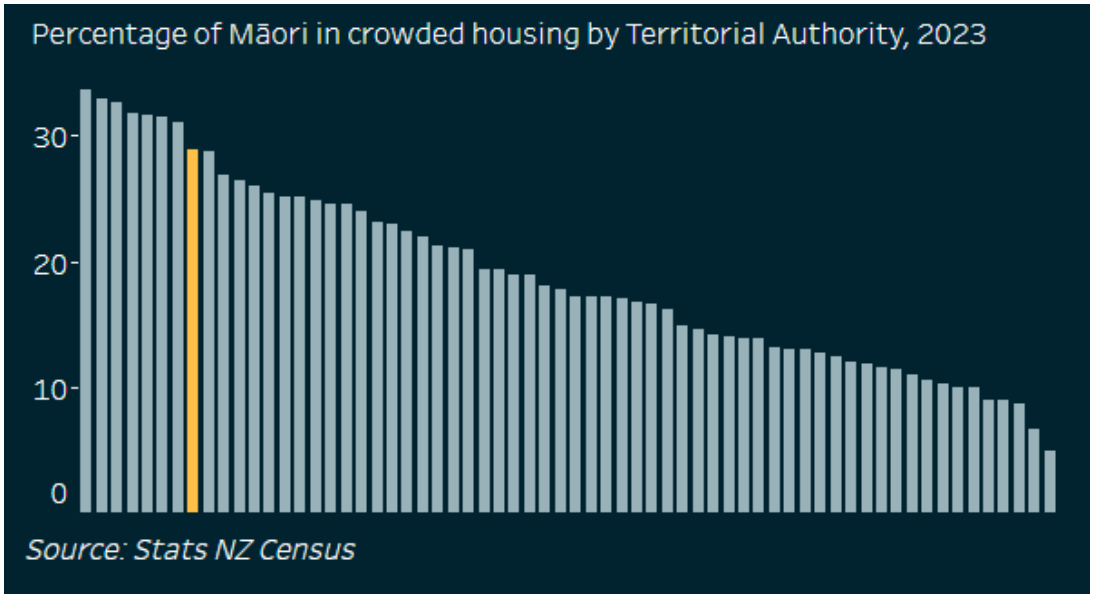


Figure 4.8 places Rotorua's Māori housing crowding statistics in context with other territorial authorities in 2023. Rotorua, shown in yellow, has a slightly lower share than Wairoa District and a similar share to Napier City. The worst district is Hastings District with 34% of Māori living in crowded or severely crowded dwellings. Rotorua District ranks the 8th worst district for this indicator in New Zealand.

[63] Data source: https://www.hud.govt.nz/stats-and-insights/local-housing-statistics/outcomes#tabset

[64] It is noted that the sum of columns in Figure 4.7 does not exactly match the 2023 census population with Māori ethnicity in Rotorua District (discussed further above).

Figure 4.8 – Percentage of Māori in Crowded Housing by TA 2023, Rotorua Focus



4.3.6 Home Ownership by Māori

Figure 4.9 shows how Māori compare in terms of home ownership rates in Rotorua District according to the Census. It highlights that in 2023, Māori have below average home ownership rates compared to the total across all ethnicities (31% compared with 50% respectively). This rate has only changed slight since 2013.

Figure 4.9 – Proportion of Māori & Non-Māori Individual Home Ownership in Rotorua District, 2013-2023 (Census)

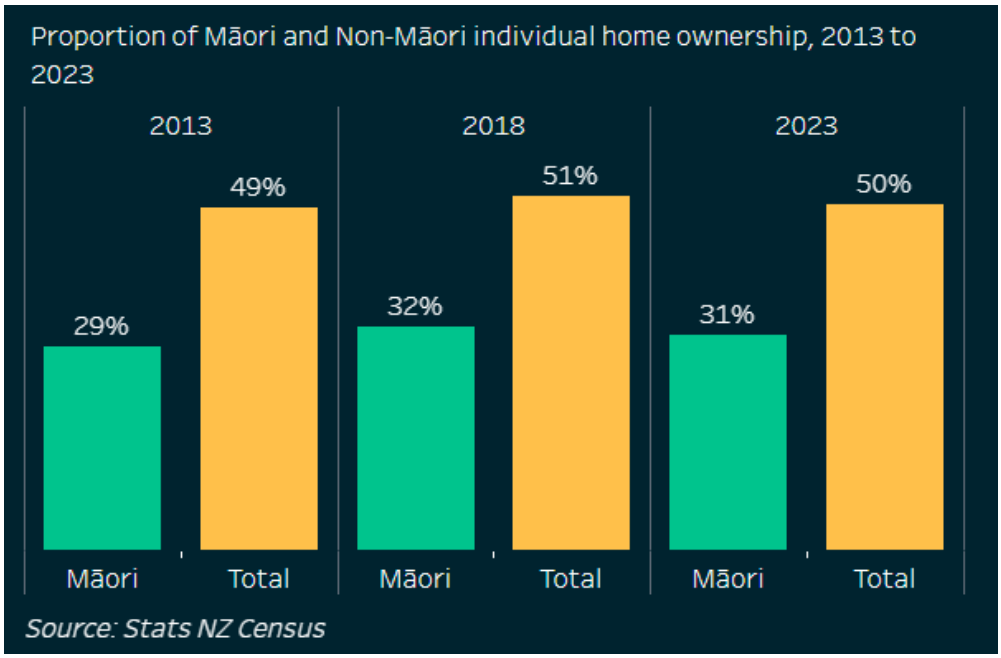
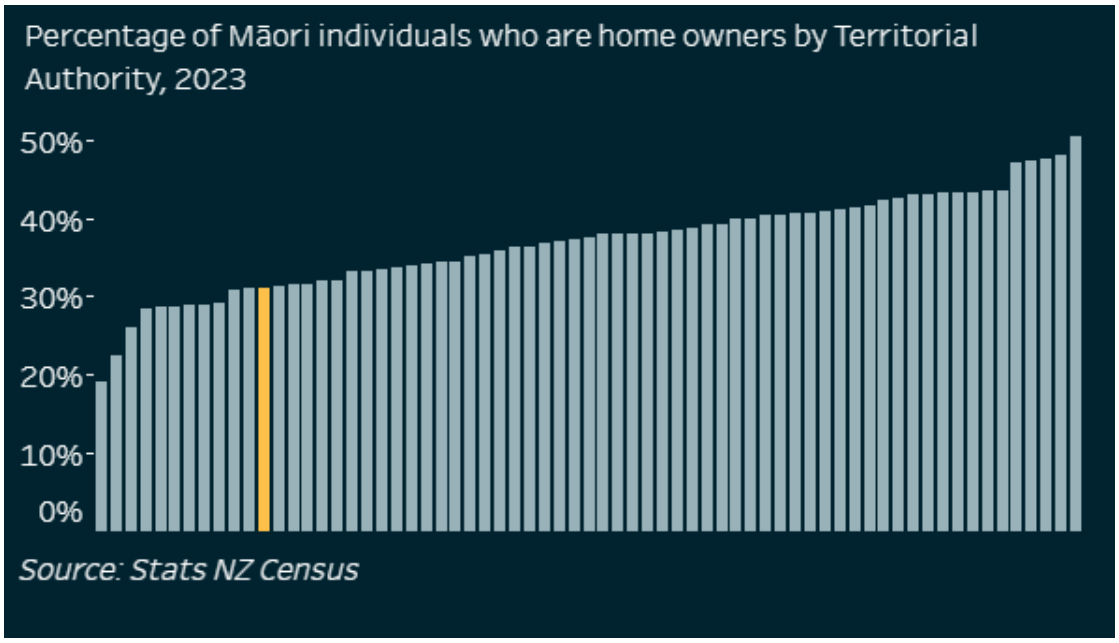


Figure 4.10 puts this statistic in context with other territorial authorities in 2023. Rotorua District performs badly relative to most territorial authorities at 31% Māori home ownership (the 12th worst district) and is

flanked by Nelson City and Gisborne District. The highest rate of Māori home ownership is in the Chatham Islands (51%) and the lowest rate is in Hamilton City (19%).

Figure 4.10 – Percentage of Māori Individuals Who Are Homeowners by TA, 2023 Rotorua Focus



4.3.7 Whenua Māori in the Urban Environment

A key feature of the Rotorua urban environment is the many parcels of Māori freehold land administered under Te Ture Whenua Māori ("Whenua Māori") that are currently zoned for urban development or are identified as future growth areas in the FDS 2024. A map of Rotorua's urban Whenua Māori land parcels relative to the urban environment boundary is included below (Figure 4.11).

The Te Ture Whenua Māori Act 1993 (or Māori Land Act 1993) recognises that land is a 'taonga tuku iho' or an ancestral treasure handed down and promotes the retention of land while also facilitating the occupation, development and utilisation of Whenua Māori by its owners and their whānau, hapū and descendants. Jurisdiction of the Act rests for the most part with the Māori Land Court. Whenua Māori is often multiple owned. It may be vested in a Trust or a Māori incorporation, who manage the land on behalf of the owners of the land (i.e., shareholders).

Potential for Whenua Māori looks different for every block and depends on owners' aspirations and the location and state of the land. Aspirations for Whenua Māori may include economic, cultural, environmental or social outcomes, or combinations of these. However, use of the land, particularly for economic and social outcomes, is not straight forward and presents a number of challenges for the owners of the land compared to the development of general land (including general Māori land). Some issues in administering Whenua Māori within the structures of the Te Ture Whenua Māori Act include a lack commerciality, processes can be cumbersome due to high level of beneficiary participation, Māori Land Court intervention can be time consuming and costly and the restrictions on alienation can impede development.

Figure 4.11 – Whenua Māori Land Parcels in Rotorua's Urban Environment

In most cases, the land takes the form of a 'block', which may be an amalgamation of one or more lots. As Whenua Māori, subdivision or partitioning is possible, but the ownership of the new parcels remains the same. Owners can apply to the Māori Land Court to partition their interests out of the block (so that they hold their interests solely) however the Court is unlikely to agree if it would render the remaining land less capable of development (for example, an uneconomic size or more difficult to access). Subdivision may provide some advantages when it comes to managing land use (including leasing areas of land, managing easements and vesting of roads), but equally, legal lots can be defined without a need to change the primary parcel boundaries.[65]

A significant characteristic of Whenua Māori is that it cannot be alienated (which includes sold, gifted, long-term leased or mortgaged) unless it complies with the Act (including its purpose, being the retention, use and development of the land). Many such alienations must be approved by the Court. The sale of Whenua Māori is expected to be a rare occurrence as it runs counter to the intention of the land to provide an asset for the iwi, hapū and whanau in perpetuity. However, it might be considered if there is sufficient owners support, the Court's pre-requisites are met and considered in the best interest of the trust, including to free up capital to facilitate development on remaining whenua land.

There are a range of ways in which a Trust or incorporation (or legal owners if these structures don't apply) can directly utilise Whenua Māori. This includes forestry or agriculture managed by representatives of the

[65] The Māori Land Court will generally only allow a partition if it can be shown that there is a good reason to do so. Consideration is given to the fact that once an individual's interests are partitioned out, it is much easier to lose/sell that interest which is contrary to the Act's over-arching purpose of retaining the land by owners as a taonga.

owners. It may also include tourism operations, or other commercial or community/cultural facilities. While sometimes difficult, whenua Māori can be used to secure finance or a mortgage to fund development just like any other interest in land. Despite this, a lack of access to capital is known to be a key constraint to realising the development potential of Whenua Māori.

Developing papakāinga is another option gaining traction within urban areas. Papakāinga typically refers to development of three or more houses, built on Whenua Māori, operating as an intentional community according to kaupapa Māori.[66] Developing a papakāinga on whenua Māori can be a long process, but there is help available to support Trusts in this process, including the Kāinga Whenua loan scheme which provides loans to Whenua Māori trusts and individuals with a right to occupy multiple-owned Māori land. As discussed in Section 1, RLC is developing a Papakāinga Toolkit that is also designed to facilitate realisation of whenua Māori for housing development within the district.

While government funding is available for some aspects of papakāinga development, before any application for funding can be made, the owners have to do a significant amount of pre-work to secure owner agreement to develop the land. This can take some 12-18 months (or more) and is onerous, time consuming and often unfunded. If these constraints can be overcome, developing a papakāinga on Whenua Māori can be a way to help whānau with quality affordable housing and to provide ongoing accommodation and/or revenue for future generations.

4.3.8 Supply of Housing to Meet Māori Demand

At the time of the HBA 2021, there were no modern large scale urban residential developments on Whenua Māori within Rotorua District[67] although there were successful examples of large and small scale urban commercial developments on Whenua Māori (which have increased in number to 2023/2024). There are also several historic papakāinga (such as Ōhinemutu. Whakarewarewa and Ngāpuna) as well as some recent small scale residential developments.

Ngāti Whakaue have successfully progressed residential development of their urban zoned whenua in the Eastern reporting area of Rotorua since the last HBA. Two large-scale projects currently underway include:[68]

1. Wharenui Rise: The vision of Wharenui Rise is to provide a consistent flow of homes to the Rotorua market which ultimately will result in providing some 1,200 new market homes through 11-13 stages, over the next 20-25 years. The site is 106ha. In 2021, Ngāti Whakaue Tribal Lands (NWTL) began assisting whānau and shareholders on their pathways to home ownership through an affordable housing programme. By May 2023, 14 lots were released in two separate tranches of 8 and 6 respectively. Ngāti Whakaue shareholders and whānau were given first preference, all 14 homes are now sold to Ngāti Whakaue whānau. While Wharenui Rise is fee-simple Tribal Land (not Māori Freehold land), the revenue from the development is intended to fund the development of their Whenua Māori (see below).

[66] http://mychoices.goodhomes.co.nz/SectionB/b37.html

[67] The Lynmore Rise Retirement Village was proposed as a partnership development on Whenua Māori (Owhatiura South 5 Incorporation Land). This was considered a relatively small scale development in an existing zoned urban site but was considered a relevant model of development that could be replicated on other sites. The site is fully developed today.

[68] https://ngatiwhakaue.iwi.nz/housing/

2. Manawa Gardens: The vision of Manawa Gardens is to activate Whenua Māori (Māori freehold land) on the eastern side of Wharenui Rise to enable targeted, long term affordable rental housing for Ngāti Whakaue's owners and beneficiaries and the wider community. Over 3-stages in total (240 houses) the first stage will deliver 80 homes (1/2/3/4 Bedrooms, Detached and Duplex Design and both 1 & 2 Storey levels). Manawa Gardens aims to cater for most stages of the rental housing spectrum (stages in life) from young families to empty nesters and kaumatua and kuia. It is also aimed at providing a building and construction gateway for training and employment opportunities. The stage 1 development is being developed in partnership with MHUD.

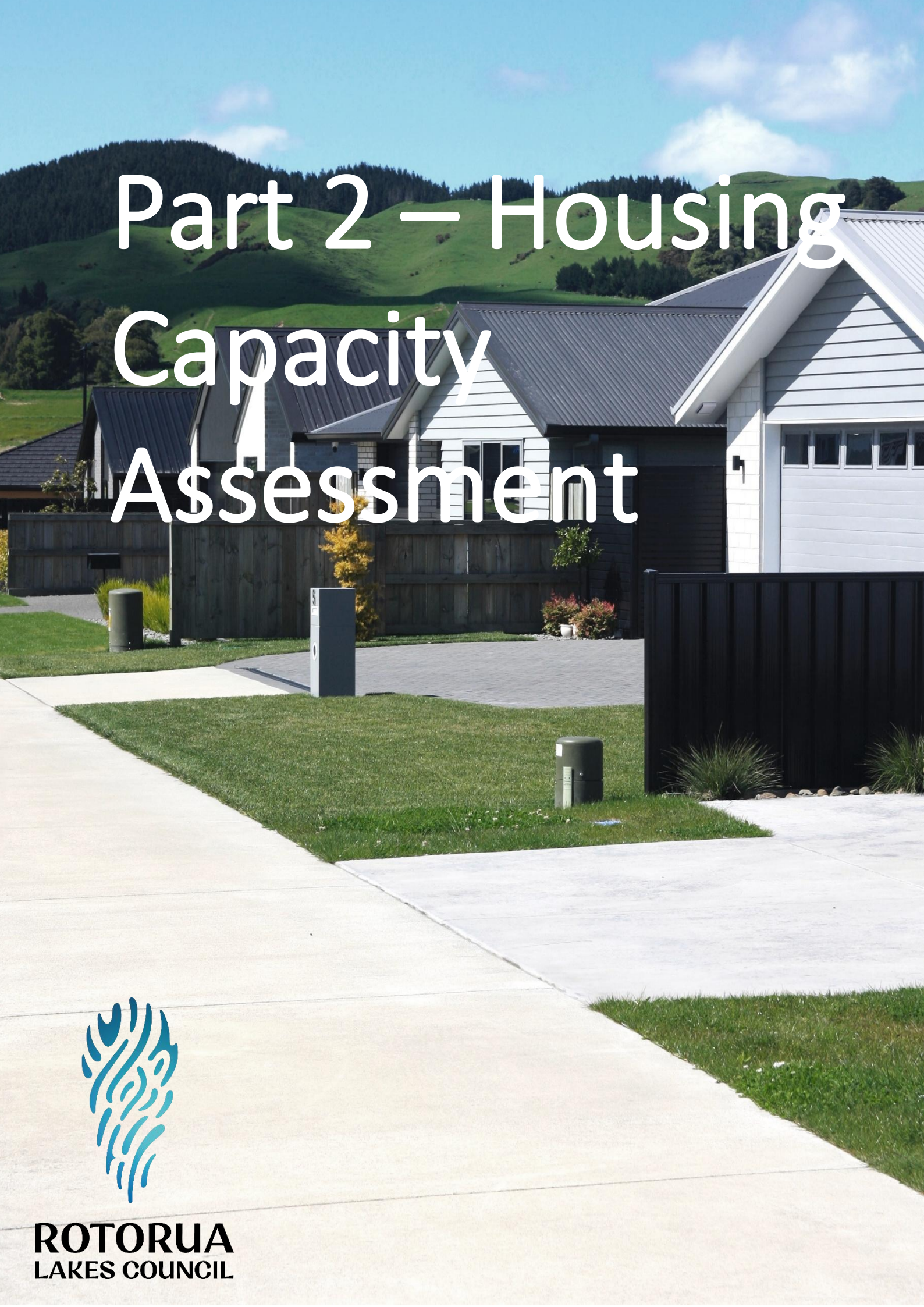
Ngāti Whakaue's housing development initiatives are expected to have a positive impact on Māori housing demand and supply in Rotorua's urban environment. They also provide a blueprint that may help unlock other Whenua Māori zoned or identified for urban housing development over time.

4.4 Summary of Māori Housing Demand in Rotorua

Māori housing demand is a sub-set of total housing demand discussed in Section 3 of this HBA, but it has specific needs in terms of its mix of dwelling types and sizes. With Rotorua's Māori population accounting for a much higher share of the total population compared to the national average, Māori housing demand is a key issue for the Council and wider Rotorua community. Rotorua District currently performs poorly relative to most other districts in terms of Māori home ownership and overcrowded living conditions.

There are a large share of iwi that whakapapa to the Rotorua urban area that live outside of their rohe which indicates potential for more net migration of Māori to Rotorua if those iwi wish to move home in the future. Total Māori housing demand over the long term will depend on which population growth projections play out – with 2018 based projections showing a large difference between medium and high growth projections (and the drivers of those projections). While long term Māori housing demand has been estimated at 1,550 additional dwellings over the 30 years to 2050, supply of many more houses is needed to help reduce overcrowding for this important part of the Rotorua community. Large scale housing developments of Whenua Māori (or targeted at mana whenua) such as those currently being delivered by Ngāti Whakaue are expected to make a positive contribution to meeting Māori housing demand over the long term. Increased supply of market rentals and social housing is also key for Māori living in Rotorua while home ownership rates remain low.

Ongoing monitoring of Māori housing demand and supply (including on Whenua Māori and papakāinga generally) in Rotorua District will be key in gauging the success of changes implemented through PC9, the Papakāinga Toolkit being developed, and the timing of upzoning Whenua Māori identified in the FDS. Census data is expected to be the most reliable way to monitory Rotorua's relative performance on Māori housing indicators.



Part 2 – Housing Capacity Assessment

ROTORUA
LAKES COUNCIL

5 Plan Enabled Capacity

This section quantifies the maximum zoned dwelling capacity that is provided under the current planning framework. It includes the capacity provided under the ODP (which includes PC9) (short to medium term) and the selected future growth areas from the Rotorua FDS 2024 (long term). M.E's Rotorua Residential Capacity Model (2024) calculates infill and redevelopment capacity in existing urban areas as well as capacity in areas classified as greenfield land. The plan enabled capacity reflects the zoned capacity without the application of infrastructure constraints. A comparison with plan enabled capacity estimated in the HBA 2021 is provided and key drivers of change are discussed.

Estimating the plan enabled capacity is a key part of the HBA assessment. It is critical to understand the level of development opportunity enabled for the market by the planning provisions across Rotorua's current and future urban environment.

In accordance with the NPS-UD, the plan enabled capacity represents the level of development opportunity theoretically enabled by the planning provisions and therefore generally reflects the highest level of development at the greatest intensity enabled on each parcel. Importantly, this stage of capacity is unlikely to reflect the level of growth within the urban environment. Take up of this plan-enabled opportunity through dwelling growth is instead more likely to occur at a level closer to growth in demand and at intensities (including typologies and sizes) able to be sustained by different parts of the market through time.

5.1 Structure of Development Pathways and Dwelling Options Modelled

M.E's Rotorua Residential Capacity Model operates at a parcel-level to calculate the number of additional dwellings that could be accommodated on each site with application of the planning provisions and taking into account other local or site-level factors that are likely to affect the development potential on each parcel.

Structure of Development Pathways and Dwellings Options Modelled

Capacity within Rotorua's current and future urban environment is classified into location types discussed below. Appendix 2 contains an updated map that classifies land parcels enabling housing within the urban environment by these location types. These location types form important distinctions for the assessment when considering the potential types of development provided by different parts of the market:

- Brownfield areas: these are sites within the existing urban extent that are already developed into urban uses. Additional capacity could occur through either:

- infill development, where additional dwellings can be accommodated on vacant portions of sites without the removal or demolition of any existing dwellings (e.g. backyard subdivision); or
- redevelopment, where the existing buildings are demolished, with the site redeveloped to a greater intensity.

- Underutilised Urban Land ("UUL"): there are a number of larger parcels within Rotorua's existing urban extent that are currently either vacant or contain only low levels of urban uses[69]. These are generally able to be developed at a larger scale than brownfield infill or redevelopment sites.
- Greenfield areas: these are areas for future urban expansion that are not yet urbanised. They are defined for future urbanisation based on their zoned status in accordance with the NPS-UD definitions by assessment time period[70].

Multiple dwelling typologies are modelled on each parcel, to reflect the range of development options enabled on each site. Depending on the zone, these include:

- Detached dwellings: these range from smaller two-storey detached dwellings on smaller sites up to larger single level detached dwellings on general suburban scale sites.
- Attached dwellings: these are attached dwellings ranging from suburban-scale attached pairs or duplex dwellings, up to terraced dwellings and townhouses. A further disaggregation into more and less intensive ends of this range is provided in the detailed output tables in Appendix 3.
- Apartment dwellings: these range from low-rise walk-up, mid-rise and high-rise apartment buildings. They include buildings consisting entirely of residential uses, as well as buildings containing a mixture of residential and non-residential uses in commercial zones.

The capacity results also include maximum dwelling yield for infill, redevelopment and greenfield capacity across all modelled typologies. Here, the model returns the greatest yield for each parcel out of the modelled typology options, which are then aggregated to area totals. Under the plan enabled capacity, the redevelopment option will always represent the greatest yield. However, under the commercially feasible capacity, often only a sub-set of the potential development options will be feasible (with the option differing between parcels), meaning that the model selects the option that is feasible[71].

Outputs, in terms of net additional dwellings by type, are calculated for each parcel, then aggregated to reporting area totals.

Technical Approach

An overview of the key technical stages of our approach to calculating plan enabled capacity is contained in Appendix 3. The analysis builds off and extends the detailed technical and GIS assessment base

[69] UUL parcels have been identified by RLC during the 2001 HBA and revised during the 2024 HBA.

[70] Greenfield areas in the short and medium term are live zoned under the ODP. Further urban greenfield FDS growth areas are included in the long term.

[71] For example, under the district plan, a particular property parcel could be developed to contain either two standalone houses or four duplex dwellings. The maximum yield would be four under the plan enabled capacity. However, it may only be commercially feasible to develop the site into standalone dwellings, in which case the maximum feasible yield would be two.

undertaken during the 2021 HBA[72] and subsequent residential intensification (PC9) and FDS assessments. The assessment calculates the capacity for net additional dwellings across Rotorua's urban environment as enabled under the Plan.

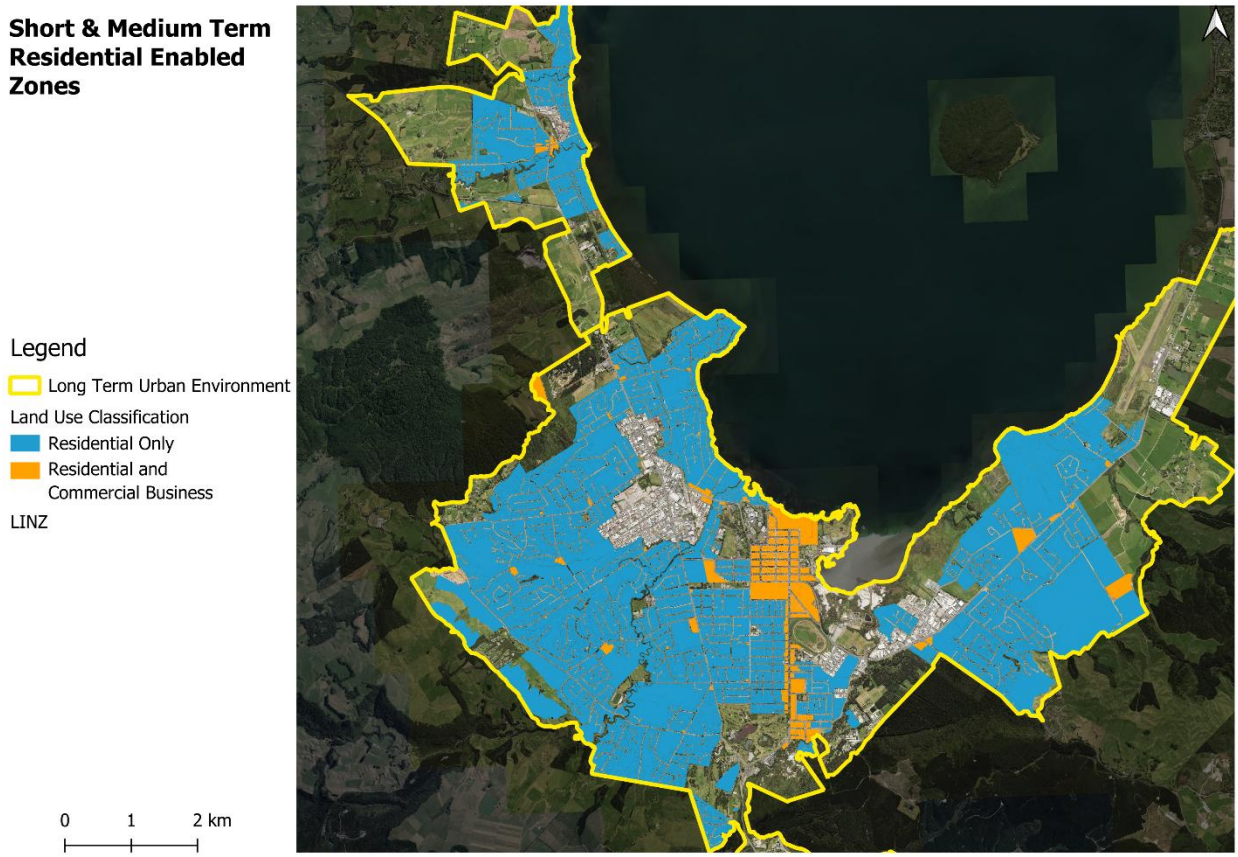
Areas of zoned opportunity that are excluded from development by other requirements of the Plan or other local constraints have been removed from the capacity identified within this section. An updated map showing excluded land parcels within the urban environment is contained in Appendix 4.

5.2 Short and Medium Term Plan Enabled Capacity

5.2.1 Updated Short to Medium Term Capacity

The following short-medium term plan enabled capacity results relate to the areas classified as Residential Only (blue) or Commercial Business and Residential (orange) in Figure 5.1.[73] These areas represent the zones in the defined urban environment that enable housing in the ODP.[74]

Figure 5.1 – Short/Medium Term Land Zoned for Housing in Rotorua's Urban Environment



[72] Further technical information of key stages is contained within the 2021 HBA technical report.

[73] Areas shaded grey are within the urban environment but do not enable housing at all, or withing this time period.

[74] The Transitional Residential to Light Industrial Zone is included as housing capacity in the short and medium term only.

There is a total short to medium term plan enabled capacity for a net additional 216,300 dwellings across Rotorua's current and future urban environment. The plan enabled capacity is summarised by dwelling typology and location type within each reporting area in Table 5.1 below, with more detailed outputs by typology and development pathway contained in Appendix 5.

Table 5.1- Short/Medium Term Plan Enabled Urban Dwelling Capacity (2023-2033)

Reporting Area	Capacity by Typology				Capacity by Location Type		
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Brownfield	Underutilised Urban Land	Greenfield
Ngongotahā	5,500	9,900	15,500	**16,900**	15,700	1,200	-
Western	30,500	53,900	91,200	**96,500**	90,100	1,500	4,900
Central	4,500	9,800	56,600	**57,100**	56,500	600	-
Eastern	16,700	30,000	40,600	**45,700**	32,500	6,200	7,000
Total	**57,100**	**103,700**	**203,900**	**216,300**	**194,900**	**9,500**	**11,900**

Source: M.E. Rotorua Residential Capacity Model, 2024.

A very high proportion of the total plan enabled capacity occurs within Rotorua's existing urban area (95%). This largely occurs through the ability to redevelop brownfield existing sites to a higher intensity. The intensification provisions brought in through PC9 enable a substantially greater level of development than the previous provisions under which much of the urban area was developed. A large share of this capacity exists through the potential to construct apartments. This occurs through higher density apartments both within the commercial and High Density Residential (HDR) zones, as well as low-rise (mainly walk-up) apartments also enabled across most of the suburban residential areas through the Medium Density Residential (MDR) zone.

A smaller share (5%; +9,500 dwellings) of the capacity within Rotorua's existing urban area is within areas of UUL. Although only a minor share of the existing urban total, a number of these areas are likely to form significant future development options as a result of their larger size and low levels of existing development.

There is also sizeable plan enabled opportunity for less intensive dwelling options within the existing urban area if these sites were instead redeveloped at a lower intensity. There is a total plan enabled opportunity for over 70,000 detached dwellings, of which around 60,000 are through redevelopment of brownfield sites; or capacity for over 100,000 attached dwellings, of which over 80,000 are through further intensification of brownfield sites.

Under the current zoning extent, there is a plan enabled capacity for up to 11,900 net additional dwellings within the greenfield areas, with a maximum capacity for an additional 7,500 detached dwellings. This is distributed between the greenfield areas of expansion in the Eastern catchment (59%; +7,000 dwellings), and the greenfield areas around Pukehāngi in the Western catchment (41%; +4,900 dwellings). Importantly, these are the theoretical dwelling yields enabled by the planning provisions (without consideration for infrastructure capacity). The actual dwelling yields achieved across these areas, once developed, are likely to be substantially lower, which is set out in Section 8 on RER capacity.

Over two-thirds of the plan enabled capacity is focussed into the more central parts of the urban environment – i.e. the Western and Central reporting areas. This is driven mainly by redevelopment potential, with the largest areas of outward urban expansion occurring at the eastern and western urban edges in the short to medium term.

5.2.2 Changes Since HBA 2021

The modelled plan enabled capacity under the updated operative provisions is nearly ten times that previously enabled under the ODP. Plan enabled capacity has increased from 23,700 net additional dwellings in the 2021 HBA, to over 200,000 net additional dwellings in this updated assessment. The introduction of the intensification provisions through PC9 has resulted in very large increases to Rotorua's plan enabled capacity in the short to medium term. Table 5.2 below, summarises the net change in plan enabled dwelling capacity in comparison to that modelled under the 2021 HBA.

Table 5.2 - Comparison of Short/Medium Term Plan Enabled Dwelling Capacity with HBA 2021

Reporting Area	Capacity by Typology				Capacity by Location Type		
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Brownfield	Underutilised Urban Land	Greenfield
	2021 HBA Plan Enabled Capacity						
Ngongotahā	1,500	-	90	**1,600**	1,300	300	-
Western	6,000	-	300	**6,400**	4,500	400	1,500
Central	800	1,300	8,100	**10,100**	10,000	90	-
Eastern	5,600	-	90	**5,700**	1,800	1,700	2,200
Total	**13,900**	**1,300**	**8,700**	**23,700**	**17,600**	**2,500**	**3,600**
	2024 HBA Plan Enabled Capacity						
Ngongotahā	5,500	9,900	15,500	**16,900**	15,700	1,200	-
Western	30,500	53,900	91,200	**96,500**	90,100	1,500	4,900
Central	4,500	9,800	56,600	**57,100**	56,500	600	-
Eastern	16,700	30,000	40,600	**45,700**	32,500	6,200	7,000
Total	**57,100**	**103,700**	**203,900**	**216,300**	**194,900**	**9,500**	**11,900**
	Net Change in Plan Enabled Capacity (2021 to 2024 HBA)						
Ngongotahā	4,000	9,900	15,400	**15,300**	14,400	900	-
Western	24,500	53,900	90,900	**90,200**	85,600	1,100	3,500
Central	3,700	8,400	48,400	**47,000**	46,500	500	-
Eastern	11,100	30,000	40,500	**40,000**	30,700	4,500	4,800
Total	**43,300**	**102,300**	**195,300**	**192,600**	**177,300**	**7,000**	**8,300**

Source: M.E. Rotorua Residential Capacity Model, 2024 and 2021.

The largest increases in capacity have occurred within the existing urban area through the intensification potential. At the plan enabled level, the largest increases are through the ability to develop sites into more intensive dwelling typologies, with most sites previously only enabled to develop as lower density detached dwellings. The differences in density between typologies are sizeable, resulting in significantly higher potential yields within most parcels, seen in the large net increases across the attached and apartment

typologies. There are also large in increases in plan enabled detached dwellings. These occur both within the existing urban and greenfield areas.

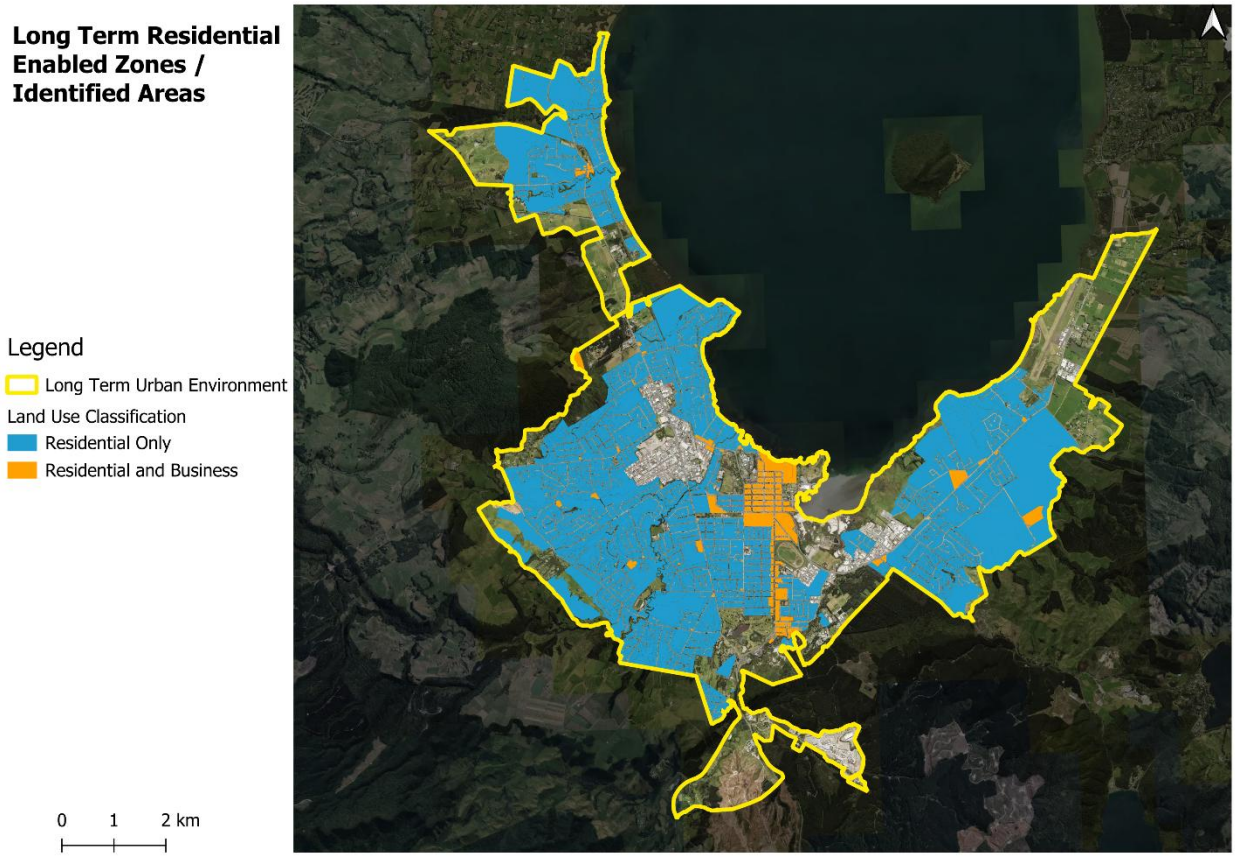
Increases in capacity within the greenfield areas are also sizeable, increasing from 3,600 dwellings under the 2021 HBA, to 11,900 dwellings within the updated assessment. This is due to the increased dwelling range and densities enabled within the same greenfield areas, rather than any geographic expansion to these areas in the short to medium term.

5.3 Long Term Plan Enabled Capacity

5.3.1 Updated Long Term Capacity

The following long term plan enabled capacity results relate to the areas classified as Residential Only (blue) or Commercial Business and Residential (orange) in Figure 5.2. These areas represent the zones in the defined urban environment that enable housing in the ODP, as well as the areas identified in the Rotorua FDS 2024. Where the FDS indicates changes to zoning in existing urban areas, this supersedes the ODP planning provisions in those locations.

Figure 5.2 – Long Term Land Zoned for Housing in Rotorua's Urban Environment



Rotorua's plan enabled capacity increases by a further 64,300 dwellings in the long term to a total net additional 280,500 dwellings to the existing dwelling stock, as summarised in Table 5.3 and Table 5.4 below.

Increases in plan enabled capacity occur through the application of the FDS growth areas. These are a combination of additional areas of greenfield expansion and further upzoning within parts of the existing urban area. The latter includes further expansion of the HDR zone around surrounding the City Centre in the Central reporting area, as well as introduction of this zone in areas surrounding the main commercial centres (Ngongotahā and Owhata) in the Ngongotahā and Eastern reporting areas.

Table 5.3- Long Term Plan Enabled Urban Dwelling Capacity (2023-2053)

Reporting Area	Capacity by Typology				Capacity by Location Type		
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Brownfield	Underutilised Urban Land	Greenfield
Ngongotahā	11,600	19,800	26,100	**29,900**	19,700	1,200	9,000
Western	32,400	57,000	93,500	**99,600**	90,100	1,500	8,000
Central	4,500	10,500	65,300	**65,900**	65,300	600	-
Eastern	22,800	40,400	78,400	**85,100**	50,200	19,500	15,400
Total	**71,300**	**127,700**	**263,300**	**280,500**	**225,300**	**22,800**	**32,400**

Source: M.E. Rotorua Residential Capacity Model, 2024.

Table 5.4 – Change in Plan Enabled Urban Dwelling Capacity between Short-Medium Term and Long Term

Reporting Area	Capacity by Typology				Capacity by Location Type		
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Brownfield	Underutilised Urban Land	Greenfield
	Short to Medium-Term Capacity						
Ngongotahā	5,500	9,900	15,500	**16,900**	15,700	1,200	-
Western	30,500	53,900	91,200	**96,500**	90,100	1,500	4,900
Central	4,500	9,800	56,600	**57,100**	56,500	600	-
Eastern	16,700	30,000	40,600	**45,700**	32,500	6,200	7,000
Total	**57,100**	**103,700**	**203,900**	**216,300**	**194,900**	**9,500**	**11,900**
	Long-Term Capacity						
Ngongotahā	11,600	19,800	26,100	**29,900**	19,700	1,200	9,000
Western	32,400	57,000	93,500	**99,600**	90,100	1,500	8,000
Central	4,500	10,500	65,300	**65,900**	65,300	600	-
Eastern	22,800	40,400	78,400	**85,100**	50,200	19,500	15,400
Total	**71,300**	**127,700**	**263,300**	**280,500**	**225,300**	**22,800**	**32,400**
	Net Change in Plan Enabled Capacity (Short-Medium-Term to Long-Term)						
Ngongotahā	6,100	9,900	10,600	**13,000**	4,000	-	9,000
Western	1,900	3,100	2,300	**3,100**	-	-	3,100
Central	-	700	8,800	**8,800**	8,800	-	-
Eastern	6,100	10,400	37,800	**39,400**	17,700	13,300	8,500
Total	**14,200**	**24,000**	**59,400**	**64,300**	**30,400**	**13,300**	**20,500**

Source: M.E. Rotorua Residential Capacity Model, 2024.

The largest increase of capacity in the long term occur in the outer parts of Rotorua's urban environment. Over four-fifths (82%) of the net increase occurs in the Ngongotahā and Eastern reporting areas. This increases the share of plan enabled capacity in these outer areas from 29% in the short to medium term, to 41% in the long term.

Significant greenfield plan enabled capacity is added in the long term, with the further urban expansion growth areas under the FDS. Greenfield capacity increases by a further 20,500 dwellings, to reach a total plan enabled capacity for 32,400 dwellings. However, the actual realised increases in growth potential in these areas is likely to be substantially lower, as set out in the RER capacity in Section 8. The plan enabled capacity reflects the most intensive dwelling mix enabled by the plan, with a significantly different mix of dwellings, and therefore yield, likely to be realised in these areas.

5.3.2 Changes Since HBA 2021

The additional dwelling capacity enabled through the FDS growth areas further increases the plan enabled capacity from that modelled in the 2021 HBA. Table 5.5 below shows that the net difference in capacity increases to over 250,000 more dwellings enabled than in the 2021 HBA long term. The long term plan enabled capacity of 280,500 additional dwellings in this assessment, compares to a long term capacity of 29,800 net additional dwellings modelled under the 2021 HBA.

Table 5.5 - Comparison of Long Term Plan Enabled Dwelling Capacity with HBA 2021

Reporting Area	Capacity by Typology				Capacity by Location Type		
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Brownfield	Underutilised Urban Land	Greenfield
	2021 HBA Plan Enabled Capacity						
Ngongotahā	1,900	90	90	**2,100**	1,300	300	2,300
Western	10,200	600	300	**11,000**	4,500	400	1,600
Central	3,500	500	9,600	**13,600**	11,400	90	-
Eastern	3,000	200	10	**3,100**	1,800	1,700	4,400
Total	**18,600**	**1,300**	**10,000**	**29,800**	**19,000**	**2,500**	**8,300**
	2024 HBA Plan Enabled Capacity						
Ngongotahā	11,600	19,800	26,100	**29,900**	19,700	1,200	9,000
Western	32,400	57,000	93,500	**99,600**	90,100	1,500	8,000
Central	4,500	10,500	65,300	**65,900**	65,300	600	-
Eastern	22,800	40,400	78,400	**85,100**	50,200	19,500	15,400
Total	**71,300**	**127,700**	**263,300**	**280,500**	**225,300**	**22,800**	**32,400**
	Net Change in Plan Enabled Capacity (2021 to 2024 HBA)						
Ngongotahā	9,700	19,700	26,100	**27,800**	18,400	900	6,700
Western	22,300	56,400	93,200	**88,600**	85,700	1,100	6,400
Central	900	10,000	55,800	**52,300**	53,900	500	-
Eastern	19,800	40,300	78,300	**82,000**	48,400	17,800	11,000
Total	**52,700**	**126,300**	**253,300**	**250,800**	**206,300**	**20,300**	**24,100**

Source: M.E. Rotorua Residential Capacity Model, 2024 and 2021.

In the long term, the difference in greenfield plan enabled capacity from that modelled under the 2021 HBA increases to 24,100 additional dwellings. The additional areas of greenfield urban expansion enabled under the FDS are larger than those modelled in the long term in the Spatial Plan.

5.4 Plan Enabled Capacity Summary

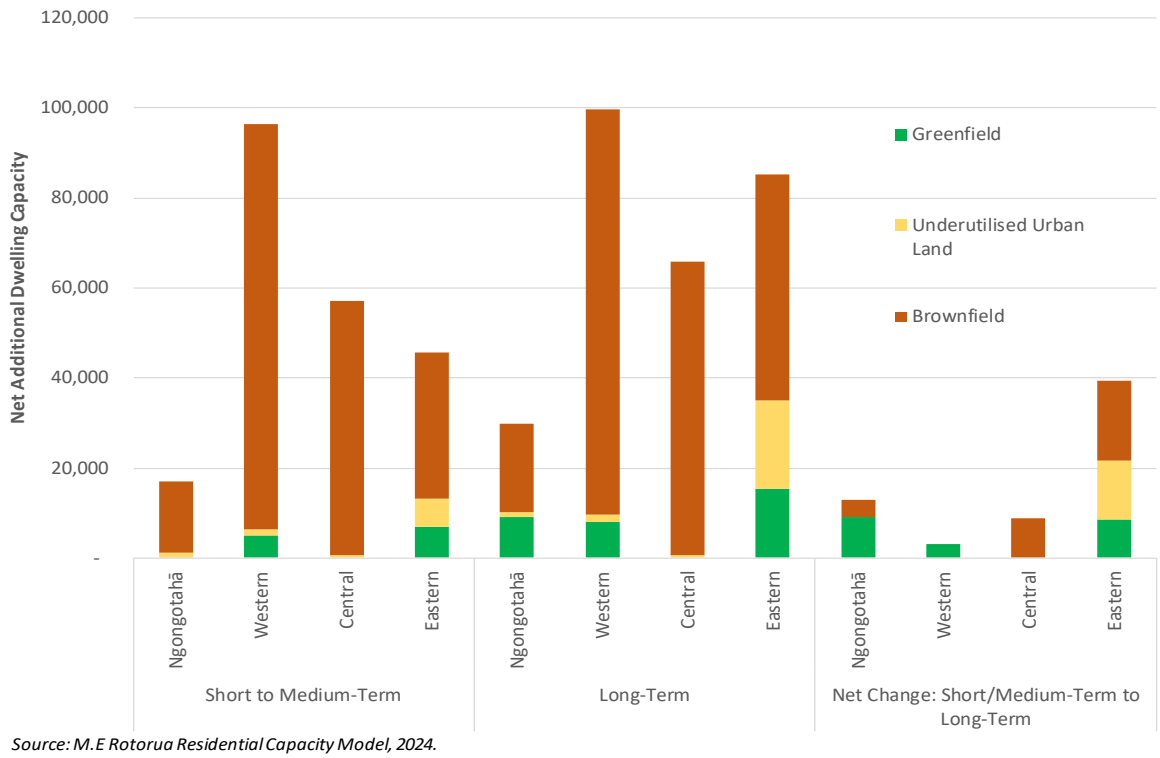
The total modelled plan enabled capacity for Rotorua's urban environment is summarised below in Figure 5.3. It shows the total capacity by location type within each reporting area. Capacity is shown for the short to medium term and the long term, with the net change in capacity between the time periods displayed in the final portion of the graph.

Overall, the graph shows that Rotorua has large development potential enabled under the plan, particularly within existing urban areas. The largest increases in capacity in the long term occur in the outer parts of the urban environment through a combination of additional greenfield areas and intensification opportunity to support the potential development of future suburban nodes in these locations.

The Western reporting area contains the largest share of plan enabled capacity within each time period, largely as a result of the potential development opportunity through intensification within the brownfield area. The largest net increase in capacity between the modelled time periods occurs in the Eastern reporting area, making this the second largest area of capacity in the long term.

Ngongotahā reporting area contains the smallest overall share of capacity in both time periods. However, significant greenfield capacity has been added to this reporting area in the long term, meaning that it is likely to attract a higher share of the city's urban growth.

Figure 5.3 – Summary of Plan Enabled Capacity by Reporting Area, Location Type and Time Period



Source: M.E Rotorua Residential Capacity Model, 2024.

6 Commercially Feasible Capacity

This section quantifies the plan enabled capacity that is commercially feasible to develop for a commercial developer. It shows the range of plan enabled capacity available to the market that is estimated to be commercially feasible (profitable) to construct. Importantly, it shows the range of development opportunities available, a share of which are likely to be taken up by the market. A comparison with commercially feasible housing capacity estimated in the HBA 2021 is provided and key drivers of change are discussed.

6.1 Approach

The commercially feasible capacity estimates the share of plan enabled capacity that would represent potentially feasible development options for commercial developers to construct a dwelling(s). The calculations are undertaken at the parcel level to test the commercial feasibility of each of the plan enabled dwelling development options modelled on each site.

Importantly, commercially feasible capacity should not be confused with growth – it is a measure of the potentially feasible capacity development options, some of which is likely to get taken up by the commercial market with growth.

In accordance with the NPD-UD, the assessment models the feasibility of development for commercial developers within the profit-driven part of the market. The profit-driven commercial sector is an important part of the market and typically delivers the largest share of dwelling supply in most urban markets. However, there are other parts of the market that also make significant contributions to dwelling supply. Within the Rotorua context, social housing providers, such as Kāinga Ora, make important contributions to dwelling supply that are focussed on meeting demand within the lower dwelling value bands[75]. Many of the developments being undertaken by these other parts of the market may not reflect viable options for a commercial developer. The relative and net contribution of these other parts of the market are discussed further in Section 2.2.

Detailed property parcel level commercial feasibility models were used to test the feasibility of each plan enabled development option on each parcel that was identified as able to be constructed under the planning provisions. The modelling approach takes into account the costs of development to bring each dwelling option to market. It compares these costs to the estimated sales price of the constructed dwelling to determine the profit margin that may occur. Dwellings estimated to achieve a sufficient margin are considered to represent commercially feasible capacity options.

M.E have further developed the Rotorua Residential Capacity Model (2024) to undertake the feasibility assessment for the 2024 HBA. M.E's feasibility modelling capability for Rotorua was initially developed in 2020 to inform the 2021 HBA and further developed to model the feasibility of the intensification provisions during 2022 and 2023. The 2024 HBA modelling approach extends this capacity to reflect the updated

[75] Furthermore, many of the developments being undertaken by these other parts of the market may not reflect viable options for a commercial, profit-driven developer, and are therefore only reflected to a limited extent within the modelled feasible capacity.

residential market conditions and development patterns, as well as the final intensification provisions made operative through PC9. The technical modelling approach is undertaken in accordance with the NPS-UD and is summarised in Appendix 6.

In accordance with the NPS-UD, the assessment is based on current costs and prices within the 2023 market for the short and medium term. Additional scenarios are provided for the long term, which allow a gradual level of growth within the market through time (as a function of population growth). Development opportunities correspondingly change as demand increases for dwellings and different development types. This scenario is subsequently used in the sufficiency and housing affordability assessments to test a more likely range of potential outcomes.

Commercially feasible capacity has been calculated across the total urban plan enabled zoned opportunity. This is important because infrastructure constraints can apply to different areas within the city at the wider catchment scale. Infrastructure is able to support certain levels of growth occurring across each catchment in aggregate, rather than constraining specific areas within the catchment. The assessment identifies the range of development opportunities within the wider infrastructure catchments that are likely to be feasible to develop if infrastructure were supplied.

The commercially feasible capacity outputs are expressed in terms of net additional dwellings. The outputs follow the same structure by dwelling typology, development pathway, location type and reporting area set out in Section 5.1.

6.2 Short and Medium Term Commercially Feasible Capacity

6.2.1 Updated Short to Medium Term Feasible Capacity

The following short-medium term commercially feasible capacity results relate to the urban environment short-medium term plan enabled capacity results contained in Section 5.2. They show the portion[76] of the that plan enabled capacity that is estimated to represent potentially feasible development options for commercial developers.

The estimated commercially feasible capacity in Rotorua's urban environment in the short to medium term is summarised in Table 6.1, with full outputs contained in Appendix 7. The upper portion of the table contains the estimated commercially feasible capacity, with the lower portion of the table expressing this as a share of modelled plan enabled capacity. The table shows a total feasible capacity for a net additional 35,700 dwellings. When current prices are applied, the feasible capacity equates to less than one-fifth (17%) of the plan enabled capacity.

Over two-thirds of the feasible capacity is modelled to occur within the brownfield areas, with a feasible capacity of 24,900 additional dwellings. In the current market, infill development accounts for a greater proportion of the feasible brownfield capacity, with the largest shares from detached dwellings and less

[76] It should be noted that in some areas and typologies the feasibility modelling takes a more conservative approach through applying a reduced density (in terms of average land area per dwelling) than that enabled under the Plan. Together with only a share of parcels being feasible to develop, this accounts for some of the difference in dwelling yield between the plan enabled and feasible capacity outputs.

intensive attached dwelling typologies. There is a further estimated feasible capacity of an additional 2,500 dwellings on areas of UUL within the existing urban area.

Table 6.1- Short/Medium Term Commercially Feasible Dwelling Capacity

Reporting Area	Capacity by Typology				Capacity by Location Type		
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Brownfield	Underutilised Urban Land	Greenfield
	Short to Medium-Term Commercially Feasible Capacity						
Ngongotahā	2,400	1,600	60	**2,800**	2,400	400	-
Western	14,600	14,000	10	**19,300**	14,700	900	3,800
Central	1,900	2,600	-	**3,300**	3,200	100	-
Eastern	6,800	8,300	-	**10,300**	4,700	1,100	4,500
Total	**25,700**	**26,400**	**70**	**35,700**	**24,900**	**2,500**	**8,300**
	Commercially Feasible Capacity Share of Plan Enabled Capacity						
Ngongotahā	44%	16%	0%	**17%**	15%	35%	0%
Western	48%	26%	0%	**20%**	16%	58%	77%
Central	42%	26%	0%	**6%**	6%	19%	0%
Eastern	41%	27%	0%	**23%**	14%	18%	65%
Total	**45%**	**25%**	**0%**	**17%**	**13%**	**26%**	**70%**

Source: M.E. Rotorua Residential Capacity Model, 2024.

The currently feasible brownfield capacity equates to only around 13% of the total capacity enabled in these areas under the Plan. Only minor shares of the more intensive development opportunities enabled within the Plan are yet feasible within the Rotorua market. Less than 1% of the apartment capacity is estimated to be feasible for commercial developers, with this typology accounting for a large share of plan enabled capacity. Higher shares of the less intensive typologies are currently feasible, which are currently more established within the local market.

A larger portion of the plan enabled greenfield capacity is estimated to be currently commercially feasible. There is a modelled capacity for a net additional 8,300 dwellings in these areas, amounting to 70% of the plan enabled opportunity. A higher share of the short to medium term greenfield land areas are estimated to be feasible to develop, but with a reduced density than the maximum enabled under the Plan.

The largest portions of commercially feasible capacity occur in the Western (54%; 19,300 dwellings) and Eastern (29%; 10,300 dwellings) reporting areas. This is due to a combination of the current size of these areas and their greenfield capacity, which has higher levels of feasibility.

There is an estimated feasible capacity of 3,300 dwellings within the Central reporting area, with the greatest proportion as attached dwellings. A lower share of this reporting areas plan enabled capacity is estimated to be currently feasible. This is due to more intensive apartment typologies accounting for higher shares of the enabled development opportunity, which are generally not yet feasible within the Rotorua market.

The commercially feasible capacity is identical between the short and medium terms due to the application of current costs and prices in accordance with the technical requirements of the NPS-UD. These requirements hold the market constant, therefore limiting change in feasible capacity to that occurring

only as a function of changes in planning provision (which is equal across the short and medium term in Rotorua).

6.2.2 Changes Since HBA 2021

There is a large increase in estimated commercially feasible capacity in the short to medium term from that estimated during the 2021 HBA. The commercially feasible capacity increases by 28,500 dwellings, from an estimated 7,300 additional dwellings in the 2021 HBA to the current estimate of 35,700 dwellings. This is summarised in Table 6.2 below, which shows the net changes in estimated feasible capacity between the 2021 HBA and current assessment.

Table 6.2 - Comparison of Short/Medium Term Commercially Feasible Capacity with HBA 2021

Reporting Area	Capacity by Typology				Capacity by Location Type		
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Brownfield	Underutilised Urban Land	Greenfield
	2021 HBA Short/Medium-Term Commercially Feasible Capacity						
Ngongotahā	400	-	-	**400**	200	200	-
Western	2,300	-	-	**2,300**	700	200	1,400
Central	100	900	1,500	**2,500**	2,400	90	-
Eastern	2,000	-	70	**2,000**	200	300	1,500
Total	**4,800**	**900**	**1,600**	**7,300**	**3,500**	**800**	**3,000**
	2024 HBA Short/Medium-Term Commercially Feasible Capacity						
Ngongotahā	2,400	1,600	60	**2,800**	2,400	400	-
Western	14,600	14,000	10	**19,300**	14,700	900	3,800
Central	1,900	2,600	-	**3,300**	3,200	100	-
Eastern	6,800	8,300	-	**10,300**	4,700	1,100	4,500
Total	**25,700**	**26,400**	**70**	**35,700**	**24,900**	**2,500**	**8,300**
	Net Change in Feasible Capacity (2021 to 2024 HBA)						
Ngongotahā	2,000	1,600	60	**2,400**	2,200	200	-
Western	12,200	14,000	10	**17,000**	13,900	700	2,400
Central	1,700	1,700	- 1,500	**800**	700	20	-
Eastern	4,900	8,300	- 70	**8,300**	4,400	800	3,000
Total	**20,900**	**25,500**	**- 1,500**	**28,500**	**21,300**	**1,700**	**5,400**

Source: M.E. Rotorua Residential Capacity Model, 2024 and 2021.

The largest increases in feasible capacity occur within the brownfield areas since the 2021 HBA. This is predominantly due to the large increases in development opportunity, and its effect on feasibility, with the introduction of the intensification provisions through PC9. Within the brownfield area, the largest net increases occur within the Western reporting area, which is related to the large size of this area.

There are also sizeable increases in feasible capacity within the greenfield areas. Feasible capacity within the greenfield areas estimated in the current assessment is over double that in the 2021 HBA. In the short to medium term, this is due to the increased potential dwelling yields across these areas. An important contributor is the greater range of dwelling types that are enabled to occur, which can significantly increase the overall yield. The estimated realised dwelling development patterns within these areas is assessed in relation to RER capacity in Section 8.

Increased feasibility as a result of the greater development opportunity enabled through the intensification provisions has occurred in several ways. This includes the increased yields able to be achieved on each parcel, the greater range of dwelling typologies, and the ability to better scale dwelling sizes to required site sizes within the context of the local market. The impact of the change in provisions is a key component of the impact on planning, which is discussed further in Section 10.

Changes in market conditions between the two assessments have also affected the feasibility of capacity. Increases in construction costs have been a main factor, resulting in a reduced feasible capacity for apartments. However, the increased development opportunity through the intensification provisions has improved feasibility across most dwelling typologies relative to the levels of feasibility that would otherwise occur in the previous planning provisions that were applied in the 2021 HBA.

6.3 Long Term Commercially Feasible Capacity

6.3.1 Updated Long Term Feasible Capacity

The following long term commercially feasible capacity results relate to the urban environment long term plan enabled capacity results contained in Section 5.3. They show the portion of the long term plan enabled capacity that is estimated to represent potentially feasible development options for commercial developers.

In alignment with options provided in the NPS-UD a 'Market Growth Scenario' - has been developed to assess long term capacity. Unlike the current costs and prices scenario required to assess the short and medium term period, this scenario better reflects the observed changes in the market through time. It assumes a level of growth in the market, where costs and prices gradually change through time as demand grows. Market growth is an important driver of feasibility within urban economies where development opportunities correspondingly change as demand increases for dwellings and different development types.

Under the Market Growth Scenario, an annual growth rate of 2.5% has been applied to dwelling sales prices and land prices. All other costs have been grown by an annual average rate of 1.5%. Growth rates are based on the national outlook from the New Zealand Treasury Half Year Economic Update, factored for the long term difference between the Bay of Plenty Region and New Zealand trends. Importantly, the growth in prices has allowance for both a growth in realised prices within the market as well as an increase in the rate of change in potential prices from market demand growth and acceptance of typologies.

The commercially feasible capacity is estimated to increase to a net additional 79,600 dwellings across Rotorua's urban environment in the long term. This is net increase in capacity of a further 43,800 dwellings over that estimated for the short to medium term as shown in Table 6.3 and Table 6.4.

In the long term, the estimated commercially feasible capacity equates to around 28% of that enabled under the Plan. A greater proportion of sites contain feasible development options, with the overall 28% share of capacity a reflection of the proportion of total potential yield[77]. The share of plan enabled capacity

[77] For instance, a site may be feasible to develop with a lower yield as a less intensive typology (e.g. terraced dwellings) than the maximum yield enabled in more intensive typologies (e.g. apartments).

estimated as feasible is higher for the less intensive typologies that are already established within the market, with lower rates within the more intensive typologies.

The largest increases in feasible capacity over the long term have occurred through the redevelopment capacity. Increases in redevelopment capacity have been focussed on non-apartment attached dwellings, followed by detached dwellings. The intensification provisions substantially increase the feasibility of redeveloping sizeable numbers of sites across Rotorua's suburban areas where many sites are able to be redeveloped to contain a significantly higher yield than their current level of development.

The non-apartment attached typologies (e.g. duplex pairs, terraced housing, horizontally-attached units) are likely to form an important driver of feasibility across Rotorua's urban environment over the medium to long term. Development of sites to contain these typologies substantially increases their yield, with a lower increase in construction costs and lower risk than more intensive apartment typologies. As observed in other locations, these typologies are also likely to have greater market acceptance through time and provide viable housing options for a substantial share of the future dwelling demand profile.

A portion of the enabled higher density apartment capacity is estimated to become feasible in the long term. There is an estimated feasible capacity of 6,900 apartments in the long term. These are concentrated into the Central reporting area, where the main capacity occurs through higher density apartments. Feasible capacity in other reporting areas is limited to low-rise apartments, with a likely focus on walk-up apartments.

Commercially feasible capacity in greenfield areas is estimated to increase to 16,900 dwellings in the long term. The increase in feasible capacity occurs mainly as a result of a geographic expansion to the extent of greenfield areas with the addition of FDS growth areas. However, the leasehold status of some additional greenfield areas added in the long term limits the commercial feasibility of these areas.

Table 6.3- Long Term Commercially Feasible Dwelling Capacity - Market Growth Scenario

Reporting Area	Capacity by Typology				Capacity by Location Type		
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Brownfield	Underutilised Urban Land	Greenfield
	Short to Medium-Term Commercially Feasible Capacity						
Ngongotahā	6,600	11,700	900	**12,300**	6,100	800	5,500
Western	22,100	36,700	900	**38,300**	30,400	1,300	6,700
Central	2,800	7,100	4,600	**11,300**	11,200	100	-
Eastern	9,300	16,700	600	**17,600**	10,700	2,100	4,800
Total	**40,800**	**72,200**	**6,900**	**79,600**	**58,300**	**4,300**	**16,900**
	Commercially Feasible Capacity Share of Plan Enabled Capacity						
Ngongotahā	57%	59%	4%	**41%**	31%	66%	61%
Western	68%	64%	1%	**38%**	34%	84%	84%
Central	62%	68%	7%	**17%**	17%	19%	0%
Eastern	41%	41%	1%	**21%**	21%	11%	31%
Total	**57%**	**57%**	**3%**	**28%**	**26%**	**19%**	**52%**

Source: M.E. Rotorua Residential Capacity Model, 2024.

Table 6.4 - Change in Commercially Feasible Urban Dwelling Capacity between Short-Medium Term and Long Term

Reporting Area	Capacity by Typology				Capacity by Location Type		
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Brownfield	Underutilised Urban Land	Greenfield
	Short to Medium-Term Capacity						
Ngongotahā	2,400	1,600	60	**2,800**	2,400	400	-
Western	14,600	14,000	10	**19,300**	14,700	900	3,800
Central	1,900	2,600	-	**3,300**	3,200	100	-
Eastern	6,800	8,300	-	**10,300**	4,700	1,100	4,500
Total	**25,700**	**26,400**	**70**	**35,700**	**24,900**	**2,500**	**8,300**
	Long-Term Capacity						
Ngongotahā	6,600	11,700	900	**12,300**	6,100	800	5,500
Western	22,100	36,700	900	**38,300**	30,400	1,300	6,700
Central	2,800	7,100	4,600	**11,300**	11,200	100	-
Eastern	9,300	16,700	600	**17,600**	10,700	2,100	4,800
Total	**40,800**	**72,200**	**6,900**	**79,600**	**58,300**	**4,300**	**16,900**
	Net Change in Plan Enabled Capacity (Short-Medium-Term to Long-Term)						
Ngongotahā	4,200	10,100	900	**9,500**	3,700	400	5,500
Western	7,500	22,800	900	**19,000**	15,700	400	2,900
Central	900	4,600	4,600	**8,000**	8,000	-	-
Eastern	2,400	8,400	600	**7,300**	6,000	1,000	200
Total	**15,100**	**45,800**	**6,900**	**43,800**	**33,400**	**1,800**	**8,600**

Source: M.E. Rotorua Residential Capacity Model, 2024.

6.3.2 Changes Since HBA 2021

There is also a substantive increase in commercially feasible capacity in the updated assessment in the long term from that estimated in the 2021 HBA. The table below shows that the estimated feasible capacity is nearly four times higher in the long term in the updated assessment. It increases by a further 58,700 dwellings from 20,900 dwellings in the 2021 HBA to 79,600 dwellings in the current assessment.

The largest differences in capacity occur within the existing urban environment. As set out a above, these are driven by the increased development opportunity enabled through PC9. The effect of this greater development opportunity on increasing feasibility is likely to strengthen through time as the market for attached typologies continues to grow and become more established.

Table 6.5 - Comparison of Long Term Commercially Feasible Dwelling Capacity with HBA 2021

Reporting Area	Capacity by Typology				Capacity by Location Type		
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Brownfield	Underutilised Urban Land	Greenfield
	2021 HBA Long-Term Commercially Feasible Capacity						
Ngongotahā	2,900	-	20	**3,000**	600	300	2,100
Western	4,100	-	-	**4,100**	2,200	400	1,500
Central	300	1,100	9,000	**10,300**	10,200	90	-
Eastern	3,500	-	-	**3,500**	700	500	2,300
Total	**10,800**	**1,100**	**9,000**	**20,900**	**13,700**	**1,300**	**6,000**
	2024 HBA Long-Term Commercially Feasible Capacity						
Ngongotahā	6,600	11,700	900	**12,300**	6,100	800	5,500
Western	22,100	36,700	900	**38,300**	30,400	1,300	6,700
Central	2,800	7,100	4,600	**11,300**	11,200	100	-
Eastern	9,300	16,700	600	**17,600**	10,700	2,100	4,800
Total	**40,800**	**72,200**	**6,900**	**79,600**	**58,300**	**4,300**	**16,900**
	Net Change in Feasible Capacity (2021 to 2024 HBA)						
Ngongotahā	3,600	11,700	900	**9,400**	5,500	500	3,400
Western	18,000	36,700	900	**34,200**	28,200	900	5,100
Central	2,500	6,000	- 4,400	**1,000**	1,000	20	-
Eastern	5,800	16,700	600	**14,100**	10,000	1,700	2,500
Total	**29,900**	**71,100**	**- 2,100**	**58,700**	**44,600**	**3,100**	**11,000**

Source: M.E. Rotorua Residential Capacity Model, 2024 and 2021.

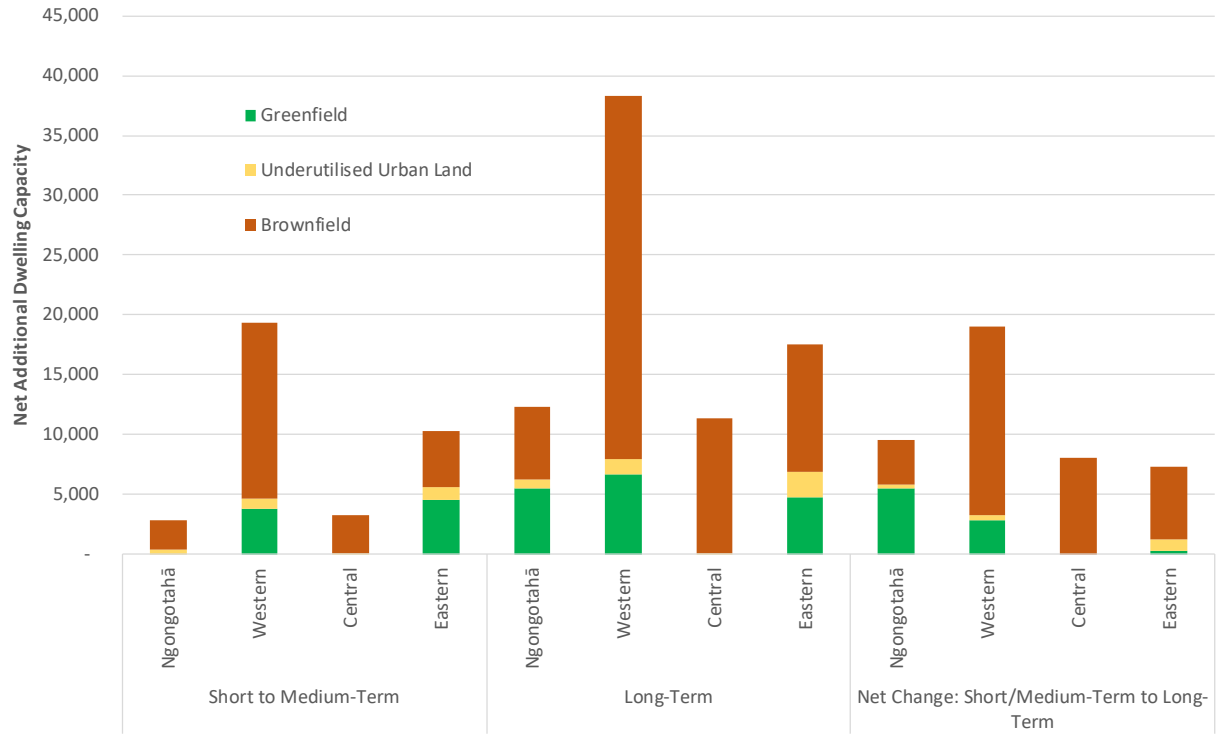
6.4 Commercially Feasible Capacity Summary

The commercially feasible capacity estimated across Rotorua's urban environment in each time period is summarised Figure 6.1 and Figure 6.2 below. The first graph shows the distribution of feasible capacity by type of location within each reporting area. The second graph shows the feasible and further plan enabled capacity in each reporting area in relation to the existing dwelling base.

The graphs show that the development potential enabled across Rotorua's urban environment is large in comparison to the existing dwelling base. The application of planning provisions for intensification have enabled Rotorua's urban residential areas to potentially be developed to a much higher intensity than their existing level of development. The increase in enabled yield within each parcel increases the number of sites that are feasible to redevelop.

Importantly, however, the actual level and intensity of future development within each area is likely to be substantially lower than the enabled or feasible capacity options. Only a portion of these sites are likely to be developed, with the intensity of their development occurring at different points of the range of feasible opportunity. It is likely that a substantial portion of sites will be developed at lower intensities to align with future patterns of household demand, with a minor portion developed at the higher levels of intensity enabled within the provisions.

Figure 6.1 – Summary of Commercially Feasible Capacity by Reporting Area, Location Type and Time Period



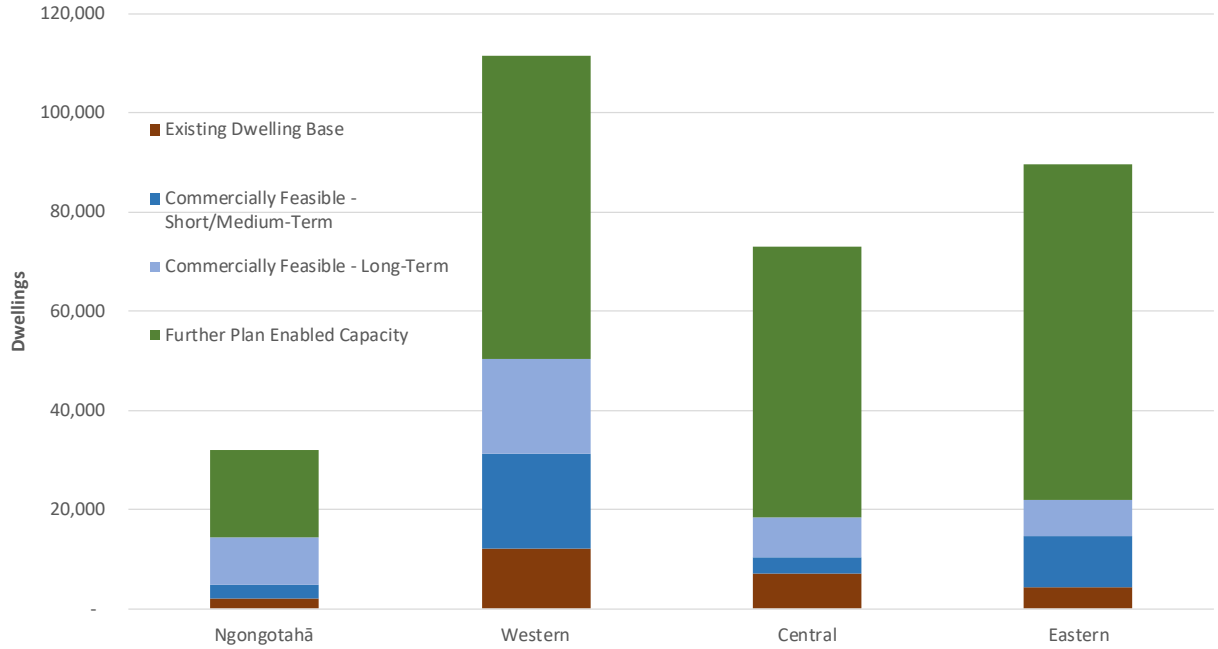
Source: M.E Rotorua Residential Capacity Model, 2024.

The graphs show the largest proportion of feasible capacity occurring within the Western reporting area, which currently has the largest existing dwelling base. A high proportion is through intensification opportunities within brownfield areas, together with a significant feasible greenfield capacity. Substantive greenfield opportunity is added to the outer parts of Rotorua's urban environment through the FDS areas in the long term[78]. However, the feasibility of this additional long term capacity within the eastern reporting area is likely to be limited due to the leasehold status.

Commercially feasible capacity is a key part in understanding the potential opportunity for future new dwelling supply for the commercial part of the market. Importantly, the actual patterns of growth in future dwelling supply are likely to differ by location and location type to the distribution of feasible capacity. Although estimated to be feasible, not all capacity will become available to the market for development, with the portion of feasible capacity taken up by the market likely to be more closely aligned to the level of future demand. This is assessed further in the following sections.

[78] Some of the FDS-identified growth areas have a short to medium term indicated timing. With the exception of part of the High Density Zone within the Central reporting area, these areas are only able to be included as capacity in the assessment in the long term time period in accordance with the NPS-UD.

Figure 6.2 – Summary of Commercially Feasible Capacity as a Proportion of Plan Enabled Capacity by Time Period



Source: M.E Rotorua Residential Capacity Model, 2024.

7 Infrastructure Ready Capacity

This section examines what amount of dwelling development opportunity is estimated to be infrastructure ready. This element of the NPS-UD is central to the requirement for well-planned urban environments whereby infrastructure and land use provision are to be aligned, and the provision of infrastructure is timely so to avoid unnecessary costs. Quantifying urban housing capacity that is infrastructure ready also helps to determine the impact that planning and infrastructure is having on the capacity for growth and the affordability and competitiveness of the Rotorua housing market.

Clause 3.4(3) of the NPS-UD states that development capacity is infrastructure ready if:

a) In relation to the short term, there is adequate existing development infrastructure to support the development of land.

b) In relation to the medium term, either paragraph (a) applies, or funding for adequate infrastructure to support development of the land is identified in a LTP.

c) In relation to the long term, either paragraph (b) applies, or the development infrastructure to support the development capacity is identified in the local authority's infrastructure strategy (as required as part of its LTP).

Clause 3.5 of the NPS-UD states that local authorities must be 'satisfied' that the additional infrastructure to service the development capacity is likely to be available.

7.1 Development and Additional Infrastructure Update[79]

Infrastructure master planning, which considered a 30-year growth period, informed the 2021-2050 Infrastructure Strategy. Following the 2021 HBA that identified the preferred growth scenario (baseline/medium growth future), the infrastructure programme was updated to become the 2024-2053 Infrastructure Strategy.

The preferred development scenario estimated about 12,500 household unit equivalents (HUEs) capacity for all identified developable lands (excluding business, i.e. 258 Ha capacity of developable land). However, the likely growth scenario (using the Infometrics Ltd growth assumption), projected about 9,300 HUEs between the period 2024 and 2053. The 12,500 HUEs will be reached by 2065 using the same Infometrics Ltd growth assumption.

Capital works identified for the first ten years (medium term) in the Infrastructure Strategy were approved in the 2024-2033 LTP.

Infrastructure planning uses population growth statistics for the likely growth projection; it is not efficient to build infrastructure for the total potential development capacity before it is needed. The master plans

[79] This content in this sub-section has been provided by the Rotorua Lakes Council Infrastructure Team.

are reviewed/updated every 3-years prior to the LTP to inform the Infrastructure Strategy. At this time the latest growth statistics will be used to assess infrastructure capacity; a higher growth scenario can also be considered then.

The likely effect of higher growth is that planned works to increase infrastructure capacity may need to be brought forward, and any new projects required in the long term will be included in the updated Infrastructure Strategy.

In terms of transport Rotorua already has a compact urban form and it is therefore relatively easy to move around the city. However, based on current travel patterns, growth in the number of people living and working in the urban area will increase the number of cars on the road. It is acknowledged that active steps will need to be taken to reduce car travel as the city grows. Further investment over time is required in transport infrastructure to encourage a shift to public transport, walking and cycling, as the main modes of travel for domestic trips. In order to achieve this, Council will need to consider:

- Building on the planned investment in the bus network with RLC and Toi Moana Bay of Plenty Regional Council working together, further increasing the frequency of bus services across all routes in the longer term.
- Extending bus coverage within Ngongotahā and Ōwhata in the future to service new greenfield locations.
- Improving walking, cycling and public transport infrastructure on central state highway corridors. This will require advocating to, and working in partnership with, the NZ Transport Agency Waka Kotahi to plan, fund and deliver this infrastructure.
- Implementing a Lakefront recreational cycling route around Lake
- Improving the safety and quality of pedestrian and cycling infrastructure across the network.
- Completing the urban cycling network, including primary routes into and through the city centre. Other key areas of focus include inter-suburb urban connectors and links to and through Ngongotahā village.

Rotorua already has a good network of public open spaces that offer variety and choice in the urban area. Within the urban area, there is limited land available and optimising the function and design of existing open spaces will be a key consideration for Council. New greenfield development in Ngongotahā and in the Eastside provides the opportunity to integrate large-scale open spaces needed to meet demand, while achieving other outcomes, including stormwater management, ecological enhancement and improved walking and cycling connections. The Council's Play, Active, Recreation and Sports Strategy sets out a plan for providing new and upgraded open spaces in more detail. This will inform public investment and influence the form of private development, particularly in new greenfield locations.

There is capacity in the school network to cater for growth in Rotorua, however there are some constraints in Ngongotahā and in the Eastside that will need active management and planning. Ngongotahā may be under pressure with additional growth and may require additional school infrastructure in the future, however this will need to be assessed through a future structure planning process. There is also some pressure on capacity in the school network in the Eastside, and in the longer term, additional investment may be required.

To support redevelopment and greenfield development initiatives Council will be using the Locality Plans for the Central, Eastern, Western and Ngongotahā referred to in the FDS to inform structure planning in these locations. These processes will ensure Council will deliver additional infrastructure to meet demand and support the growth and development within these urban areas.

7.2 Approach for Infrastructure Ready Capacity

Understanding the level of development opportunity in Rotorua's urban environment that is able to be supported by the current and future planned level of development infrastructure is a key aspect in assessing the ability to meet future growth needs. It is critical that this occurs as a distinct stage of the assessment to identify the level of plan enabled and commercially feasible development opportunity that is both supported or not supported by infrastructure. Differentiating these components of capacity therefore enables a response to any potential shortfall (if required) to be more appropriately targeted to the factor generating the potential constraint. It also helps to avoid policy or planning responses that are not associated with the constraint that would therefore have limited effect[80].

This assessment considers the level of infrastructure capacity across Rotorua's current and future urban environment. In alignment with the 2021 HBA, it distinguishes between the existing urban (brownfield and UUL) and greenfield areas to reflect the differences in relevant constraints. The potential infrastructure constraints/limits include:

i. Limits that apply at the urban environment level where the components of infrastructure generally serve urban-wide growth (e.g. water supply plants).
ii. Limits that apply at the catchment level where infrastructure components are able to sustain a certain level of growth within a particular part of the urban environment (e.g. stormwater network catchments).
iii. The geographic extent and timing of physical infrastructure network provision across greenfield areas.

City and Catchment Level Infrastructure Limits

A consistent approach has been applied to urban environment and catchment level infrastructure limits to that undertaken for the HBA 2021. The infrastructure capacity of urban environment-level and sub-urban level catchment areas was examined in detail across each of the main infrastructure networks during the 2021 HBA[81]. These included the three waters infrastructure networks (water supply, wastewater and stormwater).

The additional dwelling demand likely to be generated for these areas (as estimated in the 2021 HBA) was compared to the modelled capacity for these networks to determine whether the infrastructure was likely to be sufficient to meet projected future growth needs. Importantly, this approach focussed on the likely level of growth within these catchment areas rather than the maximum level of development opportunity

[80] For instance, if a shortfall arises as a result of infrastructure constraints that apply at a catchment level, then a further zoning response that provided further plan enabled capacity within that catchment may only have limited effect on reducing the shortfall as the infrastructure constraint would still apply. This may be indicated in an assessment through the additional feasible capacity that is beyond the level served by infrastructure.

[81] Further technical information is available within Section 7.2 of the 2021 HBA.

enabled within these catchments. This is appropriate as the level of enabled development opportunity is typically an order of magnitude larger than the actual level of dwelling demand growth, with only a portion of capacity taken up by the market.

During the 2021 HBA, the RLC Infrastructure Team assessed that the total urban environment and catchment-level infrastructure network capacity was sufficient to meet the projected future urban dwelling demand across all networks. The catchment-wide infrastructure capacity was assessed to be sufficient to meet projected demand across all three time periods. Infrastructure limits were therefore not applied within the existing urban area on the basis that the network limits were sufficient to cater for growth at the catchment level. However, more localised limits were not available within these catchment areas.

The same approach has been applied within the existing urban area in the HBA 2024. This is appropriate as the assessment is being undertaken within the same level of dwelling demand as already previously assessed in relation to the infrastructure networks.

Spatial Extent of Infrastructure in Greenfield Areas

An updated approach to infrastructure capacity has been applied in Rotorua's greenfield areas in this assessment since the HBA 2021. The new assessment has applied updated information on the timing and spatial extent of infrastructure network expansion into these areas, as advised by RLC's Infrastructure Team.

In the short to medium term greenfield area extents, the infrastructure timing applied in the HBA 2021 remains largely current. The exceptions are areas currently under development around the Wharenui Block within the Eastern Reporting area and a limited area within the Pukehāngi Development in the Western Reporting area. The infrastructure timing within these areas have been updated to have a short term timing to reflect the earlier delivery of infrastructure coinciding with development taking place within these areas.

The timing of the FDS growth areas provides the timing of the infrastructure spatial expansions across the significant greenfield areas added in the long term[82]. Infrastructure networks are spatially extended to cover these areas at the time of the development, as provided by the developers. This timing replaces any timing information applied to these FDS areas within the long term greenfield areas in the HBA 2021.

7.3 Infrastructure Serviced Greenfield Capacity

The proportion of greenfield plan enabled and commercially feasible capacity served by infrastructure within each time period is summarised in Figure 7.1 below. A further disaggregation of capacity by reporting area is contained in Table 7.1. For completeness, Table 7.2 is also provided to show the total combined infrastructure-served capacity across the existing urban and greenfield areas.

It is important to note these capacities reflect the maximum potential plan enabled or feasible capacity within the greenfield areas served by infrastructure. The actual dwelling yield that is realised in these areas served by spatial extensions to the infrastructure networks is likely to be significantly lower than these estimated capacities as not all parcels will be developed up to the greatest feasible development

[82] This has been provided by the RLC Infrastructure Team, who also advise that the relevant infrastructure networks have capacity to accommodate the demand from further development within these areas of urban expansion when it occurs.

opportunity enabled by the Plan. The estimated realised dwelling yield within these areas served by infrastructure is assessed in Section 8.

In the short term, only around one-quarter (24%; 2,000 dwellings) of the feasible greenfield capacity is served by infrastructure. This is located in the Eastern reporting area in the development currently underway in the Wharenui Block. There is sizeable amount of further capacity (+6,000 dwellings if all sites were developed at the highest feasible densities) that is estimated to currently be feasible (if infrastructure were supplied) in greenfield areas that are not served by infrastructure within the short term.

A portion of the greenfield areas that are served by infrastructure in the short term are estimated to have limited commercially feasibility for a private, profit-driven commercial developer. This is due to the leasehold status of land. However, dwellings are likely to be delivered by other parts of the market in these areas under other development models. This is reflected in the development currently occurring within these areas.

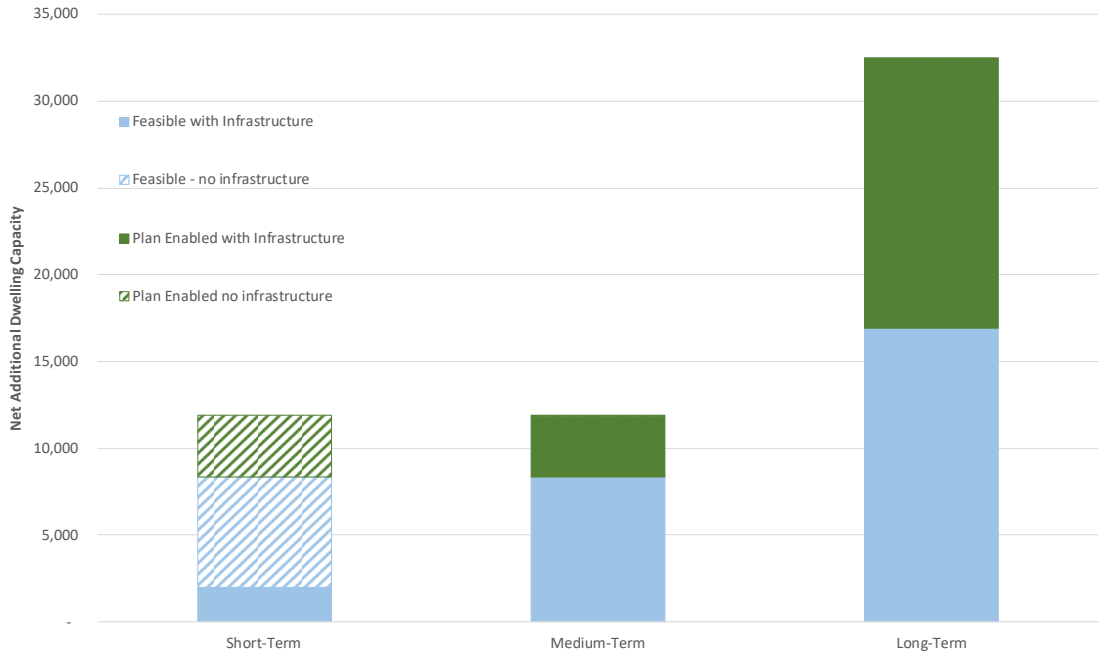
The greenfield feasible capacity served by infrastructure increases substantially in the medium term. The large spatial extensions to the infrastructure networks increase the infrastructure-served feasible capacity to 8,300 dwellings in the medium term, meaning that all feasible areas of capacity are within the infrastructure network geographic extent. Part of this occurs through network extensions that would occur from developers when urbanising these parcels. Increases in capacity are projected to occur in the Western and Eastern reporting areas.

Similar to the short term, it is important to note that actual dwelling yields realised in these areas are likely to be significantly lower when developed. There is a sizeable difference when considering only detached dwelling capacity, which amounts to 4,400 dwellings.

The greenfield infrastructure-served feasible capacity increases further in the long term, to reach 16,900 dwellings. The largest increases are projected to occur on the western side of Rotorua's urban environment through the large infrastructure-served growth areas added through the FDS. These occur in the Ngongotahā reporting area, as well as the Western reporting area through the additional areas along Parawai Road, north of Kawaha Point.

The graph indicates that only around half of the infrastructure-served plan enabled capacity is estimated to be commercially feasible in the long term. Most of this difference is due to the leasehold status of additional FDS greenfield areas in the Ngongotahā and Eastern catchments. However, similar to the short term capacity above, it is likely that other parts of the market will develop at least part of this land over the long term. A smaller share of the difference is due to difference in the estimated plan enabled vs. feasible densities applied across the same areas.

Figure 7.1 – Proportion of Plan Enabled and Commercially Feasible Greenfield Capacity Served by Infrastructure



Source: M.E Rotorua Residential Capacity Model, 2024.

Table 7.1 – Proportion of Estimated Commercially Feasible Capacity in Greenfield Areas within the Geographic Extent of Current and Planned Future Infrastructure Networks

Reporting Area	Short-Term				Medium-Term				Long-Term			
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Detached	Attached	Apartments	Maximum - All Typologies Combined	Detached	Attached	Apartments	Maximum - All Typologies Combined
	Plan Enabled Capacity - No Infrastructure Constraints											
Ngongotahā	-	-	-	-	-	-	-	-	5,600	9,000	6,700	**9,000**
Western	3,100	4,900	3,600	**4,900**	3,100	4,900	3,600	**4,900**	5,000	8,000	5,900	**8,000**
Central	-	-	-	-	-	-	-	-	-	-	-	-
Eastern	4,400	6,800	5,100	**7,000**	4,400	6,800	5,100	**7,000**	9,700	15,200	11,400	**15,400**
Total	**7,500**	**11,700**	**8,700**	**11,900**	**7,500**	**11,700**	**8,700**	**11,900**	**20,400**	**32,200**	**24,000**	**32,400**
	Plan Enabled Capacity - Infrastructure Constraints Applied											
Ngongotahā	-	-	-	-	-	-	-	-	5,600	9,000	6,700	**9,000**
Western	-	-	-	-	3,100	4,900	3,600	**4,900**	5,000	8,000	5,900	**8,000**
Central	-	-	-	-	-	-	-	-	-	-	-	-
Eastern	2,500	3,800	2,900	**3,900**	4,400	6,800	5,100	**6,900**	9,700	15,200	11,400	**15,400**
Total	**2,500**	**3,800**	**2,900**	**3,900**	**7,400**	**11,700**	**8,700**	**11,800**	**20,300**	**32,200**	**24,000**	**32,400**
	Commercially Feasible Capacity - No Infrastructure Constraints											
Ngongotahā	-	-	-	-	-	-	-	-	2,700	5,400	-	**5,500**
Western	2,000	3,800	-	**3,800**	2,000	3,800	-	**3,800**	3,300	6,700	-	**6,700**
Central	-	-	-	-	-	-	-	-	-	-	-	-
Eastern	2,300	4,500	-	**4,500**	2,300	4,500	-	**4,500**	2,500	4,600	-	**4,800**
Total	**4,400**	**8,300**	**-**	**8,300**	**4,400**	**8,300**	**-**	**8,300**	**8,500**	**16,700**	**-**	**16,900**
	Commercially Feasible Capacity - Infrastructure Constraints Applied											
Ngongotahā	-	-	-	-	-	-	-	-	2,700	5,400	-	**5,500**
Western	-	-	-	-	2,000	3,800	-	**3,800**	3,300	6,700	-	**6,700**
Central	-	-	-	-	-	-	-	-	-	-	-	-
Eastern	1,000	2,000	-	**2,000**	2,300	4,500	-	**4,500**	2,500	4,600	-	**4,800**
Total	**1,000**	**2,000**	**-**	**2,000**	**4,400**	**8,300**	**-**	**8,300**	**8,500**	**16,700**	**-**	**16,900**

Source: M.E Rotorua Residential Capacity Model, 2024.

Table 7.2 - Proportion of Estimated Commercially Feasible Capacity in Greenfield and Existing Urban Areas (Combined) within the Geographic Extent of Current and Planned Future Infrastructure Networks

Reporting Area	Short-Term				Medium-Term				Long-Term			
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Detached	Attached	Apartments	Maximum - All Typologies Combined	Detached	Attached	Apartments	Maximum - All Typologies Combined
	Plan Enabled Capacity - No Infrastructure Constraints											
Ngongotahā	5,500	9,900	15,500	**16,900**	5,500	9,900	15,500	**16,900**	11,600	19,800	26,400	**29,900**
Western	30,500	53,900	91,200	**96,500**	30,500	53,900	91,200	**96,500**	32,400	57,000	94,800	**99,600**
Central	4,500	9,800	56,600	**57,100**	4,500	9,800	56,600	**57,100**	4,500	10,500	65,500	**65,900**
Eastern	16,700	30,000	40,600	**45,700**	16,700	30,000	40,600	**45,700**	22,800	40,400	79,100	**85,100**
Total	**57,100**	**103,700**	**203,900**	**216,300**	**57,100**	**103,700**	**203,900**	**216,300**	**71,300**	**127,700**	**265,800**	**280,500**
	Plan Enabled Capacity - Infrastructure Constraints Applied											
Ngongotahā	5,500	9,900	15,500	**16,900**	5,500	9,900	15,500	**16,900**	11,600	19,800	26,400	**29,900**
Western	27,400	49,000	87,600	**91,600**	30,500	53,900	91,200	**96,500**	32,400	57,000	94,800	**99,600**
Central	4,500	9,800	56,600	**57,100**	4,500	9,800	56,600	**57,100**	4,500	10,500	65,500	**65,900**
Eastern	14,700	27,100	38,400	**42,600**	16,600	30,000	40,600	**45,600**	22,800	40,400	79,100	**85,100**
Total	**52,100**	**95,800**	**198,100**	**208,300**	**57,100**	**103,700**	**203,900**	**216,200**	**71,300**	**127,700**	**265,800**	**280,500**
	Commercially Feasible Capacity - No Infrastructure Constraints											
Ngongotahā	2,400	1,600	60	**2,800**	2,400	1,600	60	**2,800**	6,600	11,700	900	**12,300**
Western	14,600	14,000	10	**19,300**	14,600	14,000	10	**19,300**	22,100	36,700	900	**38,300**
Central	1,900	2,600	-	**3,300**	1,900	2,600	-	**3,300**	2,800	7,100	4,600	**11,300**
Eastern	6,800	8,300	-	**10,300**	6,800	8,300	-	**10,300**	9,300	16,700	600	**17,600**
Total	**25,700**	**26,400**	**70**	**35,700**	**25,700**	**26,400**	**70**	**35,700**	**40,800**	**72,200**	**6,900**	**79,600**
	Commercially Feasible Capacity - Infrastructure Constraints Applied											
Ngongotahā	2,400	1,600	60	**2,800**	2,400	1,600	60	**2,800**	6,600	11,700	900	**12,300**
Western	12,500	10,200	10	**15,500**	14,600	14,000	10	**19,300**	22,100	36,700	900	**38,300**
Central	1,900	2,600	-	**3,300**	1,900	2,600	-	**3,300**	2,800	7,100	4,600	**11,300**
Eastern	5,500	5,800	-	**7,800**	6,800	8,300	-	**10,300**	9,300	16,700	600	**17,600**
Total	**22,400**	**20,200**	**70**	**29,400**	**25,700**	**26,400**	**70**	**35,700**	**40,800**	**72,200**	**6,900**	**79,600**

Source: M.E Rotorua Residential Capacity Model, 2024.

7.4 Changes Since HBA 2021

Figure 7.2 below, provides a comparison of the infrastructure-served plan enabled and commercially feasible greenfield capacity estimated in this assessment with that estimated in the 2021 HBA. It shows large increases in capacity with the updated assessment in all three time periods.

In the short term, only around 5% of the estimated feasible greenfield capacity was served by infrastructure in the HBA 2021, amounting to a capacity for only 150 dwellings. This was largely due to infrastructure not already being in place at the time of the assessment, which forms a requirement for short term capacity under the NPS-UD.

The short term infrastructure-served greenfield capacity has increased substantially in the current assessment, to around 2,000 dwellings. This is partly due to additional infrastructure having been provided between the assessments, meaning that further land areas in the Eastern catchment were included as infrastructure-served in the short term in the updated assessment.

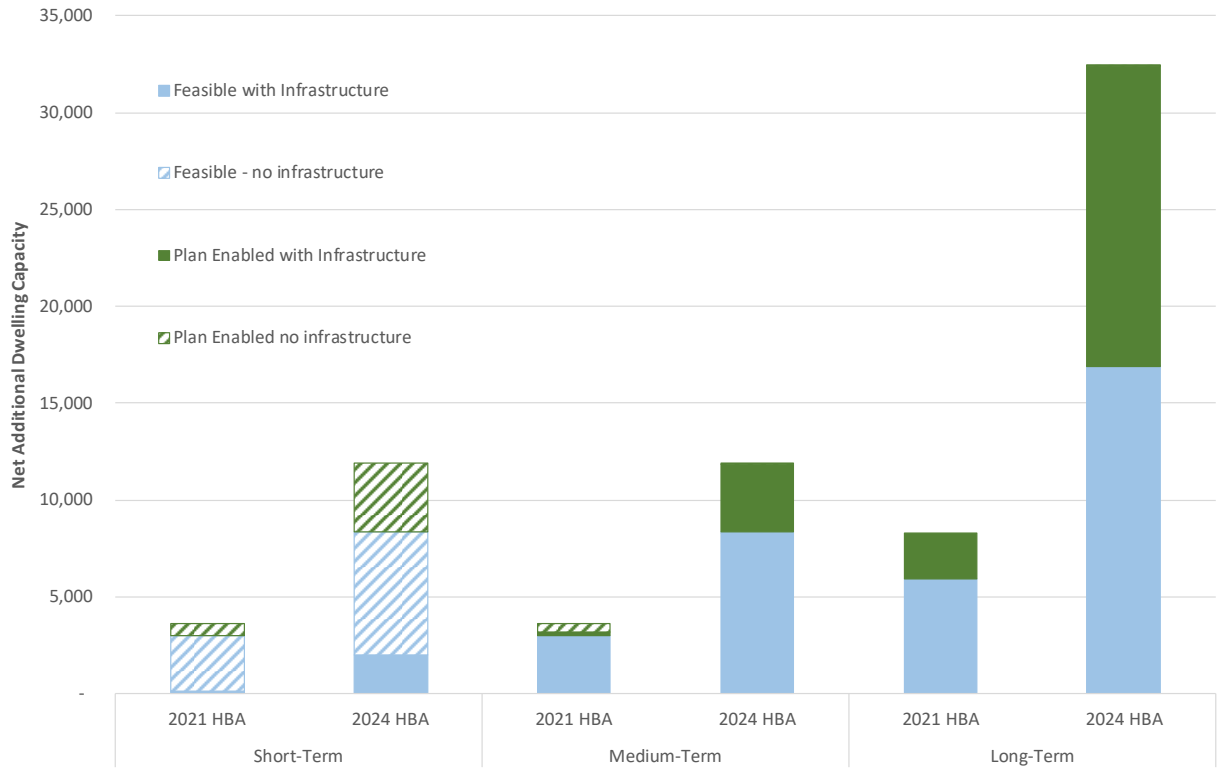
There are also large net increases in infrastructure-served capacity in the medium term with the current assessment. In the medium term, the geographic extent of infrastructure networks across the greenfield areas, and corresponding zoned land areas, are very similar between the assessments. The differences in estimated capacity occur as a result of differences in the enabled densities across these areas between the planning frameworks applied in each assessment.

Most of the greenfield areas were assessed with lower density detached dwelling development patterns in the HBA 2021, with densities of up to one dwelling per 450m2 lot. The vacant lot provisions applied to these areas as part of PC9 significantly increase the potentially enabled densities in these areas both in

terms of average land areas per detached dwellings and increasing the dwelling mix to include a range a dwelling typologies that typically get developed at greater densities. While there is a large increase in capacity with the updated assessment, these greenfield areas are likely to be developed at densities below the maximum feasible enabled densities. The market is unlikely to be able to sustain dominant proportions of these areas developing at higher densities, which is assessed further in Section 8.

There are also large increases in infrastructure-served capacity in the long term with the updated assessment. The capacity increases from around 6,000 dwellings to nearly 17,000 dwellings in the current assessment. In addition to the greater enabled densities, a large share of this increase is due to the additional FDS land areas included in the updated assessment. It is noted that under both assessments, a significant portion of the infrastructure-served greenfield capacity is estimated to have limited feasibility due to the leasehold status.

Figure 7.2 – Comparison of Infrastructure-Served Plan Enabled and Commercially Feasible Greenfield Capacity: 2021 and 2024 HBAs



Source: M.E Rotorua Residential Capacity Model, 2021 and 2024.

8 Serviced, Feasible & Reasonably Expected Capacity

This section contains the results of infrastructure serviced, feasible and reasonably expected to be realised dwelling capacity estimates in the short, medium, and long term, collectively referred to here as "RER" capacity. The results estimate the amount of commercially feasible capacity (calculated in Section 6) that is likely to represent RER capacity across each time period within each of the reporting areas. They take into account the infrastructure limits across the greenfield urban environment outlined in Section 7 as well as the likely development patterns across the district's urban environment. A comparison with RER capacity estimated in the HBA 2021 is included.

The earlier stages of assessment have identified a large development opportunity across Rotorua, with significant components that are likely to represent feasible opportunities for commercial developers if available to the market. This part of the assessment estimates the level of development that is likely to be sustained within this range, if taken up by the market, across different parts of Rotorua's urban environment. It is not an estimate of up-take of capacity as this is driven by demand projections by dwelling type and location(discussed already in Section 3.3).

The following outlines the updated approach to estimate RER capacity within each time period across the district's urban environment. The estimated RER is then provided for each time period. These form the inputs into the subsequent sufficiency assessment in Section 9.

8.1 Approach

The RER assessment has been updated since the HBA 2021 to take account of the large increases in development opportunity enabled through PC9 and the FDS. It estimates the dwelling yields likely to be realised in greenfield areas, based on the dwelling mix able to be sustained in relation to patterns of market demand. The yields realised across these areas in aggregate are a sub-set of the maximum feasible opportunity within each individual parcel. It also examines the dwelling yields produced through different levels of redevelopment within the existing urban areas.

RER capacity has been estimated separately within the greenfield/UUL areas vs. the existing urban area (brownfield locations). This is an important distinction to subsequently assess the sufficiency of each type of location in meeting future growth needs. It considers the ability of the urban environment to accommodate different proportions of future growth reasonably expected to occur in different types of location. The approach to each is set out below.

Greenfield and Underutilised Urban Land RER

Important changes were introduced through PC9 to the provisions for vacant lot subdivision of larger land parcel areas. These changes affect the patterns of vacant lots produced within subdivisions, which are likely to have significant impacts on the dwelling mix and corresponding densities delivered across these areas.

The changes increase the range of site sizes able to occur in these areas and expand the range of dwellings delivered within the *vacant* lot structure once developed. A key aspect is that the minimum/average provisions apply to the initial vacant lot subdivision pattern. The provisions enable up to three dwellings to be constructed on each site, with subsequent division[83] into individual parcels for each constructed dwelling. As such, the eventual average land area per dwelling of a subdivision (once developed into dwellings) is likely to differ to the initial average vacant lot structure.

The likely future development patterns (dwelling mix) have been estimated across the infrastructure-served feasible parcels in these areas. It has been guided by analyses of recent development patterns in Rotorua and other urban economies together with the technical assessment of different minimum/average lot size provisions undertaken to inform PC9.[84] In summary, the assessment estimates that most sites are likely to be developed to contain lower density detached dwellings, with a minor portion developed to contain multiple dwellings. These are predominantly less intensive, suburban-scale attached dwellings (e.g. duplex pairs), with smaller shares as terraces or apartments (where feasible). The dwelling mix assumed within each location is contained in Appendix 8.

Existing Urban Areas RER

Three scenarios have been tested to model different levels of development within the existing urban area, which are correspondingly assessed against different levels of demand by type of location within the sufficiency assessment. These are:

- Urban expansion scenario – this scenario has a greater focus on growth in greenfield areas, with reduced potential uptake of feasible capacity within the existing urban area.
- Urban intensification scenario – this scenario places equal focus on growth through greenfield urban expansion and intensification within existing urban areas. It tests a higher range of potential uptake of feasible capacity within the existing urban area.
- Baseline scenario – this scenario provides a position between the urban expansion and intensification scenarios to assume a fixed focus of growth between the greenfield and existing urban areas through time.

The modelled scenarios apply different levels of maximum potential uptake of feasible capacity within the existing urban area. These have been applied within each location and typology to calculate the total potential RER dwelling capacity produced by each level of take-up. This approach enables the sufficiency assessment to test whether the level of uptake required to meet demand within each area and typology are within reasonable ranges.

[83] The analysis does not assume that greenfield parcels will be further intensified at a later stage (either through backyard subdivision or redevelopment) once they have been developed to contain dwellings.

[84] Rotorua Plan Change 9 Supplementary Statement of Susan Fairgray 22 August 2023.

Table 8.3 in the following sub-section contains the maximum assessed rates of feasible capacity take-up applied in each scenario. It also shows the modelled rates as a proportion of plan enabled development opportunity.

8.2 Greenfield and Underutilised Urban Land Serviced, Feasible and RER Capacity

The estimated RER capacity in greenfield areas and UUL areas in Rotorua's urban environment across the short, medium and long term is summarised in Figure 8.1. A further disaggregation by reporting area and dwelling typology is contained in Table 8.1.

It is estimated that the greenfield and UUL areas feasible in the short term would have a dwelling yield of around 2,600 dwellings. This equates to just over half (58%) of the maximum commercially feasible capacity that is calculated based on every site developed to the maximum feasible potential. When considering the RER capacity component of the commercially feasible capacity, it is estimated that most of these feasible sites would develop at their detached dwelling capacity. In the short term, 82% of the RER capacity is estimated to occur as detached dwellings.

The RER capacity is estimated to increase to 5,700 dwellings in the medium term. This amounts to over half (53%) of the feasible capacity and over quarter (27%) of the plan enabled capacity. Additional infrastructure provision within feasible greenfield areas in the Western and Eastern reporting areas is the largest contributor to increases in RER capacity in the medium term. Further increases are due to increased feasibility of attached dwelling typologies in these areas, which account for nearly one-fifth (23%) of medium term RER capacity[85].

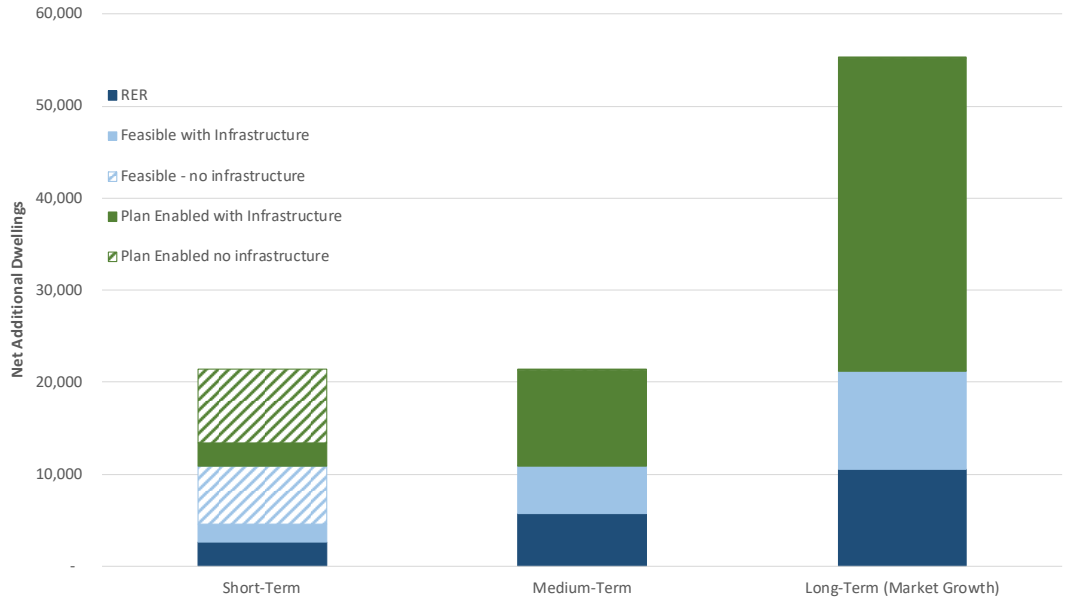
In the long term, RER capacity is estimated to increase further to 10,500 dwellings in Rotorua's feasible greenfield and UUL areas. This amounts to around half (49%) of the feasible capacity and around one-fifth (19%) of the plan enabled capacity. The RER share of feasible capacity has decreased due to the larger relative increase in feasible attached dwellings, which account for an increasing proportion of the commercially feasible capacity as the market for these dwellings becomes larger. In accordance with their increase in feasibility, attached dwellings account for a larger share (30%) of RER capacity, consisting of mainly less-intensive suburban-scale, up to terraced dwellings.

It is notable that in the long term there are sizeable zoned greenfield areas that are served by infrastructure but are not estimated to form part of the RER capacity. This is because they are estimated to have only limited feasibility due to their leasehold status[86]. However, although these areas are likely to be less attractive options for a private, profit-driven commercial developer (as modelled), they may form viable development options for other parts of the market. As such, dwellings may be delivered within these zoned areas in the long term, forming part of Rotorua's housing supply.

[85] However, it is noted that only part of this growth in feasibility is reflected in the modelling due to the NPS-UD technical requirement to apply current prices in the medium term.

[86] These areas form part of the infrastructure-served plan enabled capacity (solid dark green) in the long term that is shown in Figure 8.1.

Figure 8.1 - Greenfield and Underutilised Urban Land Serviced, Feasible and RER Dwelling Capacity



Source: M.E Rotorua Residential Capacity Model, 2024.

Table 8.1 – Greenfield and Underutilised Urban Land Serviced, Feasible and RER Dwelling Capacity by Reporting Area and Dwelling Typology

Reporting Area	Short-Term				Medium-Term				Long-Term			
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Detached	Attached	Apartments	Maximum - All Typologies Combined	Detached	Attached	Apartments	Maximum - All Typologies Combined
	Plan Enabled Capacity - No Infrastructure Constraints											
Ngongotahā	500	1,200	1,100	**1,200**	500	1,200	1,100	**1,200**	6,100	10,200	7,700	**10,200**
Western	3,700	6,400	4,900	**6,400**	3,700	6,400	4,900	**6,400**	5,600	9,500	7,300	**9,500**
Central	60	100	600	**600**	60	100	600	**600**	60	100	600	**600**
Eastern	7,100	13,000	10,300	**13,200**	7,100	13,000	10,300	**13,200**	13,200	22,300	30,200	**35,000**
Total	**11,400**	**20,700**	**16,900**	**21,400**	**11,400**	**20,700**	**16,900**	**21,400**	**25,000**	**42,100**	**45,900**	**55,300**
	Plan Enabled Capacity - Infrastructure Constraints Applied											
Ngongotahā	500	1,200	1,100	**1,200**	500	1,200	1,100	**1,200**	6,100	10,200	7,700	**10,200**
Western	600	1,500	1,300	**1,500**	3,700	6,400	4,900	**6,400**	5,600	9,500	7,300	**9,500**
Central	60	100	600	**600**	60	100	600	**600**	60	100	600	**600**
Eastern	5,100	10,000	8,100	**10,100**	7,000	13,000	10,300	**13,100**	13,200	22,300	30,200	**35,000**
Total	**6,300**	**12,900**	**11,100**	**13,400**	**11,300**	**20,700**	**16,900**	**21,300**	**25,000**	**42,100**	**45,900**	**55,200**
	Commercially Feasible Capacity - No Infrastructure Constraints											
Ngongotahā	400	100	-	**400**	400	100	-	**400**	3,100	6,300	-	**6,300**
Western	2,700	4,600	-	**4,700**	2,700	4,600	-	**4,700**	4,000	7,900	-	**7,900**
Central	60	100	-	**100**	60	100	-	**100**	60	100	90	**100**
Eastern	3,100	5,200	-	**5,600**	3,100	5,200	-	**5,600**	3,600	6,800	20	**6,900**
Total	**6,300**	**10,100**	**-**	**10,800**	**6,300**	**10,100**	**-**	**10,800**	**10,700**	**21,100**	**100**	**21,200**
	Commercially Feasible Capacity - Infrastructure Constraints Applied											
Ngongotahā	400	100	-	**400**	400	100	-	**400**	3,100	6,300	-	**6,300**
Western	600	800	-	**900**	2,700	4,600	-	**4,700**	4,000	7,900	-	**7,900**
Central	60	100	-	**100**	60	100	-	**100**	60	100	90	**100**
Eastern	1,900	2,800	-	**3,100**	3,100	5,200	-	**5,600**	3,600	6,800	20	**6,900**
Total	**2,900**	**3,800**	**-**	**4,500**	**6,300**	**10,100**	**-**	**10,800**	**10,700**	**21,100**	**100**	**21,200**
	Reasonably Expected to be Realised Capacity											
Ngongotahā	300	-	-	**300**	300	-	-	**300**	2,400	900	-	**3,300**
Western	500	40	-	**500**	1,900	500	-	**2,500**	2,700	1,100	-	**3,900**
Central	10	60	-	**70**	10	60	-	**70**	10	60	10	**80**
Eastern	1,300	400	-	**1,700**	2,200	700	-	**2,900**	2,200	1,100	-	**3,300**
Total	**2,200**	**500**	**-**	**2,600**	**4,400**	**1,300**	**-**	**5,700**	**7,300**	**3,100**	**20**	**10,500**

Source: M.E Rotorua Residential Capacity Model, 2024.

8.3 Existing Urban (Brownfields) Serviced, Feasible and RER Capacity

The estimated RER capacity on brownfield sites within Rotorua's existing urban environment under each scenario is summarised for the short, medium and long term in Figure 8.2. This is shown as a proportion of commercially feasible capacity within each time period, with the share of plan enabled capacity instead shown in Table 8.3. A disaggregation of the estimated RER capacity by reporting area and dwelling typology in each scenario is shown in Table 8.2.

In the short term, the RER capacity is estimated to range from 1,200 to 2,500 dwellings across the modelled scenarios. This is based on an overall share of 5% to 10% of capacity that is estimated to be feasible in the short term, which amounts to around only 1% of plan enabled capacity. Detached dwellings account for nearly half (48%) of the RER capacity, with the rest as mainly non-apartment, attached dwellings. Attached dwellings account for a greater share of the Central reporting area RER, which reflects the underlying patterns of feasibility where more central sites have an increased focus toward attached dwellings.

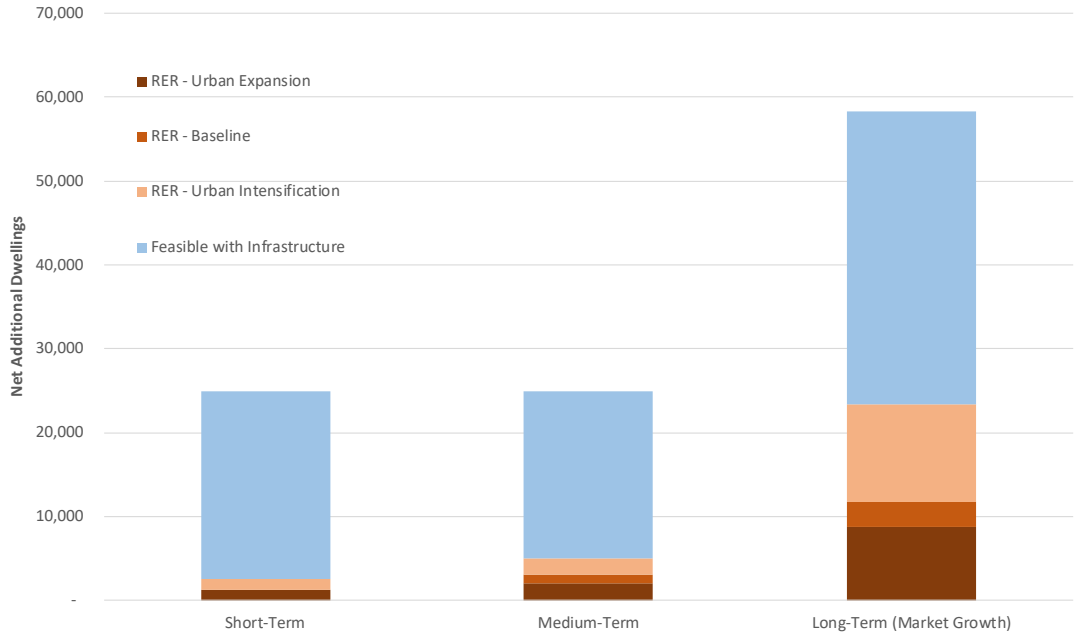
The RER capacity is estimated to increase to 1,900 to 5,000 dwellings in the medium term. This is based off an 8% to 20% overall share of commercially feasible capacity, which amounts to only 1% to 3% of the plan enabled capacity. The patterns of RER by location and typology are similar in the medium term to the short term due to the technical requirement to hold the market constant[87].

In the long term, the RER is estimated to increase to 8,800 to 23,300 dwellings. This reflects the modelled rates of an overall 15% to 40% share of commercially feasible capacity. This amounts to an overall share of 4% to 10% of the plan enabled capacity. However, there are important differences in the patterns and plan-enabled shares of RER by typology. The RER capacity amounts to higher shares of plan enabled capacity for detached and less-intensive, attached dwellings, with lower shares of plan enabled capacity as RER capacity for apartments.

It is estimated that the RER apartment capacity amounts to only 1% of the plan enabled development opportunity for this typology. This is due to a combination of the limited commercial feasibility of this typology together with the very large plan enabled potential development opportunity. The apartment RER capacity is estimated at 600 to 1,600 dwellings in the long term, if taken up by the market, which is compared to demand in the following section.

[87] If there were instead allowance for market changes over the medium term, then it is likely that a greater share of RER would occur as attached dwellings as the market becomes more established in the medium term.

Figure 8.2 – Existing Urban Brownfield Land Serviced, Feasible and RER Dwelling Capacity by Scenario



Source: M.E Rotorua Residential Capacity Model, 2024.

Table 8.2 – Existing Urban Brownfield Land Serviced, Feasible and RER Dwelling Capacity by Reporting Area and Dwelling Typology

Reporting Area	Short-Term				Medium-Term				Long-Term			
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Detached	Attached	Apartments	Maximum - All Typologies Combined	Detached	Attached	Apartments	Maximum - All Typologies Combined
	Plan Enabled Capacity											
Ngongotahā	5,000	8,700	14,500	**15,700**	5,000	8,700	14,500	**15,700**	5,500	9,600	18,700	**19,700**
Western	26,800	47,500	86,300	**90,100**	26,800	47,500	86,300	**90,100**	26,800	47,500	87,500	**90,100**
Central	4,400	9,700	56,000	**56,500**	4,400	9,700	56,000	**56,500**	4,400	10,400	64,900	**65,300**
Eastern	9,600	17,100	30,300	**32,500**	9,600	17,100	30,300	**32,500**	9,600	18,100	48,900	**50,200**
Total	**45,800**	**82,900**	**187,000**	**194,900**	**45,800**	**82,900**	**187,000**	**194,900**	**46,300**	**85,500**	**219,900**	**225,300**
	Commercially Feasible Capacity											
Ngongotahā	2,000	1,500	60	**2,400**	2,000	1,500	60	**2,400**	3,500	5,400	900	**6,100**
Western	11,900	9,400	10	**14,700**	11,900	9,400	10	**14,700**	18,100	28,800	900	**30,400**
Central	1,800	2,500	-	**3,200**	1,800	2,500	-	**3,200**	2,700	7,000	4,500	**11,200**
Eastern	3,700	3,000	-	**4,700**	3,700	3,000	-	**4,700**	5,700	9,900	600	**10,700**
Total	**19,400**	**16,300**	**70**	**24,900**	**19,400**	**16,300**	**70**	**24,900**	**30,000**	**51,200**	**6,800**	**58,300**
	Reasonably Expected to be Realised Capacity - Urban Expansion Scenario											
Ngongotahā	60	50	-	**100**	100	90	-	**200**	300	600	70	**900**
Western	400	400	-	**700**	600	600	-	**1,200**	1,300	3,200	60	**4,600**
Central	60	100	-	**200**	90	200	-	**300**	300	1,000	400	**1,700**
Eastern	100	100	-	**200**	200	200	-	**400**	400	1,100	40	**1,600**
Total	**600**	**600**	**-**	**1,200**	**1,000**	**1,000**	**-**	**2,000**	**2,300**	**5,900**	**600**	**8,700**
	Reasonably Expected to be Realised Capacity - Baseline Scenario											
Ngongotahā	60	50	-	**100**	200	100	-	**300**	300	800	90	**1,200**
Western	400	400	-	**700**	900	900	-	**1,800**	1,800	4,200	90	**6,100**
Central	60	100	-	**200**	100	200	-	**400**	300	1,300	600	**2,200**
Eastern	100	100	-	**200**	300	300	-	**600**	600	1,500	50	**2,100**
Total	**600**	**600**	**-**	**1,200**	**1,400**	**1,500**	**10**	**3,000**	**3,000**	**7,800**	**800**	**11,700**
	Reasonably Expected to be Realised Capacity - Urban Intensification Scenario											
Ngongotahā	100	100	-	**200**	300	200	10	**500**	700	1,600	200	**2,400**
Western	700	700	-	**1,500**	1,500	1,500	-	**2,900**	3,600	8,400	200	**12,200**
Central	100	200	-	**300**	200	400	-	**600**	700	2,700	1,100	**4,500**
Eastern	200	200	-	**500**	400	500	-	**900**	1,100	3,000	100	**4,300**
Total	**1,200**	**1,300**	**-**	**2,500**	**2,400**	**2,600**	**10**	**5,000**	**6,000**	**15,700**	**1,600**	**23,300**

Source: M.E Rotorua Residential Capacity Model, 2024.

Table 8.3 – Existing Urban Brownfield RER Capacity Share of Plan Enabled and Commercially Feasible Capacity

Reporting Area	Short-Term				Medium-Term				Long-Term			
	Detached	Attached	Apartments	Maximum - All Typologies Combined	Detached	Attached	Apartments	Maximum - All Typologies Combined	Detached	Attached	Apartments	Maximum - All Typologies Combined
RER Share of Plan Enabled Capacity												
	Reasonably Expected to be Realised Capacity - Urban Expansion Scenario											
Ngongotahā	1%	1%	0%	**1%**	2%	1%	0%	**1%**	5%	6%	0%	**5%**
Western	1%	1%	0%	**1%**	2%	1%	0%	**1%**	5%	7%	0%	**5%**
Central	1%	1%	0%	**0%**	2%	2%	0%	**0%**	6%	10%	1%	**3%**
Eastern	1%	1%	0%	**1%**	2%	1%	0%	**1%**	4%	6%	0%	**3%**
Total	**1%**	**1%**	**0%**	**1%**	**2%**	**1%**	**0%**	**1%**	**5%**	**7%**	**0%**	**4%**
	Reasonably Expected to be Realised Capacity - Baseline Scenario											
Ngongotahā	1%	1%	0%	**1%**	3%	2%	0%	**2%**	6%	8%	0%	**6%**
Western	1%	1%	0%	**1%**	3%	2%	0%	**2%**	7%	9%	0%	**7%**
Central	1%	1%	0%	**0%**	3%	3%	0%	**1%**	8%	13%	1%	**3%**
Eastern	1%	1%	0%	**1%**	3%	2%	0%	**2%**	6%	8%	0%	**4%**
Total	**1%**	**1%**	**0%**	**1%**	**3%**	**2%**	**0%**	**2%**	**7%**	**9%**	**0%**	**5%**
	Reasonably Expected to be Realised Capacity - Urban Intensification Scenario											
Ngongotahā	3%	1%	0%	**2%**	5%	3%	0%	**3%**	12%	17%	1%	**12%**
Western	3%	2%	0%	**2%**	5%	3%	0%	**3%**	13%	18%	0%	**13%**
Central	3%	2%	0%	**1%**	5%	4%	0%	**1%**	16%	26%	2%	**7%**
Eastern	2%	1%	0%	**1%**	5%	3%	0%	**3%**	12%	17%	0%	**9%**
Total	**3%**	**2%**	**0%**	**1%**	**5%**	**3%**	**0%**	**3%**	**13%**	**18%**	**1%**	**10%**
RER Share of Commercially Feasible Capacity												
	Reasonably Expected to be Realised Capacity - Urban Expansion Scenario											
Ngongotahā	3%	4%	3%	**5%**	5%	6%	5%	**8%**	7%	11%	7%	**15%**
Western	3%	4%	3%	**5%**	5%	6%	5%	**8%**	7%	11%	7%	**15%**
Central	3%	4%	0%	**5%**	5%	7%	0%	**8%**	9%	14%	9%	**15%**
Eastern	3%	4%	0%	**5%**	5%	6%	0%	**8%**	7%	11%	7%	**15%**
Total	**3%**	**4%**	**3%**	**5%**	**5%**	**6%**	**5%**	**8%**	**8%**	**12%**	**9%**	**15%**
	Reasonably Expected to be Realised Capacity - Baseline Scenario											
Ngongotahā	3%	4%	3%	**5%**	8%	9%	8%	**12%**	10%	15%	10%	**20%**
Western	3%	4%	3%	**5%**	7%	9%	7%	**12%**	10%	15%	10%	**20%**
Central	3%	4%	0%	**5%**	7%	10%	0%	**12%**	13%	19%	13%	**20%**
Eastern	3%	4%	0%	**5%**	7%	10%	0%	**12%**	10%	15%	10%	**20%**
Total	**3%**	**4%**	**3%**	**5%**	**7%**	**9%**	**8%**	**12%**	**10%**	**15%**	**12%**	**20%**
	Reasonably Expected to be Realised Capacity - Urban Intensification Scenario											
Ngongotahā	6%	7%	6%	**10%**	13%	15%	13%	**20%**	19%	29%	19%	**40%**
Western	6%	8%	6%	**10%**	12%	16%	12%	**20%**	20%	29%	20%	**40%**
Central	6%	8%	0%	**10%**	12%	17%	0%	**20%**	25%	38%	25%	**40%**
Eastern	6%	8%	0%	**10%**	12%	16%	0%	**20%**	20%	31%	20%	**40%**
Total	**6%**	**8%**	**6%**	**10%**	**12%**	**16%**	**13%**	**20%**	**20%**	**31%**	**23%**	**40%**

Source: M.E Rotorua Residential Capacity Model, 2024.

8.4 RER Capacity Summary – Existing Urban and Greenfields Combined

The RER capacity is summarised by time period and scenario in Figure 8.3 and Table 8.4. They show the combined RER capacity across the brownfield, UUL and greenfield land areas.

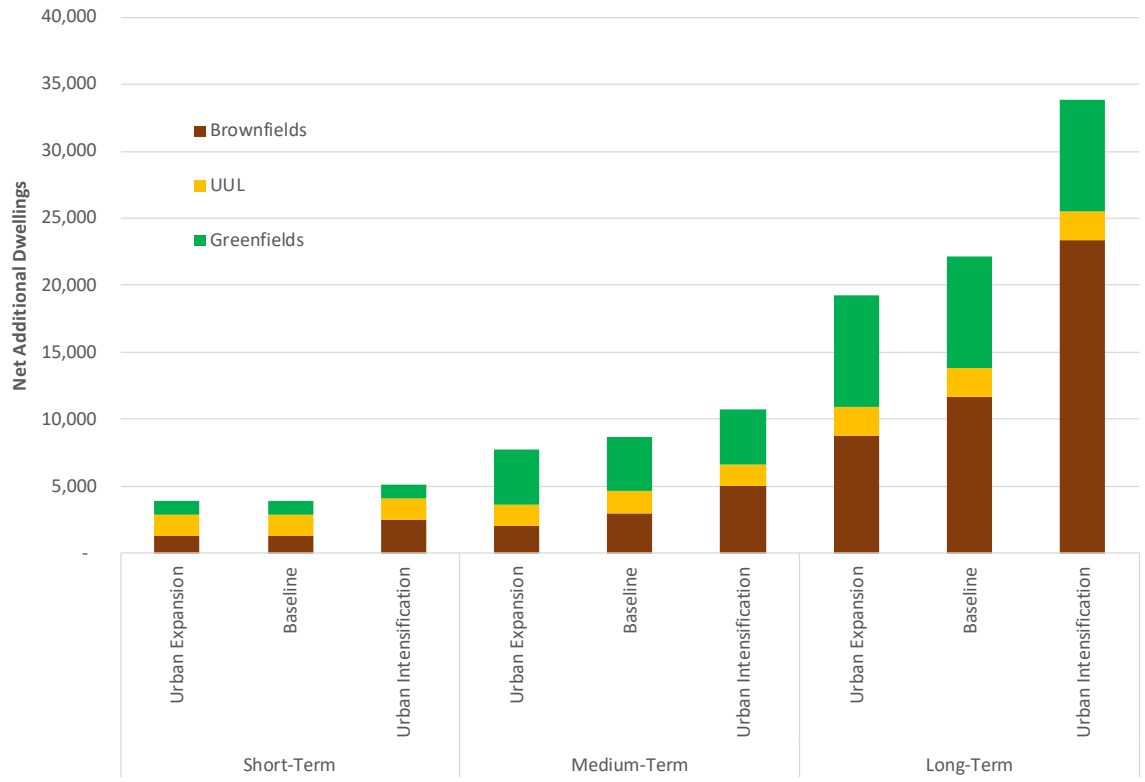
In the short term, there is a combined RER capacity for between 3,900 and 5,100 dwellings. Around half to two-thirds of the capacity is within the UUL and greenfield areas.

In the medium term, the RER capacity increases to between 7,700 to 10,700 dwellings, depending upon the scenario. The largest increases in capacity occur in the greenfield areas due to the further infrastructure extensions.

The RER capacity increases to between 19,200 and 33,800 dwellings in the long term. This largest increases occur within the existing urban area as a result of growth in feasibility across a wider range of dwelling

types and densities. The lower range RER assumes a greater focus on greenfield expansion, with a reduced potential market availability of capacity within the brownfield areas. The urban intensification scenario assumes a greater focus on the existing urban area, with higher rates of feasible capacity potentially available within the market.

Figure 8.3 – Summary of Total RER Capacity by Time Period and Scenario



Source: M.E Rotorua Residential Capacity Model, 2024.

Table 8.4 – RER Capacity Summary and Share of Plan Enabled and Feasible Capacity

Reporting Area	Short-Term			Medium-Term			Long-Term		
	Urban Expansion	Baseline	Urban Intensification	Urban Expansion	Baseline	Urban Intensification	Urban Expansion	Baseline	Urban Intensification
	RER Capacity								
Brownfield	1,200	1,200	**2,500**	2,000	3,000	**5,000**	8,700	11,700	**23,300**
Underutilised Urban Land	1,600	1,600	**1,600**	1,600	1,600	**1,600**	2,200	2,200	**2,200**
Greenfield	1,000	1,000	**1,000**	4,100	4,100	**4,100**	8,300	8,300	**8,300**
Total	**3,900**	**3,900**	**5,100**	**7,700**	**8,700**	**10,700**	**19,200**	**22,100**	**33,800**
	Share of Commercially Feasible Capacity (Infrastructure-Served)								
Brownfield	5%	5%	**10%**	8%	12%	**20%**	15%	20%	**40%**
Underutilised Urban Land	65%	65%	**65%**	65%	65%	**65%**	50%	50%	**50%**
Greenfield	49%	49%	**49%**	49%	49%	**49%**	49%	49%	**49%**
Total	**13%**	**13%**	**17%**	**22%**	**24%**	**30%**	**24%**	**28%**	**42%**
	Share of Plan Enabled Capacity (Infrastructure Served)								
Brownfield	1%	1%	**1%**	1%	2%	**3%**	4%	5%	**10%**
Underutilised Urban Land	17%	17%	**17%**	17%	17%	**17%**	9%	9%	**9%**
Greenfield	25%	25%	**25%**	35%	35%	**35%**	26%	26%	**26%**
Total	**2%**	**2%**	**2%**	**4%**	**4%**	**5%**	**7%**	**8%**	**12%**

Source: M.E Rotorua Residential Capacity Model, 2024.

8.5 Changes Since HBA 2021

The updated assessment shows a substantial increase in RER capacity across all three time periods from that modelled in the HBA 2021. These increases are summarised by land type, reporting area and dwelling typology in Figures 8.4-8.6. The differences are summarised in net terms for each time-period as follows:

- In the short term, the updated assessment RER capacity is around 2.5 to 3 times larger than the HBA 2021. The HBA 2021 RER of 1,700 dwellings, compares to an updated RER of 3,900 to 5,100 dwellings.
- In the medium term, the updated assessment RER capacity is around 1.5 to 2.5 times larger than the HBA 2021. The HBA 2021 RER of 4,800 dwellings, compares to an updated RER of 7,700 to 10,700 dwellings.
- In the long term, the updated assessment RER capacity is around 2 to 3.5 times larger than the HBA 2021. The HBA 2021 RER of 9,400 dwellings, compares to an updated RER of 19,200 to 33,800 dwellings.

The large increases in RER occur in both the existing urban and greenfield areas and are due to a combination of factors. Within the greenfield areas, this is due to:

- greater infrastructure provision in the short term[88] and in the long term (with the same infrastructure spatial extent in the medium term);
- the additional zoned areas added through the FDS in the long term; and
- the increased densities of development within greenfield areas as a result of the PC9 provisions, where part of this effect occurs through changes to the vacant lot sizes and part due to increases in the enabled dwelling mix.

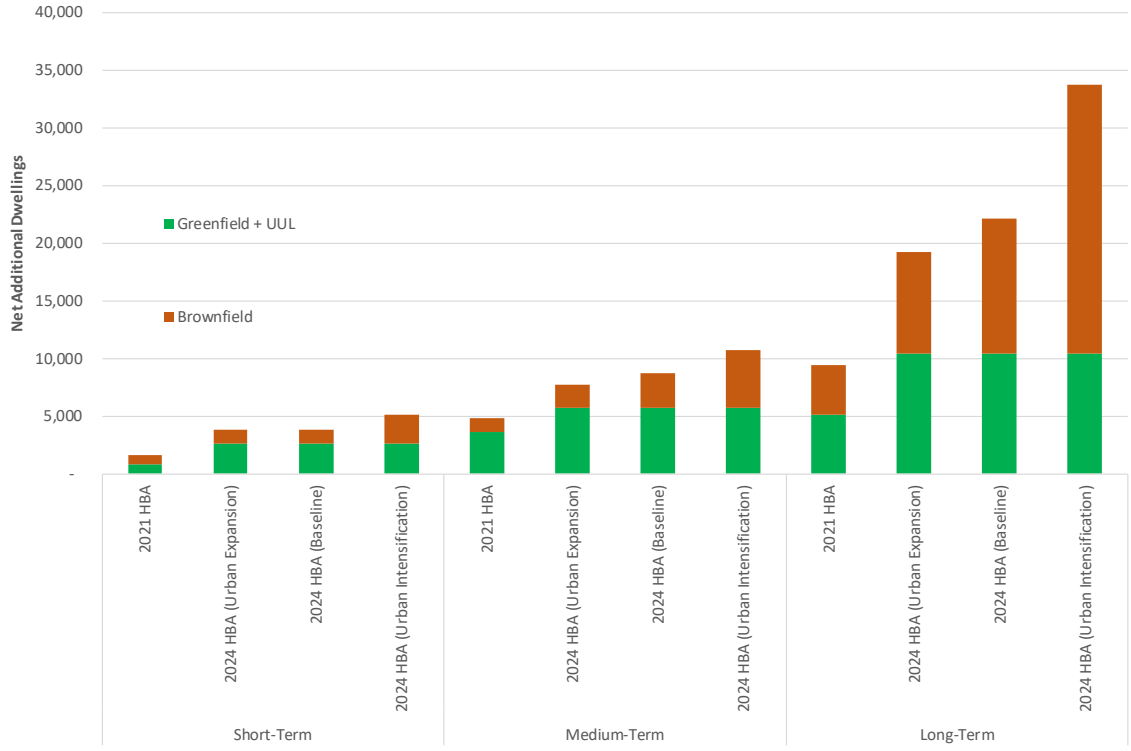
There are also large increases in RER capacity within the existing urban area. These are due to the large increases in development opportunity enabled through PC9 (Section 5). As described in Section 6, this increased opportunity also increases the feasibility of development of a range of dwelling typologies within the existing urban area. Higher potential yields increase the number of sites that are likely to be feasible for redevelopment.

Changes to the dwelling mix also form an important part of the changes in RER capacity between the two assessments. Increased shares of the RER capacity are in attached typologies, particularly in the long term as the market for these typologies becomes more established.

The changes to the size and distribution of RER capacity between the two assessments form key components to meeting demand from different parts of the market. This is assessed in Section 9.

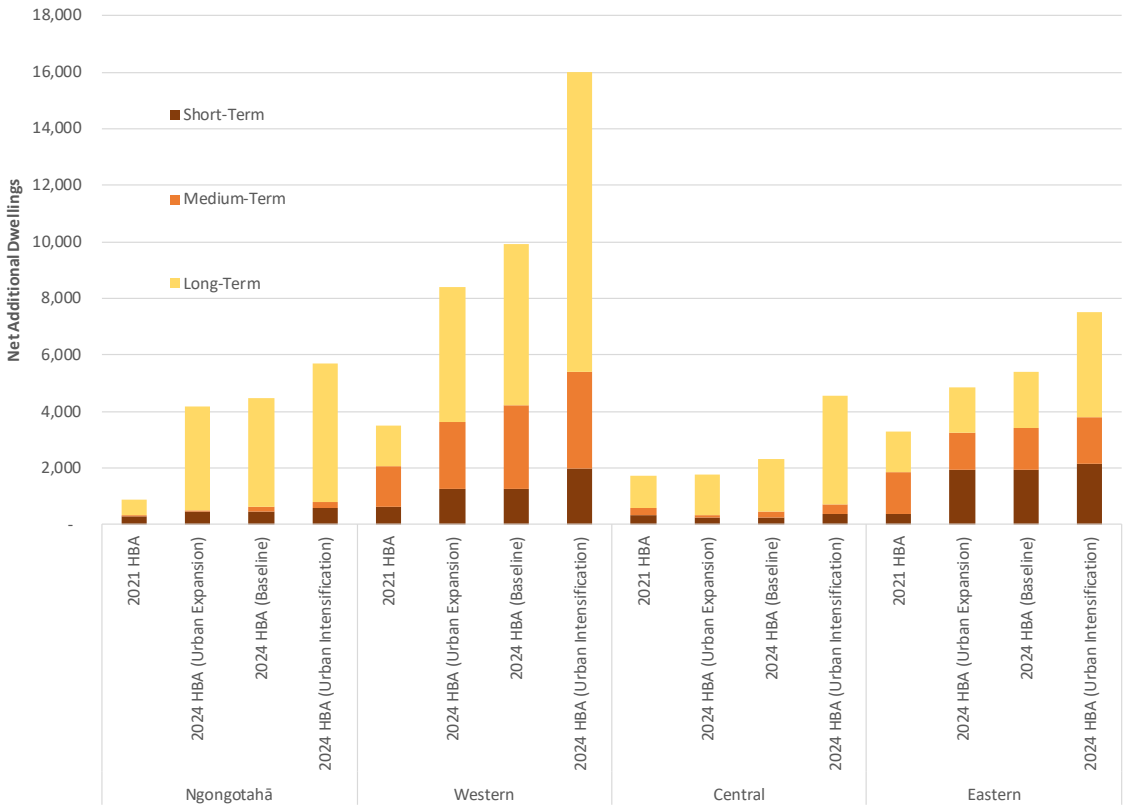
[88] Additional infrastructure has been supplied in areas where development is underway in the Western and Eastern catchments between the assessments, enabling inclusion of this capacity within the short term.

Figure 8.4 – RER Capacity by Location Type and Time Period: Comparison of 2021 HBA and 2024 HBA



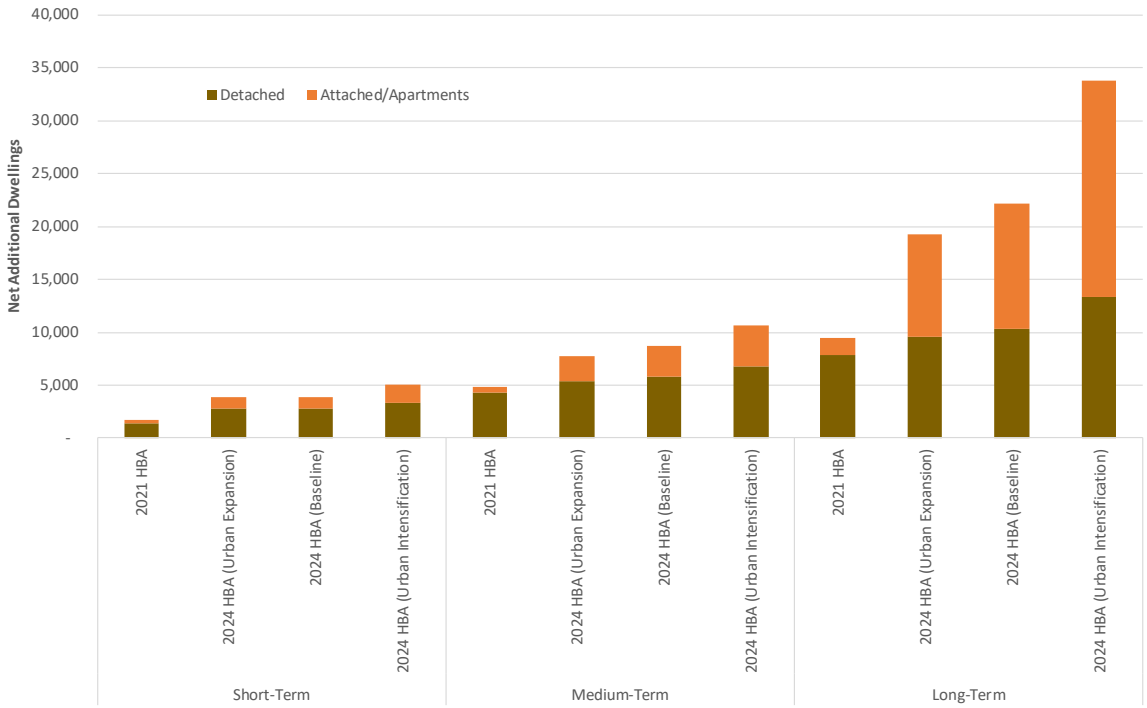
Source: M.E Rotorua Residential Capacity, 2020 and 2024.

Figure 8.5 – RER Capacity by Reporting Area and Time Period: Comparison of 2021 HBA and 2024 HBA



Source: M.E Rotorua Residential Capacity Model, 2020 and 2024.

Figure 8.6 – RER Capacity by Dwelling Typology and Time Period: Comparison of 2021 HBA and 2024 HBA



Source: M.E Rotorua Residential Capacity Model, 2020 and 2024.

9 Sufficiency of Housing Capacity

In accordance with Clause 3.2 of the NPS-UD, this section assesses the sufficiency of housing capacity to meet future urban dwelling demand across the district's urban environment (and including the competitiveness margin). In line with the technical requirements of the NPS-UD, it therefore compares the level of serviced, feasible and RER capacity estimated in Section 8 with the demand for urban dwellings in Section 3.3.4 under the preferred medium growth future projections. A comparison with housing sufficiency results estimated in the HBA 2021 is provided and key drivers of change are discussed.

9.1 Approach

Clause 3.2 of the NPS-UD specifies that RLC must provide at least sufficient development capacity in its urban environment "to meet expected demand for housing: (a) in existing and new urban areas; and (b) for both standalone dwellings and attached dwellings; and (c) in the short term, medium term, and long term". That development capacity must be plan enabled, infrastructure ready, feasible and reasonably expected to be realised and include the appropriate competitiveness margin. The requirement to assess sufficiency for housing development capacity is also set out in clause 3.27 of the NPS-UD.

At a high level, the sufficiency assessment compares the reasonably expected to be realised (RER) modelled capacity (which is plan-enabled, commercially feasible and infrastructure-served) with the projected net change in demand for dwellings (including a margin). A surplus of capacity is projected to occur if the level of RER capacity is greater than the projected net increase in demand and vice versa for a shortfall. Shortfalls/surpluses of capacity are quantified in terms of the number of dwellings.

The sufficiency assessment is undertaken for both the total Rotorua urban environment as well as within different sub-components of the market. Assessment within different parts of the market is a critical aspect to understand the ability for the urban environment to meet future growth needs overall. This is because demand is likely to arise within different parts of the market including across different types of dwellings and location types (e.g. greenfield vs. brownfield), and within different geographic parts of the urban area. While there are degrees of demand substitution, it is unlikely that supply only in one of these categories could reasonably meet all demand arising across these categories. Furthermore, development across these areas is often undertaken by different parts of the market, and it is unlikely that capacity within developer/construction parts of the market could directly expand across all areas of supply.

As such, the sufficiency assessment is undertaken across the following sub-areas:

- By location type to assess the sufficiency of capacity provided through greenfield development (including larger scale development on UUL) vs. through brownfield urban intensification through infill and redevelopment within the existing urban areas.
- By dwelling typology to assess the relative balances across different parts of the market for detached and attached dwellings. The updated assessment includes a further distinction within the

latter for apartments vs. other attached dwellings to broadly align with the levels of development opportunity in Rotorua's planning provision.

- By reporting area location to assess the ability for households to locate within different geographic areas of the urban environment.

While the assessment has been undertaken within each of these categories, it remains important to consider the ability for demand substitution to occur, to an extent, across these categories. This includes the ability for a shortfall in one area to be met through surpluses in another.

In addition to the maximum rates of potential capacity availability (as outlined in Section 8.1), the sufficiency assessment distributes the demand between each type of location in accordance with each of the modelled scenarios. These are set out as follows:

- Urban Expansion Scenario: this scenario allocates increasing shares of demand to greenfield/UUL areas through time, equating to 75% of long term demand (2023-2054) in these areas. It allows for up to 5% commercially feasible brownfield capacity availability in the short term, increasing to up to 8% in the medium term and up to 15% in the long term (which equate to lower shares of plan enabled capacity for each scenario as set out in Section 8.3).
- Baseline Scenario: this scenario allocates a constant ratio of demand into greenfield/UUL (65%) vs. existing urban (35%) through time. It allows for up to 5% commercially feasible brownfield capacity availability in the short term, increasing to up to 12% in the medium term and up to 20% in the long term.
- Urban Intensification Scenario: this scenario allocates equal shares of 2023-2054 demand to greenfield (incl. UUL) and existing urban areas. This occurs through increasing shares of growth into the existing urban area and correspondingly decreasing shares into the greenfield/UUL areas through time. It allows for up to 10% commercially feasible brownfield capacity availability in the short term, increasing to up to 20% in the medium term and up to 40% in the long term.

The following sub-sections contain the sufficiency assessment results by dwelling type and location in the urban environment in the short, medium, and long term for each of the modelled scenarios. The upper section of each table shows the projected net change in demand for dwellings. This includes the competitiveness margin on demand, which is applied to the net increase in demand across the assessment time period. The middle section of each table then shows the future RER capacity estimated in Section 8. The right-hand section of each table contains the sufficiency analysis. It shows the net difference between the projected RER capacity and the projected future demand (with a margin). Net differences greater than zero suggest a surplus in capacity, while negative net differences indicate a potential shortfall in capacity.

9.2 Baseline Scenario Sufficiency

The baseline scenario sufficiency assessment is summarised by time period and location type in Table 9.1. An assessment by reporting area and dwelling typology is contained in Table 9.2, with a comparison of capacity to demand within greenfield/UUL areas provided in Figure 9.1.

There are projected capacity surpluses across all three time periods in both greenfield/UUL and existing urban brownfield areas. The projected surplus is small in the short term at 300 dwellings, which is due to a

combination of only limited infrastructure-served capacity in greenfield areas and assumed limited rates of capacity availability within the existing urban area in the short term.

The projected surpluses become substantially larger through time, increasing to 3,200 dwellings in the medium term, and to 13,000 dwellings in the long term. The size of the long term surplus is large in comparison to the total projected long term demand of 9,100 dwellings (incl. margin). It is large relative to demand in both greenfield and existing urban areas. With a long term greenfield/UUL capacity for an additional 10,500 dwellings, this suggests that these areas have sufficient capacity to accommodate all of Rotorua's projected long term demand if it were to occur entirely within these areas.

Table 9.1 – Summary of Sufficiency by Location Type: Baseline Scenario

Reporting Area	Short-Term			Medium-Term			Long-Term (Market Growth)		
	Existing Urban	Greenfield/Underutilised Urban Land	TOTAL	Existing Urban	Greenfield/Underutilised Urban Land	TOTAL	Existing Urban	Greenfield/Underutilised Urban Land	TOTAL
Demand	1,200	2,300	3,500	1,900	3,600	5,500	3,200	5,900	9,100
RER Capacity	1,200	2,600	3,900	3,000	5,700	8,700	11,700	10,500	22,100
Sufficiency	10	300	300	1,100	2,100	3,200	8,500	4,500	13,000

Source: M.E Rotorua Residential Capacity Model, 2024 and M.E Rotorua Residential Demand Model, 2024.

Differences emerge in the patterns of surpluses and shortfalls when examined by location and dwelling typology. Table 9.2 indicates there are generally projected shortfalls within the central reporting area and within the apartment dwelling typology. Limited commercial feasibility is the main contributor to apartment capacity shortfalls. The market for apartments is not well established within Rotorua, meaning capacity is generally only estimated to become feasible for commercial developers in the long term. Despite limited commercial feasibility, other parts of the market that operate under different development models (e.g. social housing providers) may deliver apartment dwellings within Rotorua to help meet this demand.

Table 9.2 – Sufficiency by Reporting Area and Dwelling Typology: Baseline Scenario

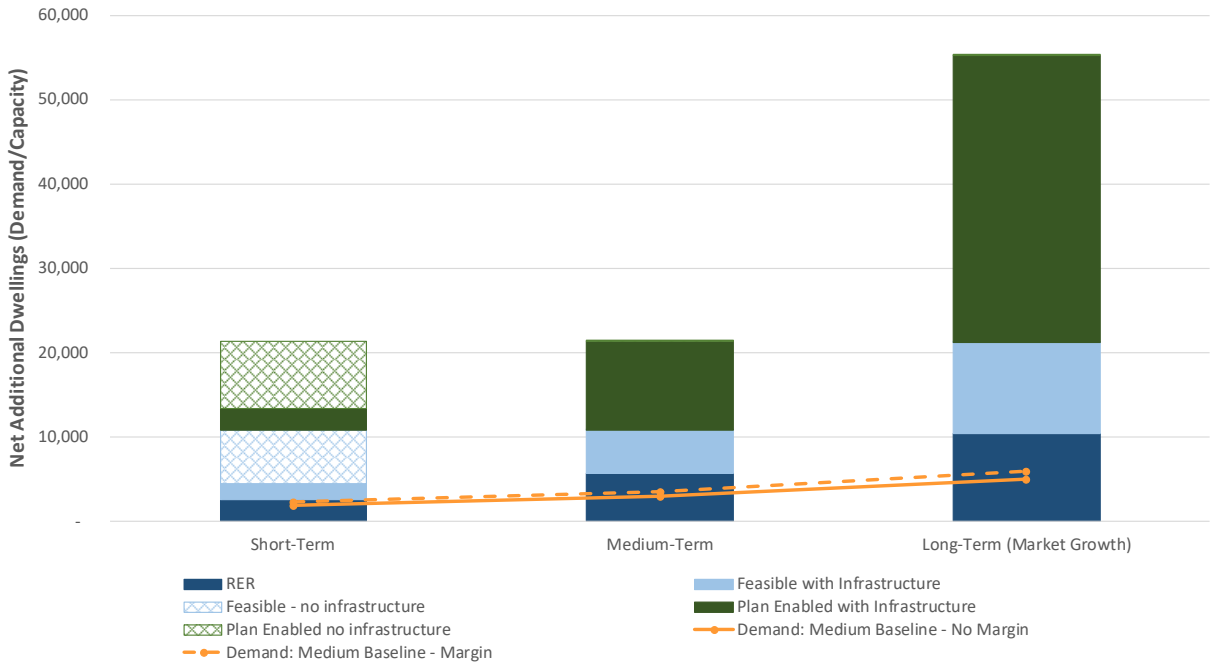
Reporting Area	Short-Term				Medium-Term				Long-Term (Market Growth)			
	Detached	Attached	Apartments	TOTAL	Detached	Attached	Apartments	TOTAL	Detached	Attached	Apartments	TOTAL
	DEMAND - NET ADDITIONAL DWELLINGS											
Ngongotahā	300	50	10	**300**	400	100	20	**500**	600	300	60	**900**
Western	1,200	200	30	**1,500**	1,500	500	100	**2,200**	1,700	1,100	300	**3,100**
Central	600	400	60	**1,000**	900	700	200	**1,700**	1,300	1,300	500	**3,100**
Eastern	600	80	10	**700**	800	200	30	**1,100**	1,300	600	100	**2,000**
Total	**2,700**	**700**	**100**	**3,500**	**3,600**	**1,600**	**300**	**5,500**	**4,900**	**3,300**	**900**	**9,100**
	RER CAPACITY - NET ADDITIONAL DWELLINGS											
Ngongotahā	400	60	-	**400**	500	100	-	**600**	2,700	1,700	90	**4,500**
Western	800	400	-	**1,300**	2,800	1,400	-	**4,200**	4,500	5,300	90	**9,900**
Central	70	200	-	**200**	100	300	-	**500**	400	1,400	600	**2,300**
Eastern	1,400	500	-	**1,900**	2,400	1,000	-	**3,400**	2,800	2,600	60	**5,400**
Total	**2,800**	**1,100**	**-**	**3,900**	**5,800**	**2,900**	**10**	**8,700**	**10,400**	**11,000**	**800**	**22,100**
	NET SUFFICIENCY											
Ngongotahā	100	10	-	**100**	100	20	-20	**100**	2,200	1,400	20	**3,600**
Western	-400	200	-30	**-200**	1,200	900	-100	**2,000**	2,800	4,200	-200	**6,800**
Central	-500	-200	-60	**-800**	-700	-400	-200	**-1,300**	-1,000	50	100	**-800**
Eastern	900	400	-10	**1,200**	1,600	800	-30	**2,300**	1,500	2,000	-60	**3,400**
Total	**70**	**400**	**-100**	**300**	**2,200**	**1,300**	**-300**	**3,200**	**5,500**	**7,700**	**-100**	**13,000**

Source: M.E Rotorua Residential Capacity Model, 2024 and M.E Rotorua Residential Demand Model, 2024.

The baseline scenario assessment indicates capacity shortfalls within Rotorua's central reporting area. A key component of this is due to the absence of greenfield/UUL capacity within this area. Consequently, all projected demand is assessed in relation to brownfield intensification potential. However, it is likely that a significant portion of this demand would instead be met within greenfield/UUL areas in other parts of the urban environment. Higher take-up rates of brownfield capacity would be required if all of the central reporting area's projected demand were met within the same area. The required take-up rates are relatively high, particularly for detached dwellings, although this demand is most likely to instead be met within other areas.

There are generally sizeable projected surpluses across other reporting areas and within the detached and non-apartment attached dwelling typologies. The assessment indicates there is large scope to meet these areas of demand within Rotorua's urban environment.

Figure 9.1 – Comparison of Greenfield and Underutilised Urban Land Dwelling Capacity with Projected Demand: Baseline Scenario



Source: M.E Rotorua Residential Capacity Model, 2024 and M.E Rotorua Residential Demand Model, 2024.

9.3 Urban Expansion Scenario Sufficiency

The urban expansion scenario sufficiency assessment is summarised by time period and location type in Table 9.3. An assessment by reporting area and dwelling typology is contained in Table 9.4, with a comparison of capacity to demand within greenfield/UUL areas provided in Figure 9.2.

There are also projected capacity surpluses in all three time periods across both existing urban and greenfield/UUL areas in this scenario. Although still large relative to total demand, the size of the medium (+2,200 dwellings) and long term (+10,100 dwellings) surpluses are smaller in this scenario than the

baseline scenario. This occurs due to the higher share of demand allocated into greenfield/UUL areas, with correspondingly lower rates of feasible capacity availability within existing urban areas.

Table 9.3 – Summary of Sufficiency by Location Type: Urban Expansion Scenario

Reporting Area	Short-Term			Medium-Term			Long-Term (Market Growth)		
	Existing Urban	Greenfield/Underutilised Urban Land	TOTAL	Existing Urban	Greenfield/Underutilised Urban Land	TOTAL	Existing Urban	Greenfield/Underutilised Urban Land	TOTAL
Demand	1,200	2,300	3,500	1,700	3,800	5,500	2,300	6,900	9,100
RER Capacity	1,200	2,600	3,900	2,000	5,700	7,700	8,700	10,500	19,200
Sufficiency	50	300	300	200	2,000	2,200	6,500	3,600	10,100

Source: M.E Rotorua Residential Capacity Model, 2024 and M.E Rotorua Residential Demand Model, 2024.

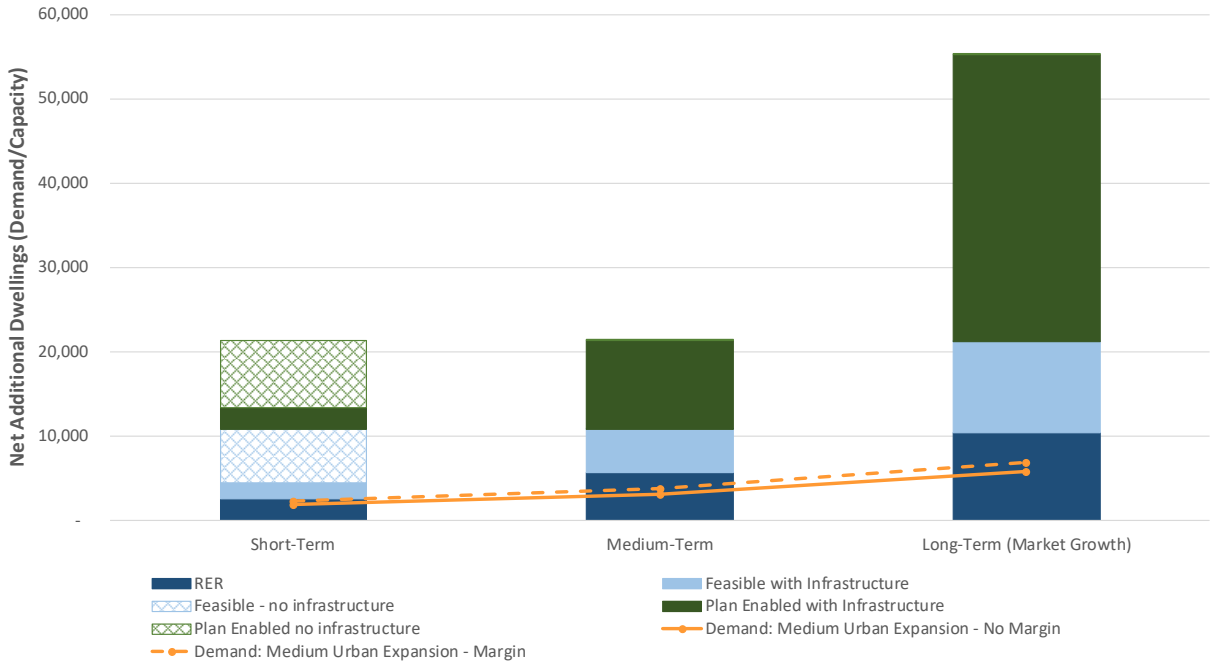
There are similar patterns of surpluses and shortfalls by dwelling typology and location within this modelled scenario. It also indicates a general pattern of capacity shortfalls within the central reporting area and apartment typology. These projected shortfalls are larger than under the baseline scenario due to the reduced rates of brownfield feasible capacity availability applied in this scenario. Despite the application of lower capacity availability rates within brownfield areas, large surpluses remain across most other typologies and reporting areas.

Table 9.4 – Sufficiency by Reporting Area and Dwelling Typology: Urban Expansion Scenario

Reporting Area	Short-Term				Medium-Term				Long-Term (Market Growth)			
	Detached	Attached	Apartments	TOTAL	Detached	Attached	Apartments	TOTAL	Detached	Attached	Apartments	TOTAL
	DEMAND - NET ADDITIONAL DWELLINGS											
Ngongotahā	300	50	10	**300**	400	100	20	**500**	600	300	60	**900**
Western	1,200	200	30	**1,500**	1,500	500	100	**2,200**	1,700	1,100	300	**3,100**
Central	600	400	60	**1,000**	900	700	200	**1,700**	1,300	1,300	500	**3,100**
Eastern	600	80	10	**700**	800	200	30	**1,100**	1,300	600	100	**2,000**
Total	**2,700**	**700**	**100**	**3,500**	**3,600**	**1,600**	**300**	**5,500**	**4,900**	**3,300**	**900**	**9,100**
	RER CAPACITY - NET ADDITIONAL DWELLINGS											
Ngongotahā	400	60	-	**400**	400	90	-	**500**	2,600	1,500	70	**4,200**
Western	800	400	-	**1,300**	2,500	1,100	-	**3,600**	4,100	4,300	60	**8,400**
Central	70	200	-	**200**	100	200	-	**300**	300	1,100	400	**1,800**
Eastern	1,400	500	-	**1,900**	2,300	900	-	**3,200**	2,600	2,200	40	**4,900**
Total	**2,800**	**1,100**	**-**	**3,900**	**5,400**	**2,300**	**-**	**7,700**	**9,600**	**9,000**	**600**	**19,200**
	NET SUFFICIENCY											
Ngongotahā	100	10	-	**100**	60	-30	-20	**10**	2,100	1,200	-	**3,300**
Western	-400	200	-30	**-200**	1,000	600	-100	**1,400**	2,300	3,200	-200	**5,300**
Central	-500	-200	-60	**-800**	-800	-500	-200	**-1,400**	-1,100	-300	-40	**-1,400**
Eastern	900	400	-10	**1,200**	1,500	700	-30	**2,100**	1,300	1,600	-80	**2,900**
Total	**70**	**400**	**-100**	**300**	**1,800**	**800**	**-300**	**2,200**	**4,700**	**5,700**	**-300**	**10,100**

Source: M.E Rotorua Residential Capacity Model, 2024 and M.E Rotorua Residential Demand Model, 2024.

Figure 9.2 - Comparison of Greenfield and Underutilised Urban Land Dwelling Capacity with Projected Demand: Urban Expansion Scenario



Source: M.E Rotorua Residential Capacity Model, 2024 and M.E Rotorua Residential Demand Model, 2024.

9.4 Urban Intensification Scenario Sufficiency

The urban expansion scenario sufficiency assessment is summarised by time period and location type, reporting area and dwelling typology in Tables 9.5-9.6 and Figure 9.3.

The projected surpluses are largest across all three time periods within the urban intensification scenario. In the short term, there is a projected surplus of 1,600 dwellings, which is significantly higher due to the increased market focus on intensification opportunities within the existing urban brownfield areas. The projected surpluses increase significantly in the medium (+5,200 dwellings) and long terms (+24,700 dwellings), which are substantially greater than projected within the other scenarios. The projected surpluses are also larger in the greenfield areas due to the lower share of demand allocated to these areas in this scenario.

Table 9.5 – Summary of Sufficiency by Location Type: Urban Intensification Scenario

Reporting Area	Short-Term			Medium-Term			Long-Term (Market Growth)		
	Existing Urban	Greenfield/Underutilised Urban Land	TOTAL	Existing Urban	Greenfield/Underutilised Urban Land	TOTAL	Existing Urban	Greenfield/Underutilised Urban Land	TOTAL
Demand	1,300	2,200	3,500	2,200	3,300	5,500	4,600	4,600	9,100
RER Capacity	2,500	2,600	5,100	5,000	5,700	10,700	23,300	10,500	33,800
Sufficiency	1,200	400	1,600	2,800	2,400	5,200	18,800	5,900	24,700

Source: M.E Rotorua Residential Capacity Model, 2024 and M.E Rotorua Residential Demand Model, 2024.

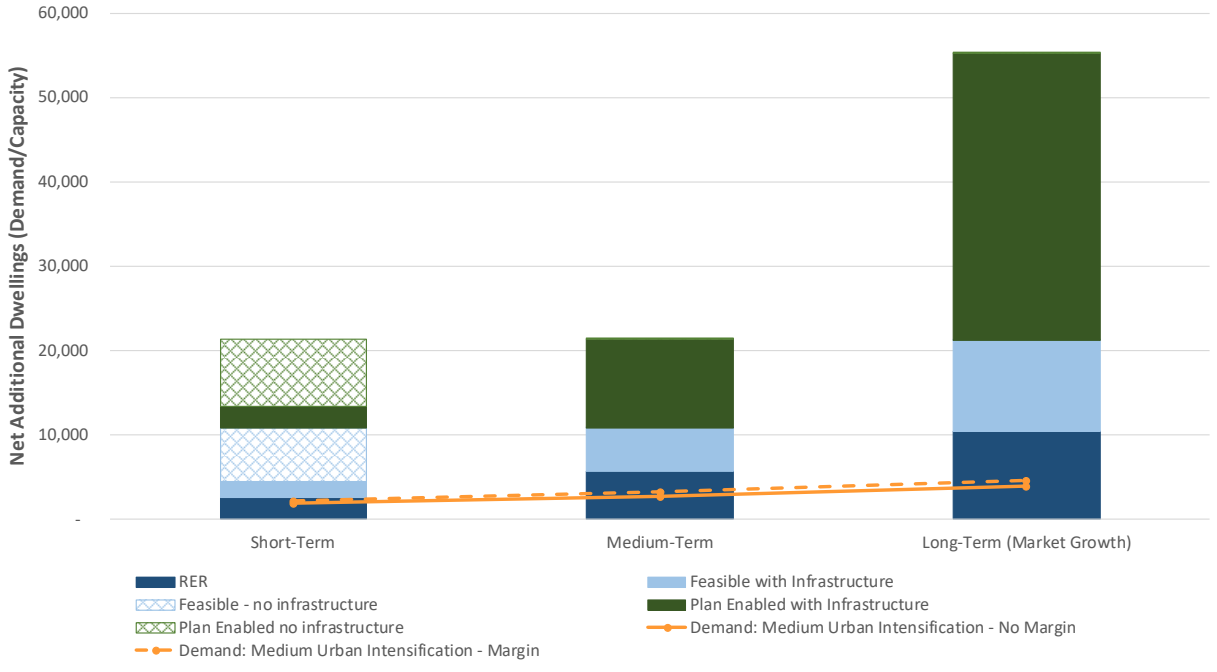
The patterns of surpluses and shortfalls by dwelling typology and location differ to the other modelled scenarios in the long term. A greater focus on urban intensification instead generates a projected 1,400 dwelling capacity surplus within the central reporting area in the long term. There is also a surplus for apartments projected to occur in the long term under this scenario. These surpluses are projected to occur in the long term under this scenario as the market for attached typologies increases their feasibility in the long term, combined with the greater rates of market availability of feasible capacity.

Table 9.6 – Sufficiency by Reporting Area and Dwelling Typology: Urban Intensification Scenario

Reporting Area	Short-Term				Medium-Term				Long-Term (Market Growth)			
	Detached	Attached	Apartments	TOTAL	Detached	Attached	Apartments	TOTAL	Detached	Attached	Apartments	TOTAL
	DEMAND - NET ADDITIONAL DWELLINGS											
Ngongotahā	300	50	10	**300**	400	100	20	**500**	600	300	60	**900**
Western	1,200	200	30	**1,500**	1,500	500	100	**2,200**	1,700	1,100	300	**3,100**
Central	600	400	60	**1,000**	900	700	200	**1,700**	1,300	1,300	500	**3,100**
Eastern	600	80	10	**700**	800	200	30	**1,100**	1,300	600	100	**2,000**
Total	**2,700**	**700**	**100**	3,500	**3,600**	**1,600**	**300**	5,500	**4,900**	**3,300**	**900**	**9,100**
	RER CAPACITY - NET ADDITIONAL DWELLINGS											
Ngongotahā	500	100	-	**600**	600	200	10	**800**	3,100	2,500	200	**5,700**
Western	1,200	800	-	**2,000**	3,400	2,000	-	**5,400**	6,300	9,500	200	**16,000**
Central	100	300	-	**400**	200	500	-	**700**	700	2,700	1,100	**4,600**
Eastern	1,600	600	-	**2,200**	2,600	1,200	-	**3,800**	3,300	4,100	100	**7,500**
Total	**3,400**	**1,800**	**-**	5,100	**6,800**	**3,900**	**10**	10,700	**13,400**	**18,800**	**1,600**	**33,800**
	NET SUFFICIENCY											
Ngongotahā	200	70	-	**300**	200	100	-10	**300**	2,500	2,200	100	**4,800**
Western	-20	600	-30	**500**	1,800	1,500	-100	**3,200**	4,600	8,400	-100	**12,900**
Central	-500	-100	-60	**-700**	-600	-200	-200	**-1,000**	-600	1,400	700	**1,400**
Eastern	1,000	500	-10	**1,500**	1,800	1,000	-30	**2,700**	2,000	3,500	-10	**5,600**
Total	**700**	**1,000**	**-100**	1,600	**3,200**	**2,300**	**-300**	5,200	**8,500**	**15,500**	**700**	**24,700**

Source: M.E Rotorua Residential Capacity Model, 2024 and M.E Rotorua Residential Demand Model, 2024.

Figure 9.3 - Comparison of Greenfield and Underutilised Urban Land Dwelling Capacity with Projected Demand: Urban Intensification Scenario



Source: M.E Rotorua Residential Capacity Model, 2024 and M.E Rotorua Residential Demand Model, 2024.

A shortfall in detached dwelling capacity is still projected to occur in the central reporting area. It is unlikely that the higher levels of demand projected for detached dwellings would be met within the central reporting area, particularly where there may be a greater market tendency to instead redevelop sites into attached typologies due to the higher potential dwelling yields. Projected shortfalls in detached dwelling demand are instead more likely to be met within other reporting areas.

9.5 Changes Since HBA 2021

Tables 9.7 and 9.8 provide a comparison of the sufficiency assessment in the updated 2024 assessment with that contained in the HBA 2021. Table 9.7 summarises the net sufficiency at the total urban environment level, through showing the differences between net additional demand and RER capacity. Table 9.8 then provides a more detailed comparison of the estimated sufficiency by reporting area and dwelling typology within each time period.

There are large differences in the sufficiency of capacity between the 2021 and 2024 assessments. The previous assessment identified shortfalls in capacity across all three time periods. In contrast, the 2024 assessment estimates sizeable surpluses at the urban environment level, particularly in the medium and long term. The differences in RER capacity between the two assessments have the largest effect, with a smaller contribution through differences in projected net changes in dwelling demand.

Table 9.7 – Total Net Changes in Demand, RER Capacity and Sufficiency by Time Period: Comparison of HBA 2021 and HBA 2024

Assessment and Scenario	Net Additional Dwelling Demand			RER Capacity			Net Sufficiency		
	Short-Term	Medium-Term	Long-Term	Short-Term	Medium-Term	Long-Term	Short-Term	Medium-Term	Long-Term
2024 Assessment									
Baseline Scenario	3,500	5,500	9,100	3,900	8,700	22,100	300	3,200	13,000
Urban Expansion Scenario	3,500	5,500	9,100	3,900	7,700	19,200	300	2,200	10,100
Urban Intensification Scenario	3,500	5,500	9,100	5,100	10,700	33,800	1,600	5,200	24,700
2021 HBA Assessment	3,600	6,200	9,700	1,700	4,800	9,400	- 1,900	- 1,400	- 300

Source: M.E Rotorua Residential Capacity Model, 2020 and 2024; M.E Rotorua Residential Demand Model, 2020 and 2024.

The previous shortfalls in capacity were estimated to occur due to a combination of zoning provisions, feasibility and level of infrastructure provision. Previous short term shortfalls occurred due to greenfield areas not yet having infrastructure in place (which is a requirement for inclusion of capacity in the short term under the NPS-UD). The development of further infrastructure over the past three years has increased the greenfield RER capacity in the current assessment, contributing toward short term surpluses together with increased development opportunity across the urban environment.

The increased development potential within the existing urban area and the greater enabled yields within greenfield areas change the medium term shortfall estimated in the HBA 2021 to a significant surplus in the current assessment.

A small shortfall was previously estimated for the long term in the 2021 HBA. The limitations in commercial feasibility of additional greenfield areas added in the long term due to their leasehold land status were an important factor in generating the shortfall. The feasibility of these areas remains limited in the current assessment, however the increased dwelling yields, increased long term infrastructure-served capacity and

greater development opportunity across the urban environment instead produce sizeable long term surpluses.

The HBA 2021 estimated large shortfalls for attached dwellings, particularly in the medium and long term. There was previously limited development opportunity for these dwellings, with planning provisions focussed on lower density patterns of development consisting predominantly of detached dwellings on full sites. The large increases in development opportunity across a range of dwelling types through PC9 has significantly shifted this pattern to instead produce large surpluses in attached dwelling capacity.

Table 9.7 indicates that differences in the net change in demand in the medium to long term also make a small contribution to differences in estimated sufficiency between the assessments. The net change in demand is slightly lower in the medium and long term in the updated assessment, as set out in Section 3. However, the effect of these differences in demand is minor in comparison to the much larger effect of changes in RER capacity. The large size of the surpluses estimated in the current assessment indicate that surpluses would still occur if demand were significantly higher in the current assessment.

Table 9.8 - Sufficiency by Reporting Area, Dwelling Typology and Time Period: Comparison of HBA 2021 and HBA 2024

Reporting Area	Short-Term				Medium-Term				Long-Term (Market Growth)			
	Detached	Attached	Apartments	TOTAL	Detached	Attached	Apartments	TOTAL	Detached	Attached	Apartments	TOTAL
	2024 HBA Assessment - Baseline Scenario											
Ngongotahā	100	10	-	**100**	100	20	-20	**100**	2,200	1,400	20	**3,600**
Western	-400	200	-30	**-200**	1,200	900	-100	**2,000**	2,800	4,200	-200	**6,800**
Central	-500	-200	-60	**-800**	-700	-400	-200	**-1,300**	-1,000	50	100	**-800**
Eastern	900	400	-10	**1,200**	1,600	800	-30	**2,300**	1,500	2,000	-60	**3,400**
Total	**70**	**400**	**-100**	**300**	**2,200**	**1,300**	**-300**	**3,200**	**5,500**	**7,700**	**-100**	**13,000**
	2024 HBA Assessment - Urban Expansion Scenario											
Ngongotahā	100	10	-	**100**	60	-30	-20	**10**	2,100	1,200	-	**3,300**
Western	-400	200	-30	**-200**	1,000	600	-100	**1,400**	2,300	3,200	-200	**5,300**
Central	-500	-200	-60	**-800**	-800	-500	-200	**-1,400**	-1,100	-300	-40	**-1,400**
Eastern	900	400	-10	**1,200**	1,500	700	-30	**2,100**	1,300	1,600	-80	**2,900**
Total	**70**	**400**	**-100**	**300**	**1,800**	**800**	**-300**	**2,200**	**4,700**	**5,700**	**-300**	**10,100**
	2024 HBA Assessment - Urban Intensification Scenario											
Ngongotahā	200	70	-	**300**	200	100	-10	**300**	2,500	2,200	100	**4,800**
Western	-20	600	-30	**500**	1,800	1,500	-100	**3,200**	4,600	8,400	-100	**12,900**
Central	-500	-100	-60	**-700**	-600	-200	-200	**-1,000**	-600	1,400	700	**1,400**
Eastern	1,000	500	-10	**1,500**	1,800	1,000	-30	**2,700**	2,000	3,500	-10	**5,600**
Total	**700**	**1,000**	**-100**	**1,600**	**3,200**	**2,300**	**-300**	**5,200**	**8,500**	**15,500**	**700**	**24,700**
	2021 HBA Assessment											
Ngongotahā	40	-40	-	**-**	-200	-90	-	**-200**	200	-200	-	**-40**
Western	-700	-200	-	**-900**	-50	-500	-	**-500**	1,000	-1,000	-	**20**
Central	-600	-90	-	**-700**	-1,100	-300	-	**-1,300**	-1,700	40	-	**-1,600**
Eastern	-200	-50	-	**-300**	800	-100	-	**700**	1,700	-400	-	**1,300**
Total	**-1,500**	**-400**		**-1,900**	**-400**	**-1,000**		**-1,400**	**1,200**	**-1,500**		**-300**

Source: M.E Rotorua Residential Capacity Model, 2020 and 2024; M.E Rotorua Residential Demand Model, 2020 and 2024.

10 Impact of Planning and Infrastructure

This section builds on the analyses of housing demand, feasibility and sufficiency of capacity to assess the impacts of planning decisions and provision of infrastructure in Rotorua's urban environment. It examines how the development opportunity provided by these parameters contributes to a well-functioning urban environment, including the effect on housing affordability and competitiveness of the local housing market, as required by clause 3.23 of the NPS-UD.

10.1 Introduction

Planning has a core influence on the development of a well-functioning urban environment. It provides development opportunity that, together with other factors, encourages different growth patterns across different parts of the market. The distribution and type of growth have important effects on urban form (the efficiency of the spatial layout of the urban environment) and housing affordability through the alignment of dwelling supply with future housing need. The type of development opportunity provided to the market can influence the operation of different parts, with consequent effects on urban form and housing supply.

It is important to note that planning provisions are one of the factors that affect the feasibility of the development process and housing market outcomes. Other factors include the scale and timing of market demand, financial conditions, construction sector capacity, infrastructure provision, etc. The resulting dwelling development patterns delivered by the market are a combined function of these aspects.

This section of the report draws on the key areas of assessment undertaken to examine the likely impacts of Rotorua's planning decisions on these factors. The first part focusses on housing affordability, and the remainder on infrastructure, competitiveness and urban form.

10.2 Impact on Housing Affordability

This sub-section examines the impact of planning provisions on housing affordability in Rotorua's urban environment.

There is an important difference between *housing affordability* and *affordable housing.* Housing affordability forms the focus of this assessment and considers the level of affordability across the dwelling value profile of viable housing options for different household types across the full demand profile in each location. This differs to *affordable housing*, which instead refers to a subset of dwellings that are supplied at or below a particular price point, which is typically defined at a point in relation to an area's median income. Changes in dwelling development patterns, as encouraged by different sets of planning provisions, are likely to have an effect on housing affordability, but may not necessarily deliver affordable housing.

10.2.1 Housing Affordability Indicators

This section describes the current picture and recent changes in housing affordability in Rotorua using the indicators provided by the Ministry of Housing and Urban Development. They provide average measures across the district but are not able to assess levels of affordability within different parts of each market.

The assessment focusses on levels of affordability within Rotorua's housing market, comparing these to affordability in the surrounding housing markets and other Tier 2 urban economies. It examines the changes in affordability that have occurred since the previous HBA (specifically December 2020 to December 2023). Affordability is considered separately for the home ownership segment of the market and for households within the rental market.

Home Ownership Affordability

The indicators suggest that Rotorua generally has higher levels of home ownership housing affordability than surrounding areas and other Tier 2 urban economies. Some aspects of affordability are similar to those three years ago, with changes in Rotorua generally occurring in line with changes in the national economy as a result of economic conditions. Levels of affordability are lower than a decade earlier, mainly due to larger increases in house prices than incomes.

Table 10.1 summarises the average level of home ownership affordability across different urban economies through relating median house sales prices to median household incomes in each area. It expresses the affordability in terms of house prices as a multiple of average incomes. The indicator suggests that areas with higher multiples are less affordable, with areas containing lower multiples as more affordable.

Table 10.1 – Home Ownership Affordability: Ratio of Median Sales to Median Income

	Time				
Location	**Dec-13**	**Dec-18**	**Dec-20**	**Jun-22**	**Dec-23**
Rotorua District	5.1	6.9	8.0	9.4	7.8
Other Tier 2 Urban Economies					
Whangarei	6.5	8.2	9.4	11.2	9.5
New Plymouth	6.1	7.0	8.0	9.9	8.6
Napier	6.7	8.7	10.8	12.1	9.5
Hastings	5.9	7.1	9.2	11.0	8.9
Palmerston North	5.3	6.4	8.4	9.8	7.8
Nelson	7.3	9.3	10.2	11.5	9.4
Tasman	8.0	9.7	10.9	12.2	10.5
Queenstown	7.9	9.9	10.3	11.8	10.8
Dunedin	5.5	7.1	9.0	10.0	7.9
Surrounding Urban Economies					
Hamilton	6.0	8.3	9.1	10.7	8.9
Tauranga	7.6	10.0	11.0	13.1	10.7
Taupo	6.2	7.3	9.0	11.3	10.0
Auckland	8.1	10.1	10.3	11.9	9.1

Source: Ministry of Housing and Urban Development (MHUD, CoreLogic, Stats NZ).

Table 10.1 shows that Rotorua District had a ratio of 7.8 of median house sales to median income in December 2023. This indicates a higher level of housing affordability than surrounding cities (which ranged

from 8.9 to 10.7) and at the higher end of the range of housing affordability of other Tier 2 urban economies (which ranged from 7.8 to 10.8).

The housing affordability indicator is similar to that of 8.0 in December 2020, although has fluctuated during this time period (see Figure 10.1 below). Similar to other areas, the ratio increased from 2020 to 2022 (indicating reduced affordability), mainly due to the faster growth in house prices than income across this time. It has decreased since 2022 across all areas, primarily due to a decrease in house prices. Although it has decreased recently, it remains higher than a decade earlier due to faster growth in house prices than income across this period.

Figure 10.1 - Home Ownership Affordability: Rotorua District

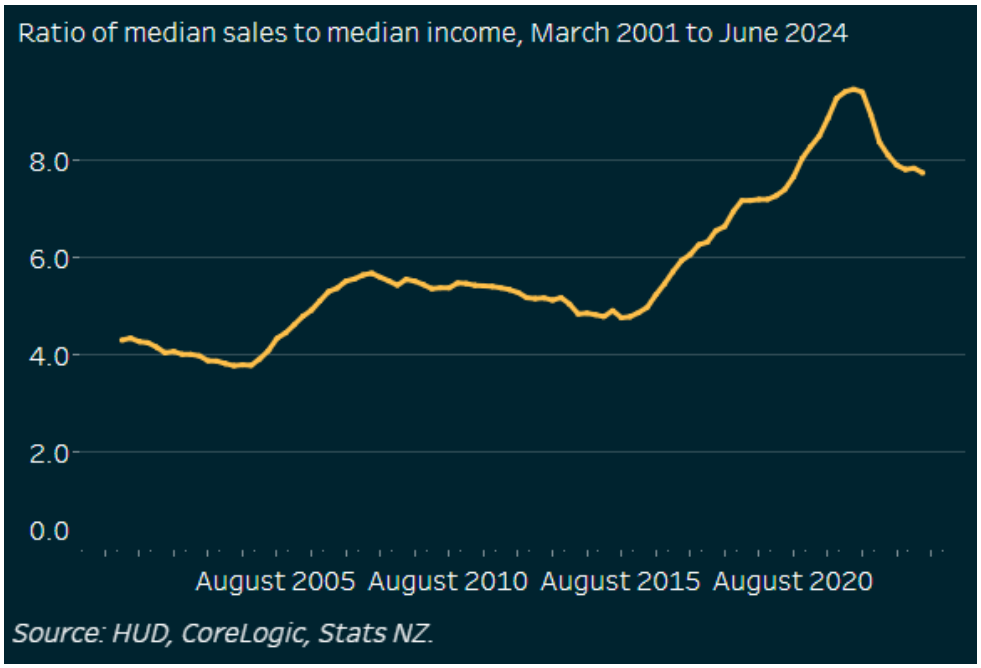


Figure 10.2 – Change in Housing Affordability Indicators (Source: MHUD)

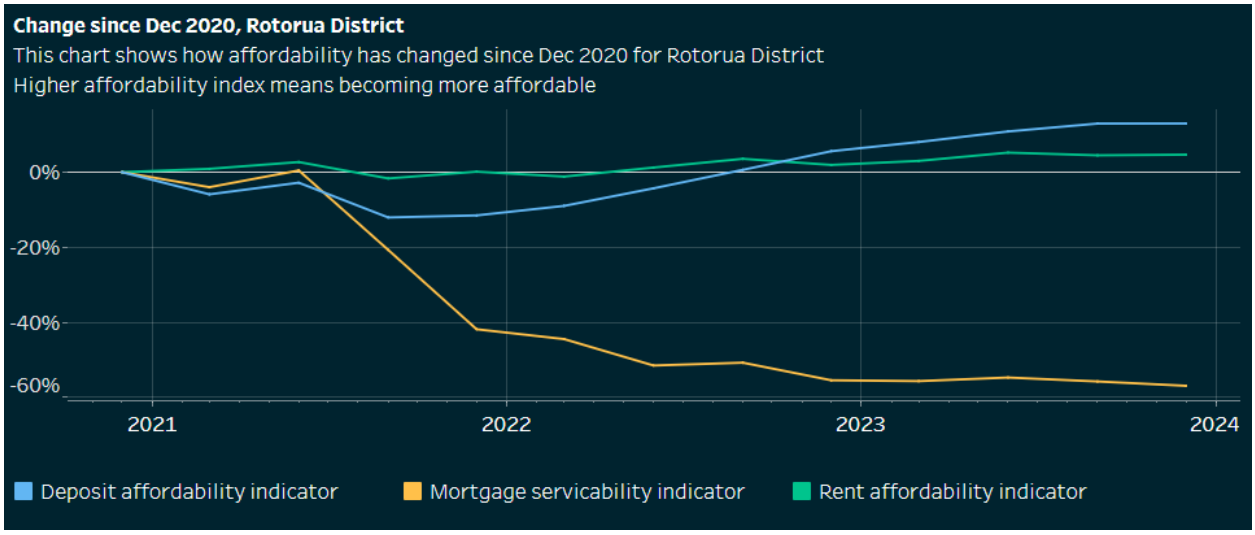


Figure 10.2 contains indicators of changes in housing affordability for first home buyers through time (December 2020 to December 2023). For the home ownership sector, it shows changes in the affordability of deposits and mortgage serviceability. Changes in these indicators for Rotorua have occurred largely in line with those of the national economy because of wider economic conditions.

The affordability of deposits has increased by a 13% since December 2020 due to a larger net positive change in household incomes than house prices. This compares to 9% nationally, where the differential between house price and income changes was lower due to larger house price change. In contrast, mortgage serviceability has decreased significantly at -57%. This is heavily influenced by increased interest rates across this time period, which have caused similar changes nationally.

Rental Market

The indicators suggest that levels of rental affordability in Rotorua are lower than five to 10 years previously, although have increased since the previous assessment (December 2020). Despite recent increases, Rotorua's affordability relative to the National economy is significantly lower than a decade earlier due to faster growth in rents than income (from 2015 to 2022). Importantly, indicators suggest that Rotorua has higher rental affordability pressures at the lower end of the market.

Figure 10.3 below provides in indication of affordability within Rotorua's rental market from the previous three Censuses. It shows the share of renting households where rent is equal or greater to a proportion of household income, with rental stress considered to occur at 40%. It shows that in 2018 nearly one-third (31%) of rental households had rent that was equal to or greater than 40% of household income. This has increased across the previous two Census periods, from 24% of rental households in 2006.

Figure 10.3 – Rental Affordability: Rotorua

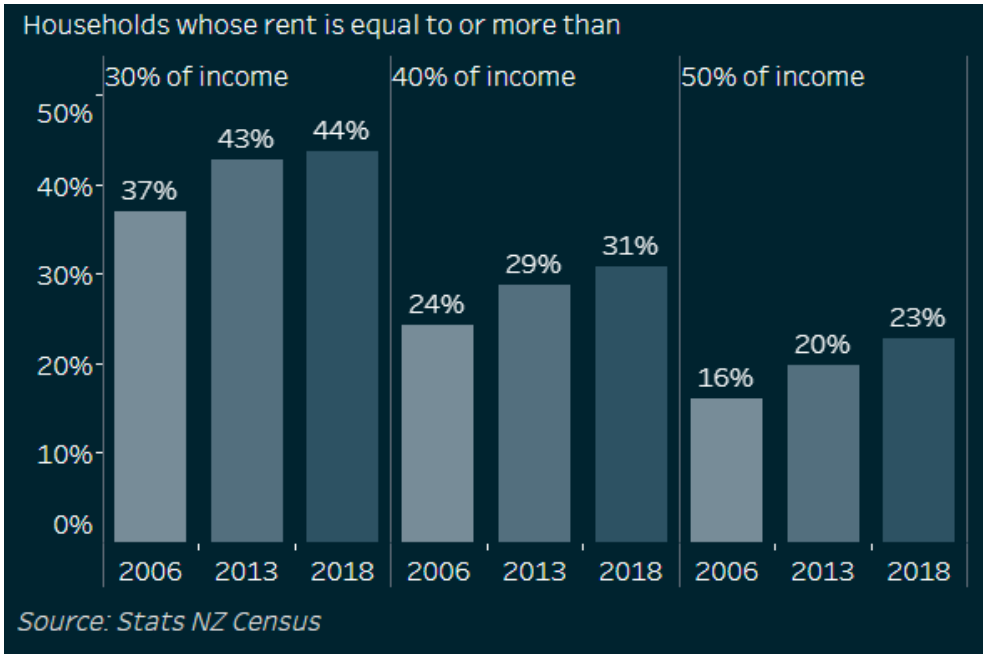
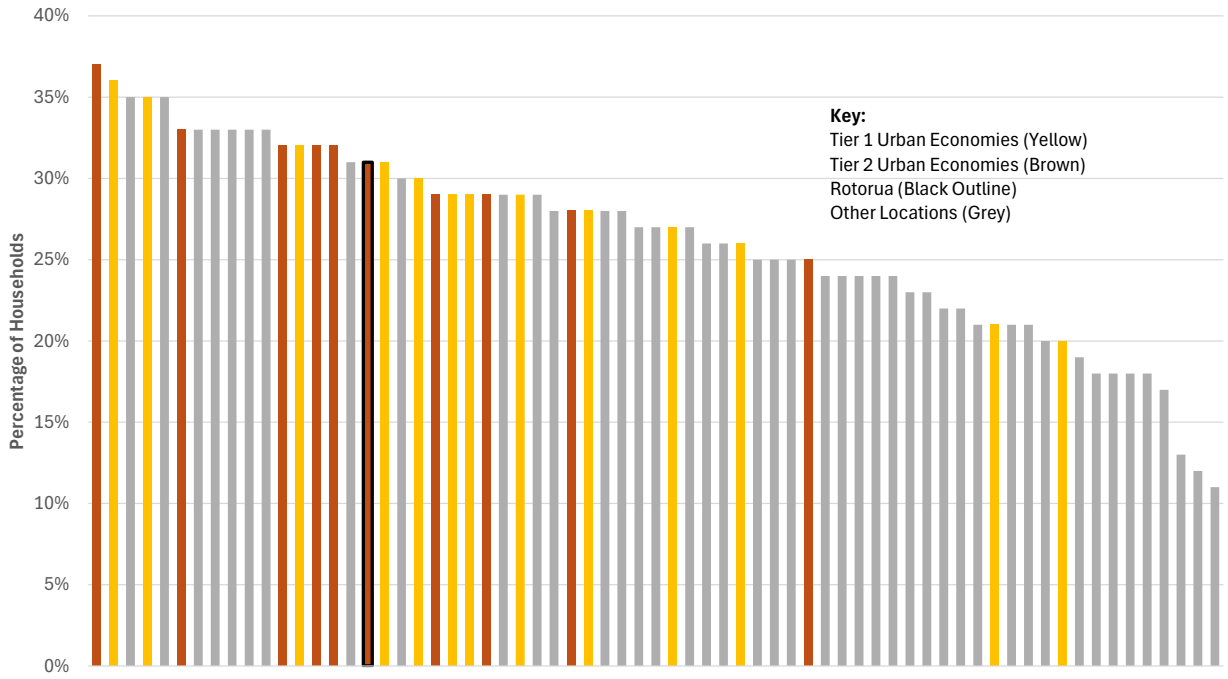


Figure 10.4 below shows that the level of rental stress experienced in Rotorua was within that of the range of other Tier 1 and 2 urban economies in 2018. At 31%, Rotorua's share of rental households with rent at

40% or more of their income is within the middle of the range of other Tier 2 urban economies (which ranged from 25% to 37%.

Figure 10.4 – Rental Stress: Percentage of Renting Households Spending Over 40% of Income on Rent by Territorial Authority, 2018

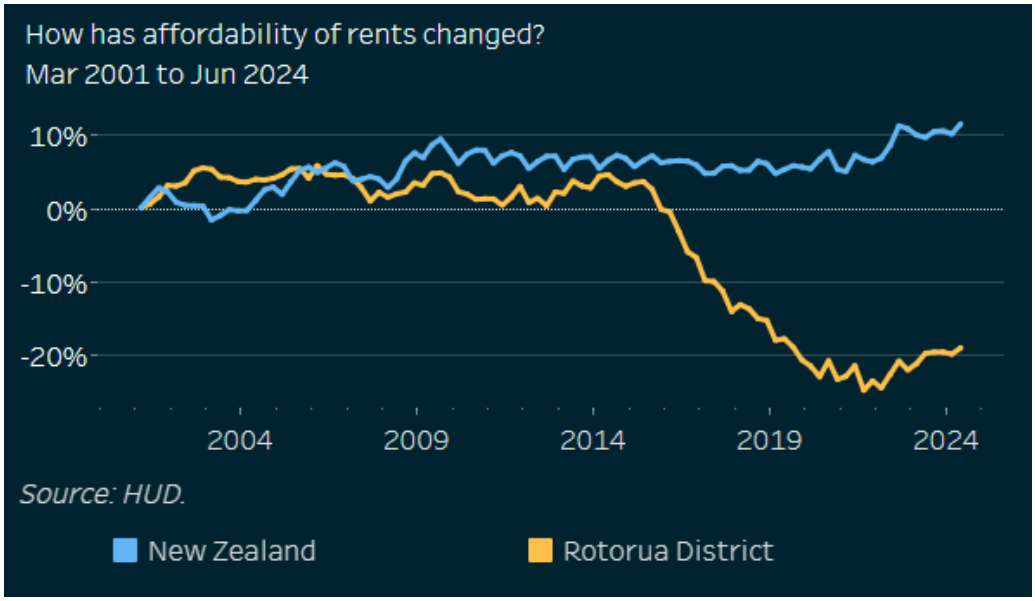


Source: MHUD (Stats NZ 2018 Census).

The indicators suggest the position of Rotorua's rental market relative to New Zealand has changed since a decade earlier. Figure 10.5 shows broadly similar changes in rental affordability between Rotorua and New Zealand overall from 2001 to 2015. From 2015 to 2021/2022 rental affordability decreased steadily in Rotorua, while remaining relatively similar for New Zealand overall. This has occurred due to faster growth in rental prices in Rotorua than household income between 2015 and 2022. In comparison, incomes grew faster than rent in New Zealand overall.

Rotorua's change in rental market position relative to New Zealand has remained relatively steady during the past three years following the earlier divergence from 2015 to 2021/2022. The rental affordability indicator in Figure 10.5 indicates that affordability within Rotorua's rental market is slightly higher than three years earlier (December 2020 to December 2023). The indicator shows that rental affordability in Rotorua has increased by 5% across this time period, which is consistent with the same increase nationally. This is due to a larger increase in household incomes than rent prices, although it is noted that rents have increased to a greater extent than house prices.

Figure 10.5 – Changes in Affordability of Rents Since 2001



The Ministry of Social Development Housing Register indicates there are significant issues of rental affordability at the lower end of Rotorua's market, with these pressures being greater than in other locations. This was shown in the graphs in Section 2.2.1. Figure 2.7 showed the number of people on the Housing Register, Figure 2.9 showed changes in the proportion of the population on the register and Figure 2.10 showed a comparison of these rates to other locations.

As discussed in Section 2.2.1, Rotorua has the highest proportion of people on the housing register within New Zealand (115/10,000 residents registered in June 2023, although down to 101/10,000 residents in June 2024). Differences to the national rate have emerged through time from 2018 to 2022 due to increases in the number of the people on the register during this time period, with these occurring at a faster rate than population growth within the district.

The number of people on the register has decreased from a peak of 1,104 in June 2022 to 899 registered in June 2023. By June 2024, the data shows that the number of people on the register dropped further to 793, although significant differences to the national rate remain.

10.2.2 Dwelling Mix and Housing Affordability

The potential impact on housing affordability forms a core component of the impact of planning. This occurs through the alignment of development patterns (dwelling size, typology and location) with housing demand, with important differences between the patterns encouraged under different sets of provisions.

Housing affordability is not increased through adding dwellings in the lowest dwelling value bands alone. It also requires an increased range of dwelling options that are suited to each household size and type, a share of which require larger dwellings. It is important that increased housing options occurs across the

dwelling value demand profile to enable the ability for households within different parts of this profile to make trade-offs between housing type, location, size and price[89].

Achieving a beneficial dwelling mix for long term housing need in the community is a core component of improving housing affordability in Rotorua. Importantly, this is a function of both dwelling typology and size. A dwelling mix across both of these factors is required to meet long term community demand. While there is a correlation between dwelling size and dwelling value, the typology also significantly influences the substitutability of household demand across different housing options.

The development opportunity provided by planning provisions to the market influences the types of dwellings delivered across different parts of Rotorua's urban environment. It is critical that the assessment also considers a key part of the effect as the difference between the development patterns encouraged under the PC9 intensification provisions vs. those otherwise encouraged previously under the Operative Plan, rather than only as a change measured from the current point in the market[90].

Past patterns of development across the district have been characterised by spatially extensive growth of low density detached dwellings, with limited opportunity for development of smaller or attached dwellings in areas of relative demand. This pattern of development has previously limited the potential for households to increase their level of housing affordability through making trade-offs between dwelling size, type, price and location.

The capacity assessment has shown the large increase in development opportunity enabled across most of Rotorua's urban environment through the PC9 intensification provisions. The feasibility assessment has also shown consequent increases in feasibility for low to medium density dwellings across much of the urban environment. The market is likely to respond to this increased opportunity, resulting in changes to the structure and mix of new dwellings incrementally added to the urban environment's housing stock. It is modelled to deliver both a greater number and range of dwellings than under previous planning provisions, that limited much of the development to lower density detached dwelling. The range of opportunities at different scales and across different locations means that this is likely to occur across different parts of the urban environment.

Importantly, the effect on the city's dwelling mix is likely to occur gradually through time as new dwellings are incrementally delivered to the market in response to growth. The effect on dwelling mix is likely to become more significant over the medium to long term with the cumulative growth in dwellings. This means that changes in affordability will occur gradually through household trade-offs/decisions in response to the increased housing choice (becoming larger through time), rather than as any immediate large-scale reduction in dwelling prices across the market.

The increased range of dwellings encouraged by Rotorua's planning provisions is likely to increase the ability for households to make trade-offs in dwelling choices and therefore potentially increase affordability. Attached dwellings are likely to form an increasingly important component of the dwelling

[89] For instance, a three to four bedroom duplex is likely to form a cheaper viable option for a larger family household that may alternatively occupy a larger detached dwelling. While this larger duplex dwelling is unlikely to occur in the lowest dwelling value bands, it increases housing affordability for households that may otherwise occupy dwellings in the mid value bands.

[90] This is important because there are other factors (e.g. construction costs, capacity within the development sector, monetary conditions, etc) that are likely to create increased upward pressure on dwelling prices. These factors may change from the current market, but would also apply across a counterfactual development opportunity. This is taken into account in the following section.

mix, with this likely to occur across both central and suburban areas. Many of these dwellings are sufficiently large to form viable cheaper options for a range of household types than alternatively occupying a detached dwelling in the same location.

The market is also likely to respond to the smaller site sizes enabled for detached dwellings, delivering a portion of dwellings at a reduced size from that otherwise enabled under the previous provisions. While these dwellings are unlikely to be provided within the lower value bands, they are still likely to be cheaper than detached dwellings alternatively constructed on sites with a 450m2 net area.

10.2.3 Housing Affordability Dwelling Value Band Analysis

This section provides further quantitative assessment on the impact of planning provisions on housing affordability. It examines the potential value distributions of dwellings from development patterns encouraged under different sets of planning provisions. A key aspect is the difference in value distributions between the types of dwellings encouraged under Rotorua's PC9 intensification provisions vs. the types of dwellings likely to instead occur if the Plan provisions applicable at the time of the HBA 2021 continued to apply. This comparison is an important component of understanding the effect of Rotorua's planning provisions.

The analysis applies the dwelling value profiles generated within the feasibility model (for feasible dwellings) to the estimated RER capacity. This is applied by location, development type and dwelling typology, to provide aggregate results at the urban environment level. Alternative scenario runs of commercial feasible and RER capacity were also undertaken within the Model to produce the same dwelling value distributions for the development pattern encouraged by the previous pre-PC9 provisions.

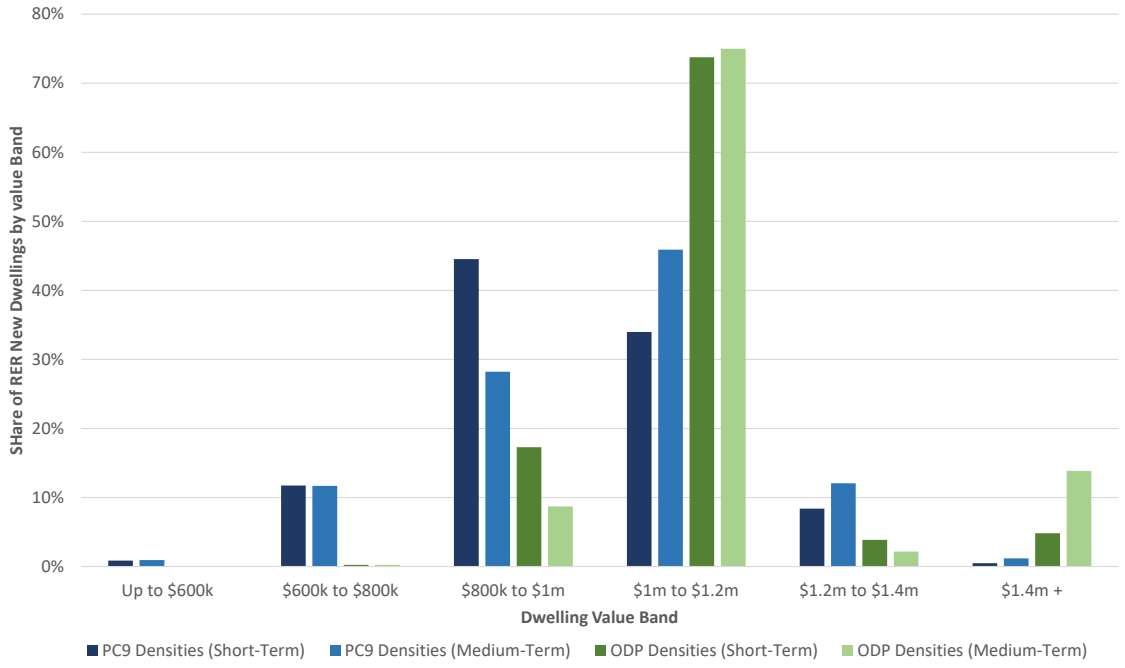
Figures 10.9-10.11 show the distribution of the share[91] of RER (new) dwellings by dwelling value band for Rotorua's urban environment, for each of the RER scenarios (Baseline, Urban Expansion, and Urban Intensification). The blue bars show the value profile of RER dwellings modelled under the operative PC9 provisions. The green bars show the value profile instead modelled with the application of the pre-PC9 densities (labelled ODP Densities in the graphs).[92] The darker shaded bars within each graph show the short term value distributions, with the lighter shaded bars showing the value distributions from the medium term.

The graphs show that there are sizeable differences in the modelled dwelling value distributions between the planning scenarios. The development opportunity enabled under the operative PC9 provisions produces a lower value distribution than that generated by the pre-PC9 densities. Part of this effect is due to the larger dwellings on larger site sizes within the pre-PC9 provisions, including a higher proportion of luxury dwellings (noting that RER is lower). A more diverse dwelling mix under the now operative PC9 provisions - containing a greater proportion of attached dwellings - is another key factor contributing toward a lower value distribution.

[91] The distribution has been converted to shares of total RER dwellings within each category to enable comparisons of the distribution between each data set due to differences in the total RER dwellings in each.

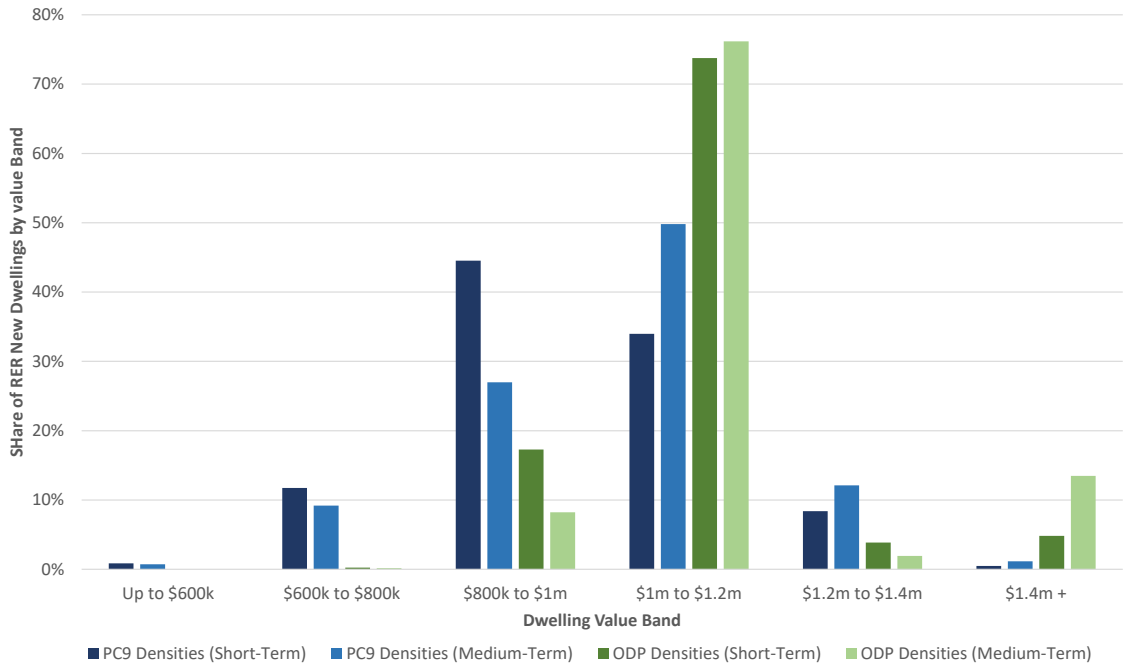
[92] The pre-PC9 densities have been applied to the same zoned areas as the baseline modelling (which applies PC9 densities).

Figure 10.6 – Modelled Dwelling Value Band Distribution in Rotorua Urban Environment by Planning Scenario: Baseline Scenario



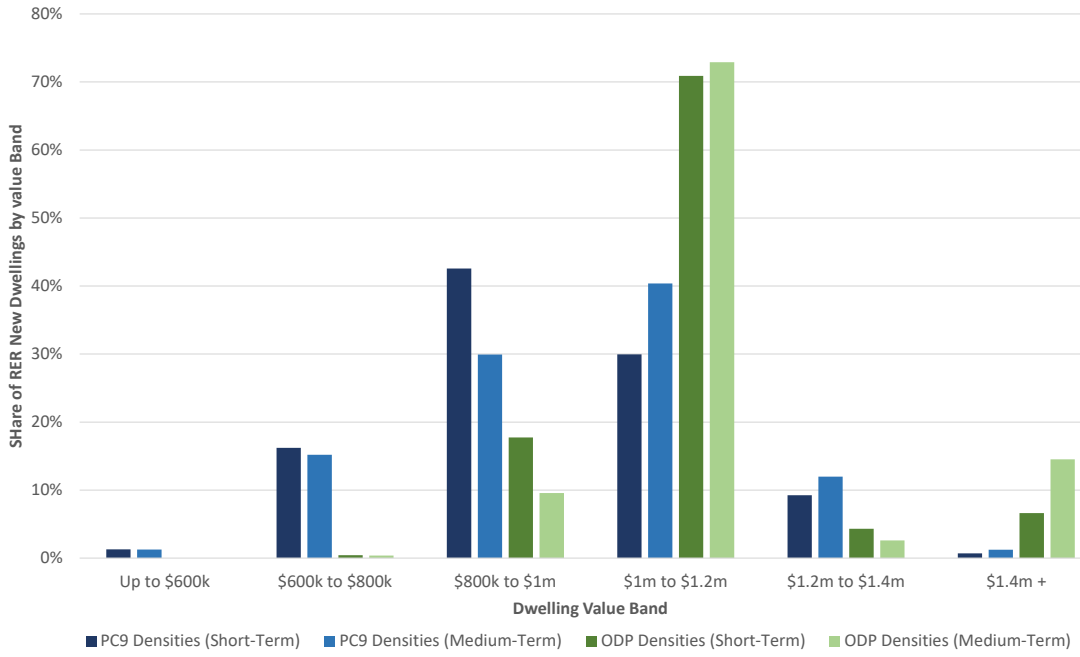
Source: M.E Ltd, Rotorua Residential Capacity Model, 2024.

Figure 10.7 - Modelled Dwelling Value Band Distribution in Rotorua Urban Environment by Planning Scenario: Urban Expansion Scenario



Source: M.E Ltd, Rotorua Residential Capacity Model, 2024.

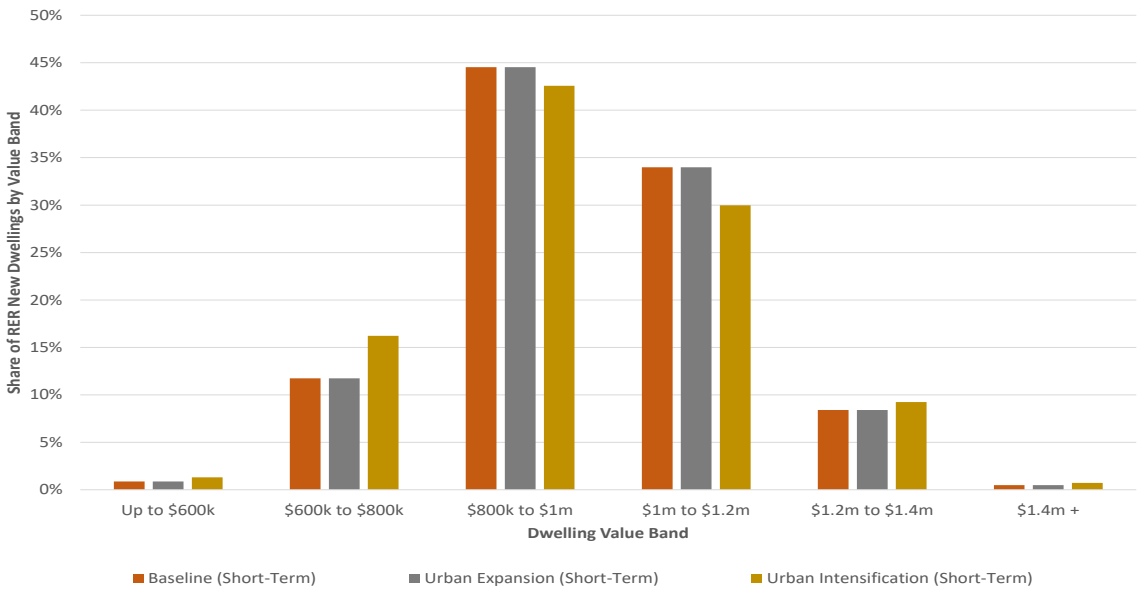
Figure 10.8 - Modelled Dwelling Value Band Distribution in Rotorua Urban Environment by Planning Scenario: Urban Intensification Scenario



Source: M.E Ltd, Rotorua Residential Capacity Model, 2024.

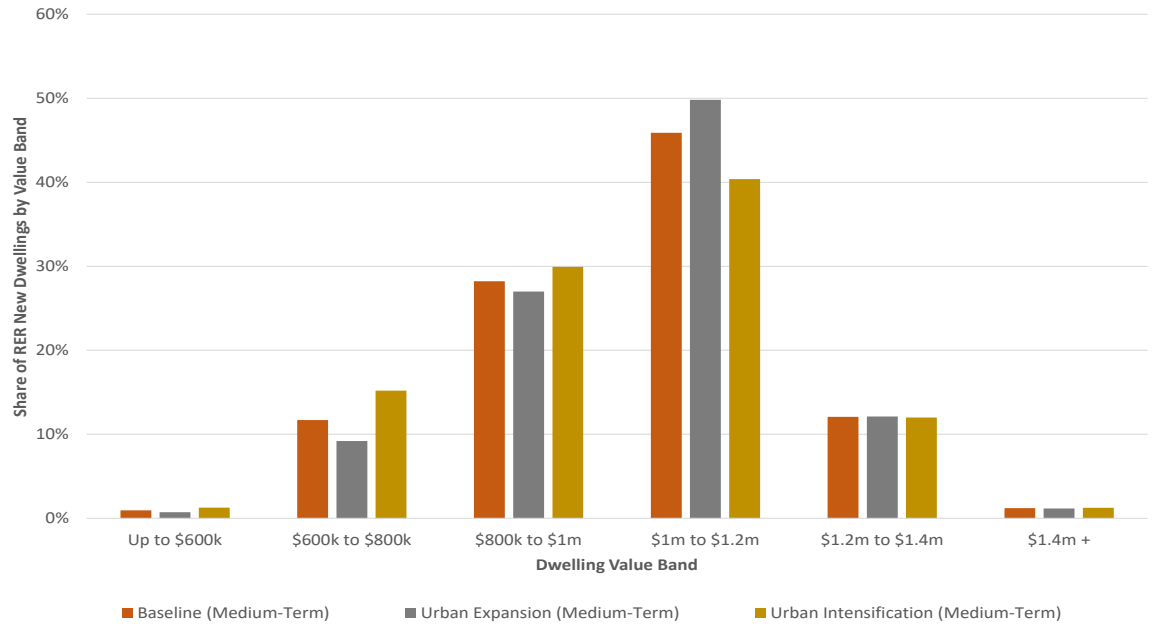
The effect of an increased dwelling mix is shown further below. Figures 10.12-13 show the difference in dwelling value band distributions between the modelled scenarios (Baseline, Urban Expansion and Urban Intensification) within the PC9 provisions planning scenario. The dwelling value profile is lower under the Urban Intensification Scenario where attached dwellings account for a greater share of the dwellings.

Figure 10.9 - Modelled Dwelling Value Band Distribution in Rotorua Urban Environment by Growth Scenario (Base Case PC9 Provisions): Short Term



Source: M.E Ltd, Rotorua Residential Capacity Model, 2024.

Figure 10.10 - Modelled Dwelling Value Band Distribution in Rotorua Urban Environment by Growth Scenario (Base Case PC9 Provisions): Medium Term



Source: M.E Ltd, Rotorua Residential Capacity Model, 2024.

10.3 Impact of Infrastructure

The provision of infrastructure is a core requirement of the dwelling development process. Infrastructure constraints can potentially occur through limited spatial coverage in greenfield areas of future urban expansion as well as within already urbanised areas through any limits in accommodating the additional network demand from new dwellings.

As required under the NPS-UD, this assessment has identified separately (Section 7) the portion of capacity that is served by infrastructure networks. The RER capacity incorporates the identified infrastructure limits (Section 8), with the sufficiency tested in Section 9.

Our assessment has not found evidence of infrastructure limits constraining future urban growth in Rotorua. In the short term, the sufficiency assessment estimated surpluses in capacity, which incorporates the effect of infrastructure. The calculated surpluses are smaller in the short term, but are followed by sizeable increases in surpluses in the medium to long term, driven in part by significant increases in the infrastructure capacity.

It is noted that in the short term there are additional areas of greenfield capacity that are estimated to be commercially feasible, but are not served by infrastructure. However, part of this is due to the NPS-UD technical requirements to only include short term capacity that already has infrastructure in place. Furthermore, infrastructure networks are already planned to cover these same areas within the medium term.

10.4 Competitiveness in the Housing Market

It is important to ensure that sufficient development opportunity is provided by planning parameters to enable competitiveness in Rotorua's housing market, while simultaneously encouraging an efficient long term development pattern.

There are differences in the economic effects (e.g. infrastructure cost and sustainability of urban form) between the spatial structures of growth encouraged under each set of planning provisions (i.e. pre-PC9 at the time of the 2021 HBA vs. the current planning framework). These need to be appropriately balanced with opportunity for competition across the market. Competition between different developers within the market is one factor that encourages patterns and rates of dwelling supply to better align with demand, including in dwelling prices.

Our assessment has considered the potential for competition to occur among commercial developers as a function of the development opportunity provided by Rotorua's planning provisions. It has identified areas for competition among different developers, including important changes as a result of the introduction of intensification provisions.

The capacity assessment has found there is significant greenfield development opportunity provided across a number of areas across Rotorua in the medium to long term. The additional capacity provided in the long term through the FDS adds further locations across different parts of the urban environment, which is likely to increase competition between different landowners. It is noted however that the leasehold status of some greenfield land areas (particularly within the Eastern reporting area) may restrict the viability of these areas for commercial developers.

Our assessment considers that the large increases in Rotorua's development opportunity enabled across the urban environment generally through PC9 are also likely to increase competition within the market. The capacity assessment has found that the provisions for attached dwellings and multiple dwellings per site mean that a much greater proportion of sites have development potential, with a sizeable proportion that would be likely to be feasible. Importantly, this occurs within the existing urban area at the individual suburban parcel scale. This means there a now a much greater number of potential opportunities for smaller developers to deliver dwellings within the Rotorua market.

The increased range and density of dwelling types enabled may also increase competition within Rotorua's development market. The provisions enable developers to provide a more diversified dwelling mix meaning that there is likely to be greater scope for developers to compete through providing different housing choice options to meet demand. The greater enabled range of dwellings is also likely to increase the range of market demand targeted by developers.

10.5 Urban Form and Well-Functioning Urban Environment

Planning has important economic effects on Rotorua's urban form that are likely to arise over the medium to longer term as a result of development patterns that are encouraged by the planning provisions (including the FDS). An efficient urban form is a critical component of a well-functioning urban environment, where the geographic distribution of different land uses and their intensity, impact upon the efficiency of interactions and accessibility of households, businesses and individuals across the urban

environment. Changes to Rotorua's urban form are likely to occur gradually and become significant over time through the cumulative effect of many individual land use decisions.

Location is not neutral. A centres-based urban form is generally a more sustainable pattern of city growth than dispersed patterns of development. The concentration of activity into central nodes results in more efficient patterns of consumer access to goods, services and other household needs. It also increases efficiency through the centralisation of infrastructure and services delivery[93].

Residential intensification in and around centres is a critical factor in reinforcing the growth and development of centres and their important role within the wider urban structure. A concentration of residential demand within these locations reinforces the commercial viability and vitality of centres. This occurs through the greater interaction of households within the centres, with higher shares of their access occurring through more sustainable nodes.

The scale at which intensification occurs differs significantly by location. Medium density development typically accounts for a larger share of the intensification within smaller urban economies such as Rotorua. The provision for higher density residential development is also an important aspect of Rotorua's urban form into the future. It can play an important role in supporting the viability and vitality of commercial centres, but can also dilute potential intensification around centres if it occurs in less appropriate locations.

The assessment has found that the PC9 intensification provisions enable patterns of growth that differ substantially to past patterns of development within Rotorua. These differences occur through a combination of medium density provision to enable more housing development across the extent of the suburban residential area, together with substantial increases enabled through the provision for higher density development around the City Centre and other core nodes in the outer areas of the urban environment.

The spatial extent of Rotorua's higher density provision was tested during the PC9 hearings and is likely to provide for development patterns that contribute to a well-functioning urban environment. The application of the High Density Residential Zone is shown below in Figure 10.14. The short to medium term provision around the City Centre aligns with patterns of relative demand, with higher density development encouraged across a spatial extent likely to support the viability of the City Centre. A spatial expansion of the provision in the long term occurs with projected growth in this part of the market, which is currently not yet well established in Rotorua, with limited feasibility.

The assessment has also found that the universal application of the medium density provisions across the extent of the general suburban area may limit potential differentiation in density (outside the high density zoned areas) between suburban areas surrounding centres and those located further away from centres. This is an important consideration as, in smaller urban economies such as Rotorua, a high share of the intensification around centres is likely to be characterised by medium density development such as terraced housing and other medium density dwellings. Undifferentiated provision of this intensification potential may reduce the extent to which intensification is concentrated around centres.

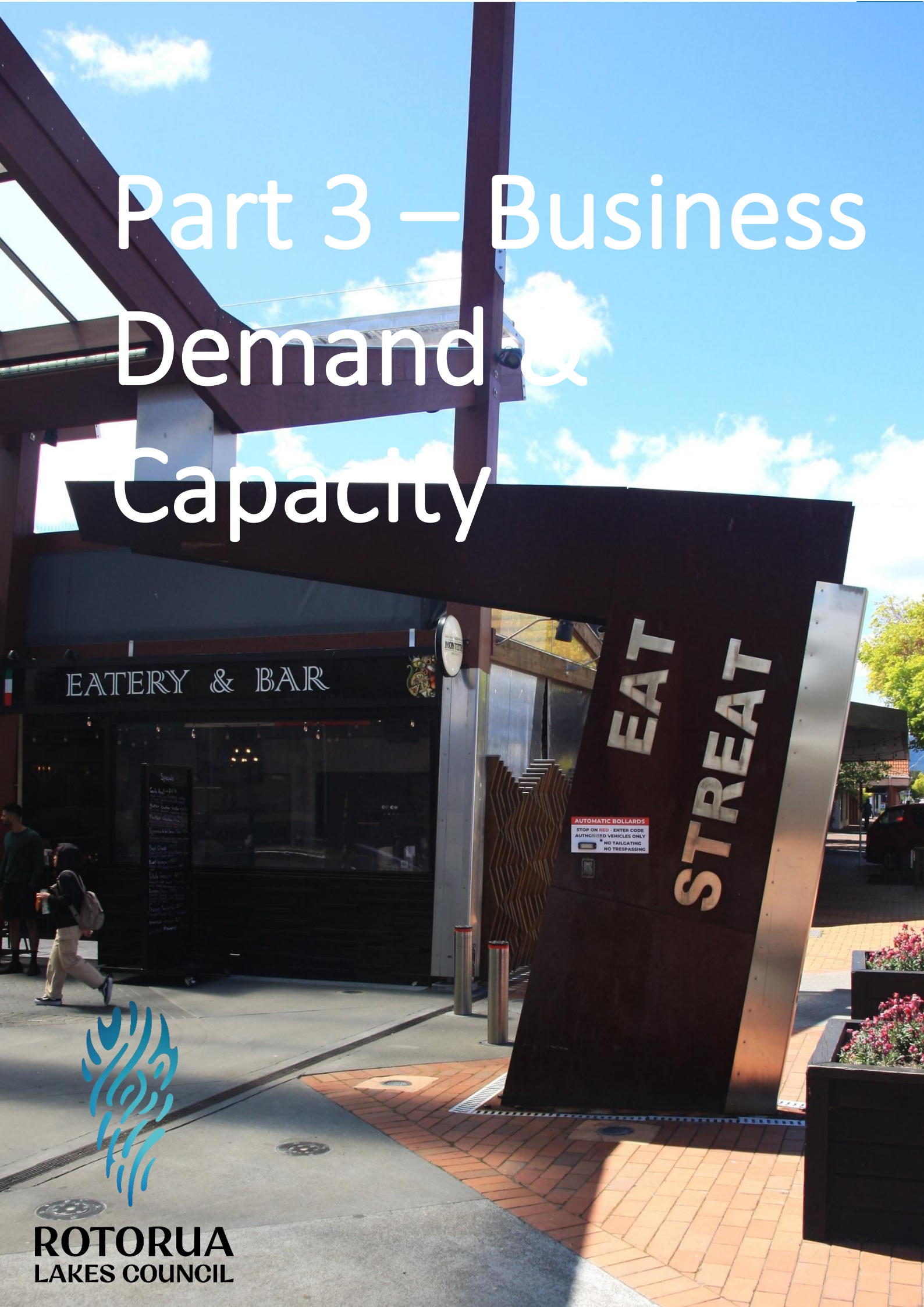
[93] This also includes the provision of social and other public infrastructure such as public space, which are important components of the social role of centres.

Figure 10.11 – Operative and Future High Density Residential Zone in Rotorua's Urban Environment

Our assessment consequently indicates that a level of differentiation in the medium density development opportunity across different parts of Rotorua's urban environment may contribute further towards the development of a well-functioning urban environment. The current provisions enable up to intensive terraced housing (3 storeys at up to three dwellings per site) across the extent of Rotorua's residential areas beyond the High Density Residential Zone. This is a high level of intensification relative to demand within the context of Rotorua's suburban areas.

Our assessment considers that an increased dwelling mix that is likely to contribute toward housing choice and affordability could also be achieved at a reduced scale of intensification within some parts of the urban environment. This may include development opportunity for attached dwellings at a reduced scale from that of intensive terraced housing.

Part 3 – Business Demand & Capacity



ROTORUA
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11 Business Supply – Recent Trends

This section provides an overview of recent supply trends in business related development in Rotorua. It draws on non-residential consent data from SNZ, with a particular focus on the period since the last HBA (i.e. 2020 to 2023). Using this data, we are able to test the accuracy of the short term floorspace demand projections from the HBA 2021. This is followed by an update on the commercial office, retail and industrial markets in Rotorua by local commercial real estate company CBRE. The latest information on vacant floorspace is also quantified.

11.1 Non-Residential Building Consent Trends

Since the year ending June 2020 (the base year of the HBA 2021) up to the year ending June 2023 (the base year of this HBA 2024 update), there were 96 building consents issued across the district for new non-residential buildings (Table 11.1).[94]

Table 11.1 – Growth in Non-Residential New Building Consents by Type Year Ending June 2000-2023

Building Type	Growth 2020-2023 (n)			Share of Growth 2020-2023 (%)		
	Count	Value of Works (excl GST) ($m)	Floorspace (sqm)	Count	Value of Works (excl GST) ($m)	Floorspace (sqm)
Hostels, boarding houses, and prisons	-	$ -	-	0%	0%	0%
Hotels, motels, and other short-term accommodation	4	$ 4.9	1,060	4%	3%	2%
Hospitals, nursing homes, and other health buildings	6	$ 45.3	5,019	6%	26%	9%
Education buildings	5	$ 10.9	1,930	5%	6%	3%
Social, cultural, and religious buildings	19	$ 44.0	7,583	20%	25%	13%
Shops, restaurants, and bars	11	$ 19.8	9,759	11%	11%	17%
Office, administration, and public transport buildings	10	$ 13.3	6,126	10%	8%	11%
Storage buildings	11	$ 6.2	6,733	11%	4%	12%
Factories and industrial buildings	30	$ 30.6	20,027	31%	17%	34%
Total Non-Residential Building Consents (Excl. Farm Buildings)	**96**	**$ 175.2**	**58,237**	**100%**	**100%**	**100%**

Source: StatisticsNZ, data relates to total district

[94] Excludes farm building consents.

Of that total, 31% were factories/industrial buildings and 20% were social, cultural and religious buildings. Shops and restaurants, office/administration and storage buildings each made up around 10-11% each of the total (2020-2023).

Those 96 buildings consents had a total value of works of $175.2m (excluding GST), with health buildings and social, cultural and religious buildings accounting for a quarter each of that total, and health buildings having the highest average value per consent (and storage buildings having the lowest average value per consent as expected from their simple form and function). The total growth in consented floorspace 2020-2023 was 58,236sqm. Factories/industrial buildings accounted for around a third of that total floorspace and shops and restaurants making up a further 17% (Table 11.1). It is not certain how many of these consented buildings are in the urban environment, or indeed within business zones, although it is assumed that the majority are. It is also uncertain whether all of these building consents were given effect to with new construction.

Figure 11.1 – Non-Residential New Building Consents by Type Year Ending June 2013-2023

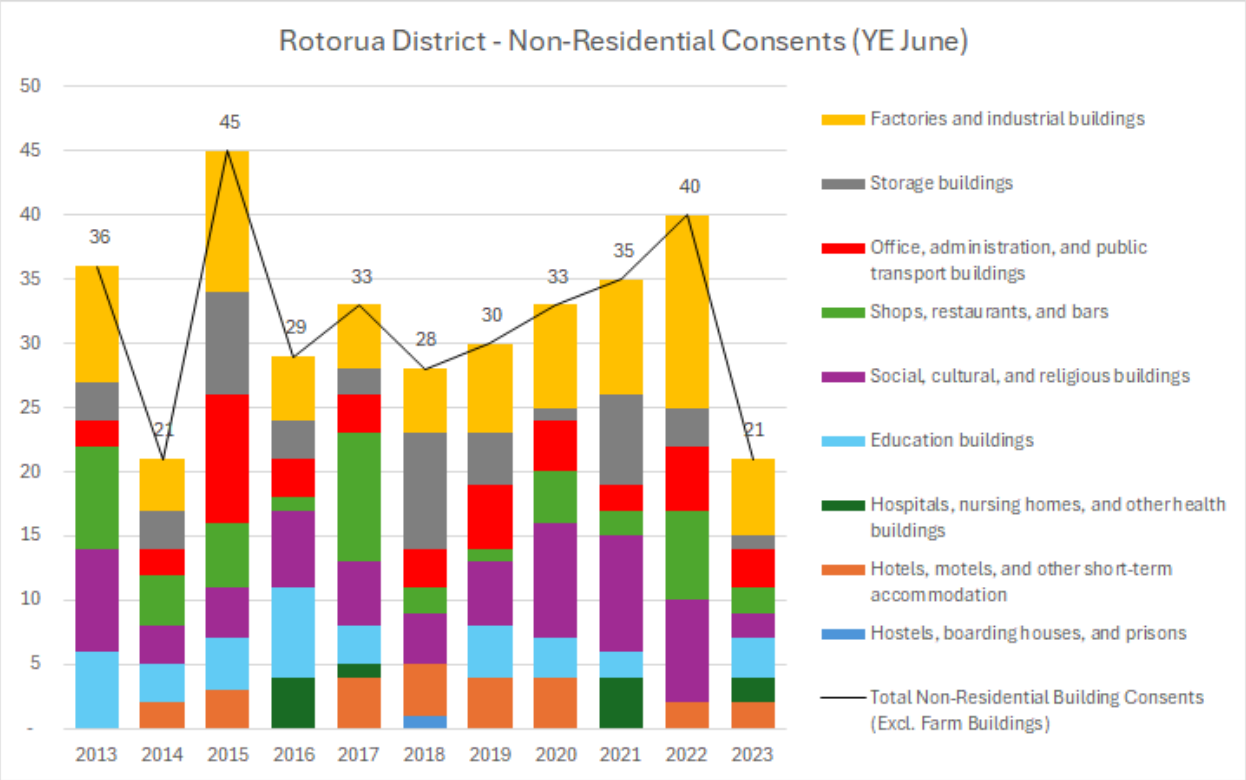
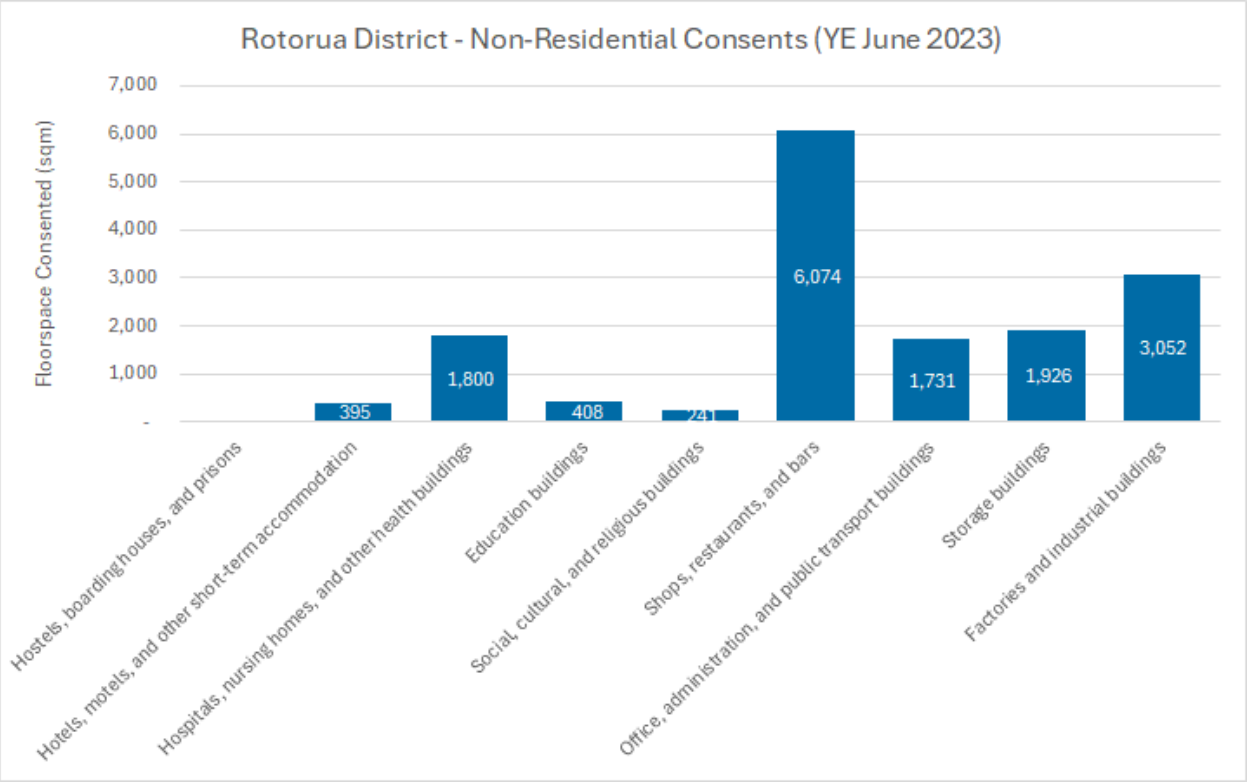


Figure 11.1 shows total non-residential building consent numbers by year ending June between 2013 and 2023. Most building types showed considerable variations year on year, although the count of factories/ industrial building consents rose steadily between 2018 and 2022. Non-residential building consents in the YE June 2023 showed a considerable drop compared with the year before, and is the lowest count recorded since 2013, and equal to the number consented in 2014. This was however also reflected in the data for total New Zealand, so is not unique to Rotorua (and reflects wider economic factors).

Figure 11.2 provides a breakdown of non-residential new building consent floorspace in Rotorua District in the year end (YE) June 2023. While the number and floorspace of consents dropped substantially in the YE 2023 compared with the previous year, new shop and restaurant floorspace accounted for 39% of the total

(6,074sqm) and made up 62% of all new shop and restaurant floorspace consented between 2020-2023. If given effect to, the majority of this shop and restaurant floorspace would be expected to be constructed sometime between YE June 2023 and YE June 2024 (depending on the exact consent date and availability of contractors). Compared with the floorspace profile consented in the YE June 2020, development is much more diverse – with YE June 2020 floorspace heavily dominated by factories/industrial buildings. This increased diversity is considered a positive change for Rotorua as it suggests development (or redevelopment)[95] across a broader range of business zones in the urban environment.

Figure 11.2 –Non-Residential New Building Consent Floorspace by Type Year Ending June 2023



11.1.1 Accuracy of HBA 2021 Short Term Floorspace Projections

Table 11.2 provides a brief comparison of projected short term (2020-2023) business floorspace growth from the HBA 2021 against actual consented business floorspace over that same period.[96] To allow for the lag between consenting and floorspace being occupied, we have taken floorspace consented for the period 2019-2022 (i.e., a one year lag). It should be noted that the HBA projected floorspace demand in urban business zones, while the consent data is for the total district. Nonetheless, the comparison shows that the demand model was moderately more optimistic of floorspace growth, with actual consented floorspace (assumed to be fully constructed and occupied between 2020 and 2023) accounting for 85% of the projected volume.

[95] The consent data does not indicate if existing buildings were demolished prior to new buildings being consented (i.e., brownfield development).

[96] Building consent types have been grouped to the four categories used in the Demand Model.

It is important to acknowledge that the demand model in the HBA 2021 was based on employment projections beginning in March 2020 and did not anticipate the impact of Covid-19 which is likely to have dampened consents in retail and Tourist Accommodation sectors during part of that period. The real impact of Covid-19 on district employment is discussed further in Section 12 below. Table 11.2 shows that consented retail floorspace was just 33% of projected retail floorspace growth between 2020-2023. Tourist Accommodation floorspace demand growth in the HBA 2021 accounted for only a small amount of total projected short term floorspace and was moderately close to consented floorspace (within 16%), as was Commercial floorspace demand within 14%).

Overall, when compared this way, the performance of the HBA 2021 demand model for short term business floorspace projections is considered to be good, particularly when accounting for sectors that were subsequently impacted by Covid-19. Based on consented new industrial floorspace assumed to have been constructed over the 2020 to 2023 period, the demand model in the HBA 2021 appears 100% accurate in its short term Industrial floorspace projections. It is noted that industrial development was the least likely of the four categories to be impacted by Covid-19.

Table 11.2 – Comparison of HBA 2021 Projected Short Term Business Floorspace and Actual Consented Floorspace

Category	HBA 2021 Projected Floorspace Demand 2020-2023 (sqm) (Urban Environment)*	Actual Consented Floorspace 2019-2022 (sqm) (Total District)**	Actual as Share of Projected (%)
Retail	9,900	3,252	33%
Commercial	21,600	18,504	86%
Accommodation	4,900	4,121	84%
Industrial	35,600	35,660	100%
Total	72,000	61,537	85%

** Refer Table 12.7 of the HBA 2021 Technical Report.*

*** This period has been taken to allow a 1 year lag for construction*

We do not however consider that this comparison provides sufficient evidence to validate the accuracy of the floorspace demand model assumptions used in the HBA. Even though the Industrial floorspace projections appear to be accurate (retrospectively), the demand model is sensitive to the short term net employment projections and actual Industrial category employment growth was only 15% of projected Industrial employment growth for that period. All else being equal, one would expect the Industrial floorspace projections to also have been too high (compared with actual supply).

We discuss the accuracy of the HBA 2021 short term land demand projections using a more tangible comparison with recent take up of vacant business land later in Section 13.

11.2 Vacant Business Premises

The Rotorua Business Capacity Model (discussed in Section 13) focusses on vacant land within urban business zones and does not capture unoccupied (vacant) premises that also provide floorspace capacity available to meet demand. This is due to the difficulty in isolating these premises and distinguishing them from other developed (but occupied) premises in a format consistent with the HBA modelling which occurs at a parcel level. Adding to this, the number and size of unoccupied premises are often in flux, driven by take-up from new and relocating existing businesses. The availability of vacant premises means that there is some extra floorspace capacity available for net business growth to occupy that does not have an associated demand for vacant land.

The approach taken in the HBA 2021[97] was to exclude vacant premises from the capacity and sufficiency modelling. Excluding this from the 2021 assessment presented a conservative picture with respect to business land capacity and sufficiency. This is considered appropriate to help avoid under-providing zoned land for urban business growth. Given that there is limited data available to quantify vacant premises across all business zones in the urban environment, this HBA 2024 update has adopted the same approach.

That said, this section provides an overview of what information is available on vacant premises in urban business areas of Rotorua. Four reports by CBRE[98] have been relied on.[99] Key findings are summarised below.

11.2.1 Commercial Office Market

The overall vacancy level for prime office space remained low in both June 2023 and June 2024 with unsatisfied demand. Demand for secondary and poor quality space was limited in both years. While there was a three storey office building under construction in the CBD as of June 2023, by June 2024 CBRE stated that there was limited developer interest or activity in the commercial office market. Yield levels had softened in the 12 months to June 2023, and continued to soften to June 2024, with the gap between vendor and purchaser expectations causing more sale listings to sit for longer periods.

CBRE considered that in June 2023, demand for prime CBD office space was "average", but "weak" for CBD secondary office space and CBD C-Grade office space. CBRE's survey of vacant office space in the CBD in December 2023 showed a total vacancy rate of 13.84% (13,817sqm spread over 71 vacant office premises). These figures showed a rise in office vacancies compared to December 2021 and 2022, although was partly driven by an increase in supply.

Demand for office space in other suburban areas was considered "average". These demand indicators across all office grades remained the same in June 2024. Table 11.3 shows that there was limited supply of prime office space in the CBD (less than 1% vacancy rate in December 2022)[100] and limited supply of any office space in the suburban areas, but supply exceeds demand for lower quality office space in the CBD

[97] Refer to section 12.5.2 of the HBA 2021 Main Report.

[98] Previously Telfer Young.

[99] Rotorua Central Business District 2022 Vacant Survey and 2023 Vacant Survey and Commercial Figures Report Rotorua 2023 and 2024.

[100] This was not reported in December 2023, although the commentary highlighted the demand for and scarcity of prime office space.

(with the vacancy rate in 2022 around 4% for secondary office space and around 15% for C-Grade CBD offices.

Table 11.3 – CBRE Commercial Office – Occupier Market Indicators June 2023 and 2024

OCCUPIER MARKET

	Market direction	Supply
CBD (Prime)	▲ Improving	Limited
CBD (Secondary)	▶ Static	Over supplied
CBD (C Grade)	▼ Weakening	Over supplied
Suburban	▶ Static	Limited

11.2.2 Retail Market

According to CBRE, the retail leasing market in Rotorua remains soft with a general oversupply, although CBD vacancy rates have remained static over the past two years. There has been considerable site swapping as tenants try to reduce their cost structures or move to better sites on improved rental terms. The investment market was generally quiet with limited enquiry although there were very few properties on the market as of June 2023. This remained the same in June 2024. The retail yields have softened especially for second tier properties where there is uncertainty around tenants, vacancies and/or seismic issues.

CBRE considered that in June 2023, demand for prime CBD retail space was "average", but "weak" for CBD secondary retail space. CBRE's survey of vacant retail space in the CBD[101] in December 2023 showed a total vacancy rate of 10.7% (10,469sqm spread over 55 vacant retail premises).[102] These figures were a minor improvement compared to December 2022 where there were 4 more vacant retail premises, but overall, the retail vacancy rate in the CBD has been dropping since the last peak in 2020. In fact, based on records over the last decade, the CBD retail vacancy rate has only been lower in 2017 (when it was 10.69%), but is still higher compared with some other locations in the North Island.[103] Retail vacancies have tended to be concentrated on Hinemoa Street and Pukuatua Street (and many within the Royal Court Hinemoa Arcade). However, in floorspace terms, the most vacant retail space in December 2023 was on Fenton Street (2,249sqm vacant), although this was an improvement compared to 2022.

Colliers completed an 'Inner-city Retail Study' for the Council in January 2024. Colliers attribute the high vacancy rate for retail premises with an oversized retail footprint in the CBD and consider that the key to reducing vacancy rates is to encourage retail supply to concentrate into a smaller core area. They note that "*this problem has been exacerbated by decisions made by policymakers to permit the development of large scale retail facilities outside of the CBD. Consequently, there has been significant leakage of consumer*

[101] Excluding Trade Central.

[102] A recent survey by Colliers had the vacancy rate in the CBD higher at 13.7% in July 2023. Source: Inner-city Retail Study, January 2024.

[103] Ibid. Page 18.

spending to peripheral large format centres, such as Trade Central and the wide range of retail outlets located at Fairy Springs" (Colliers, page 19).

Demand for retail space in other suburban areas was considered by CBRE to be "average" but demand was "strong" for bulk retail locations. These demand indicators across all retail tenancy types remained the same in June 2024. Table 11.4 shows that there is moderate supply of CBD prime retail space and bulk retail space in Rotorua. Supply has been limited in suburban centres, but supply exceeds demand for secondary retail space in the CBD.

Table 11.4 – CBRE Retail – Occupier Market Indicators June 2023 and 2024

OCCUPIER MARKET

	Market direction	Supply
CBD (Prime)	▼ Weakening	Moderate
CBD (Secondary)	▼ Weakening	Moderate (2023) – Over-supplied (2024)
Bulk Retail	No trend apparent	Moderate
Suburban	▶ Static	Limited

11.2.3 Industrial Market

A limited supply of vacant land close to the CBD underpins a relatively robust industrial market according to CBRE. A shortage of available space to lease with an overall vacancy level at 3.1% in June 2023 and June 2024 is keeping rent levels firm.[104] Even with reduced market confidence in 2022, 2023 and 2024, rents across all industrial property types were showing modest increases. The sales market has shown a softening of yields, although CBRE consider that if listings are priced correctly, there is still good investor interest.

CBRE state that in June 2023, demand for prime (main road) industrial space and secondary (side street) industrial space was strong, and demand continued to be strong in June 2024. Table 11.5 shows that there is limited supply of prime and secondary industrial space in Rotorua.

Table 11.5 – CBRE Industrial – Occupier Market Indicators June 2023 and 2024

OCCUPIER MARKET

	Market direction	Supply
Prime (Main Roads)	▲ Improving	Limited
Secondary (Side Streets)	▲ Improving	Limited

[104] The CBRE reports do not include a measure of vacant industrial space in square meters.

12 Business Demand

This section provides an analysis of future demand for business land and floorspace in Rotorua's urban business enabled zones. That is, zones that anticipate business activity, including in mixed use zones where housing is also anticipated by the District Plan. It begins with Council's employment projections. It focusses on the portion of employment that is expected to occur in the urban environment over the long term future and then within urban business zones. That employment growth is converted into estimates of business land and floorspace demand using average ratios of space requirements per worker.

A detailed discussion on the approach used to quantify demand for business floorspace and land in the urban environment is contained in the HBA 2021 Main Report and Technical Report.

12.1 Employment Projections

This HBA 2024 update has relied on the same district-level 'base' employment projections (developed by Infometrics for the period 2020 to 2050 by industry/sector) as used in the HBA 2021. Those projections have been rebased (at the sector level)[105] to March 2023 using more recent but consistent employment data prepared by Infometrics for the Council[106] and extrapolated to 2053. Specifically, the Infometrics 6-digit ANZSIC projections for 2021, 2022 and 2023 were rebased (pro-rata) to match actual employment in those years at the 1-digit ANZSIC level.

Figure 12.1 shows how Covid-19 has impacted the projections developed in 2020. Actual employment in 2021 for the total district was 35,170 compared to a projected value of 36,540 in that year. Employment returned to positive gains in 2022, and this continued in 2023. While employment in 2023 was still below the original projections for that year (36,680 compared to 37,670), the gap was closing, and it looks probable that employment may return to original projected levels in the short term (i.e. by around 2026). Supporting this assumption is the nature of Covid-19 impacts, which were concentrated in the Tourist Accommodation and Food Services sector and Arts and Recreation Services sector. These two sectors accounted for 79% of the drop in employment between 2020 and 2021, and both are recovering as tourism, and particularly international tourism, returns.

The rebased employment projections for this HBA 2024 update therefore start from 2023 actual employment, have a period of strong growth (driven by the expected recovery of tourism related sectors in particular), followed by the previously projected growth path from 2026 to 2050, and a continuation of this growth trend to 2053 (Figure 12.1).

[105] We have taken actual 2023 employment reported by Infometrics at the 1-digit ANZSIC level and applied the same structure of 6- digit employment contained in the in 2023 has been rebased pro-rata to match actual

[106] Infometrics 'Rotorua Economic Profile'.

Figure 12.1 – Total District Employment Projections (Infometrics) and 2023 Rebasing Approach

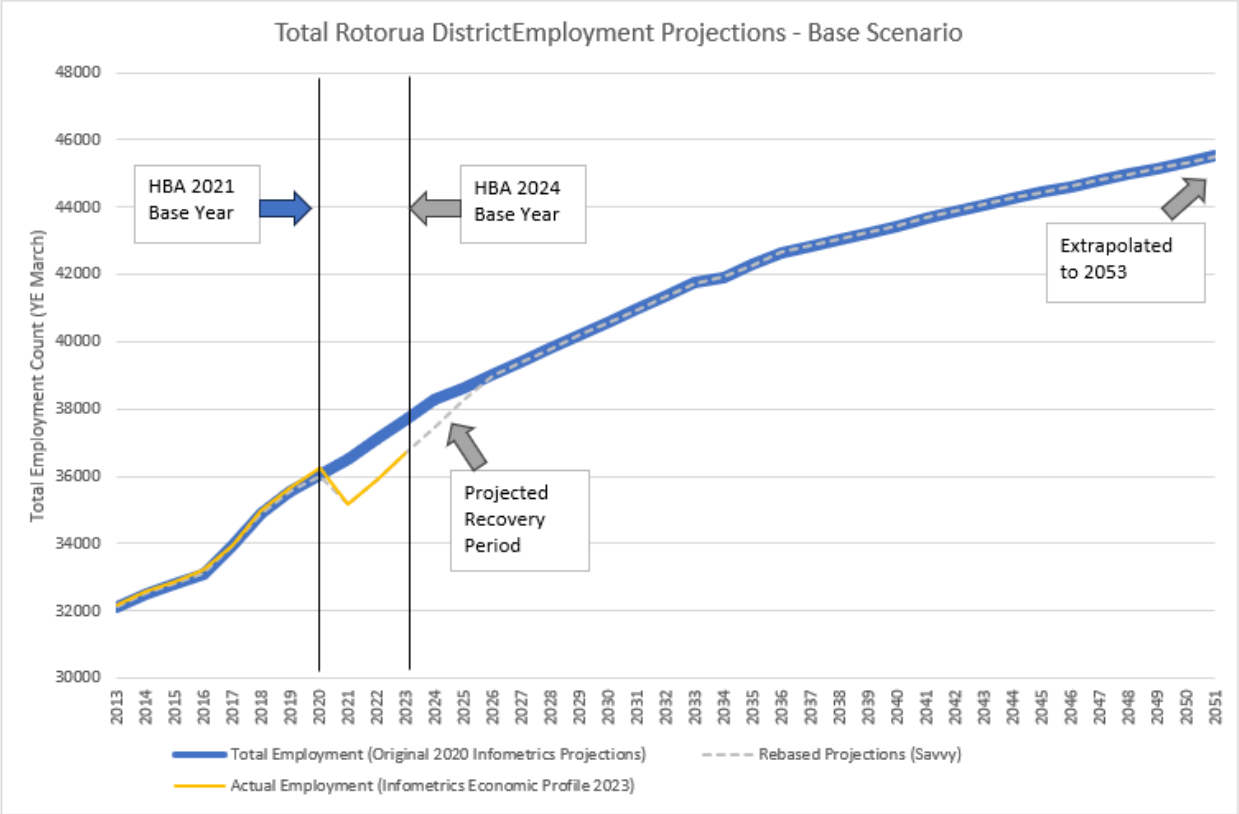


Figure 12.2 – Share of Total District Employment 2020 v 2023 (1 Digit ANZSIC)

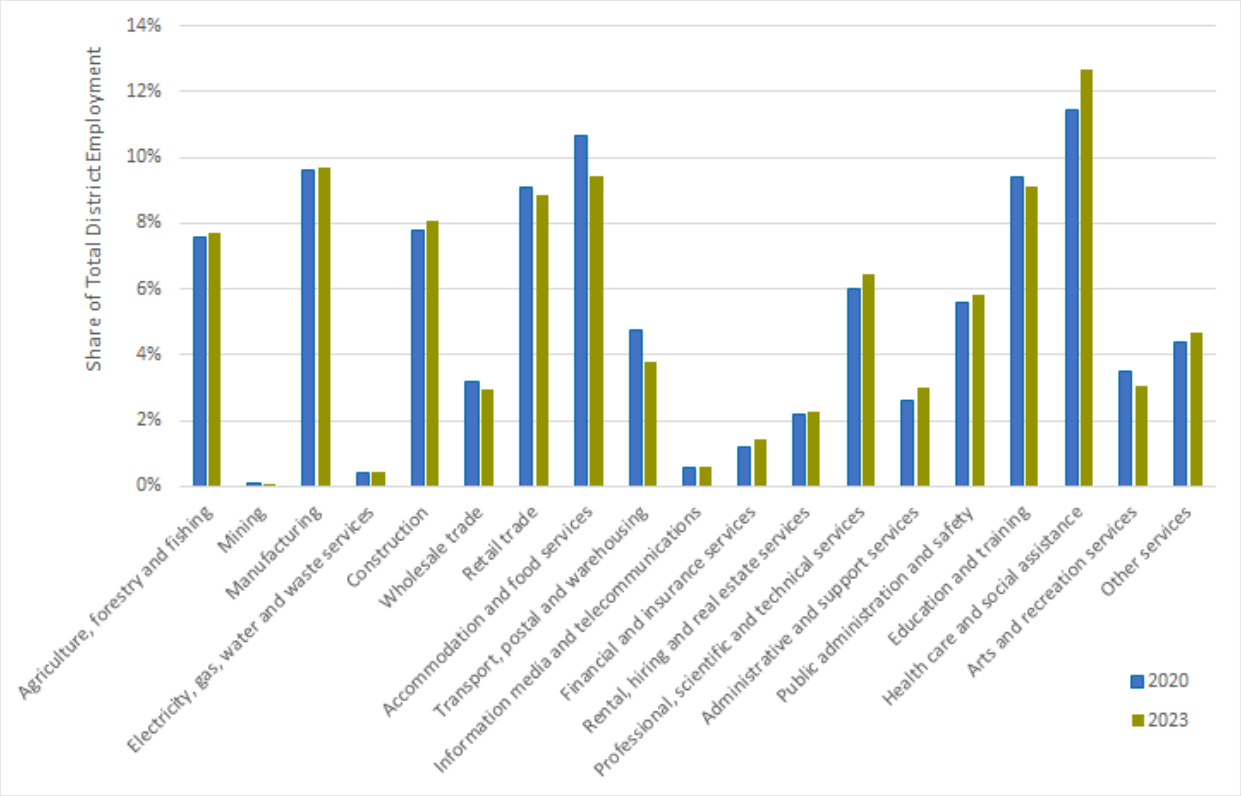


Figure 12.2 shows that despite the impacts of Covid-19, the structure of the Rotorua economy remains similar to that in 2020. The top five employment sectors (at 1-digit ANZSIC level) remain Health Care and Social Assistance (12.7%), Manufacturing (9.7%), Tourist Accommodation and Food Services (9.4%), Education and Training (9.1%) and Retail Trade (8.9%). These five sectors account for 50% of district employment in 2023.

12.1.1 Urban Environment Employment Projections

Given the key purpose of the NPS-UD is to assess demand and capacity in the urban environment, estimates have been made on the share of district employment by sector that is located within the urban environment (as defined in Figure 1.1).

The SNZ Business Directory ("BD") has been relied on which contains annual employment estimates for 2023, also by 6-digit ANZSIC. While broadly compatible with the LEED data used by Infometrics, the results differ slightly in some sectors. However, the advantage of the BD data is that it is broken down to relatively small geographic areas. Statistical Areas 1 ("SA1s") have been aggregated to approximate the urban environment boundary to estimate the percentage share of total district employment that falls within the urban environment, and the share that falls in the rural environment (rest of district). This percentage structure has been applied to the Infometrics employment projections at a sector level.

The analysis shows that in 2023, an estimated 88% of district employment (25,180 jobs) is based in the main urban environment of Ngongotahā, Central, Western and Eastern. Just 12% of district employment is currently based in the rural environment. This compares with 87% of district employment in the main urban environment in 2020, although some additional SA1s on the urban fringe are now included in the expanded urban environment, which is likely driving this slight increase. As would be expected, the sectors which have only a low share of employment in the urban environment are the primary production sectors (agriculture, forestry, mining/quarrying) and beverage product manufacturing. These are captured in the rural areas of SA1s that overlap the urban fringe, as well as the rural areas that are identified as future urban growth, which are included in the long term urban environment boundary.

12.1.2 Urban Business Zone Projections

The next step in the demand analysis is to convert Council's urban level employment projections into projections of demand for combined urban business enabled zoned land for the period 2023 to 2053. This step is important so as to focus on the employment and business growth that would seek a business zone in the urban environment, rather than seek a location in an urban residential zone.[107] This is because the NPS-UD requires that Council provide at least sufficient capacity to provide for urban business demand, and this occurs primarily through the appropriate zoning of urban business land (including the provisions within those zones). The amount of zoned land combined with the type of zoning and its location are all relevant to meeting demand in a way that supports a well-functioning urban environment.

[107] This mainly covers businesses that operate from a residential address. This includes a large share of the construction sector for example, with self-employed trades people administering their business from home but working throughout the district on a daily basis.

In accordance with the NPS-UD[108] only land where business use is a "permitted, controlled or restricted discretionary activity on that land" is that land 'zoned' for business. Table 12.1 lists the business zones included in this HBA.[109] They are a mix of business only zones (where residential housing is not provided for) and mixed-use business zones (where residential housing is also provided for). Residential zones generally do not enable new business activities (other than home based businesses) so are excluded. In future HBA updates, this approach may need to be reconsidered given the Government's recent announcement that "*Tier 1 and 2 councils must enable activities such as cafes, dairies, and other retail across their urban areas, and especially in areas where Tier 1 councils are required to enable six or more storey developments*".[110]

Some of these business zone classifications have changed since the HBA 2021 as a result of PC9 which has provided for residential activities in some additional business zones. This classification of the business zones is mapped in Figure 12.3.[111] These combined areas define the extent of urban business zones.

Table 12.1 – Urban Business Zones and Zone Classification (As Amended by Plan Change 9)

Business Zone	Zone Description	HBA Classification
City Centre 1 Zone	Mid City	Business and Residential
City Centre 2 Zone	Southern Edge	Business and Residential
City Centre 3 Zone	Northern Edge	Business and Residential
Commercial 1 Zone	Ngongotahā Centre	Business and Residential
Commercial 2 Zone	Compact Commercial Centres	Business and Residential
Commercial 3 Zone	Neighbourhood Centres	Business and Residential
Commercial 4 Zone	City Entranceway Accommodation	Business and Residential
Commercial 5 Zone	City Entranceway Tourism	Business Only
Commercial 6 Zone	Trade Central	Business and Residential
Industrial 1 Zone	Light Industrial	Business Only
Industrial 1E Zone	City Entranceway Mixed Use	Business Only
Industrial 2 Zone	Heavy Industrial	Business Only
Industrial Transitional Zone **	Future Light Industrial	Business Only
Business and Innovation 1 Zone *	Scion Business Park	Business Only
Business and Innovation 2 Zone *	Waipa Business Park	Business Only
Business and Innovation 3 Zone	Eastgate Business Park	Business Only
PC 2 Commercial Precinct	Pukehangi Plan Change	Business Only
Total Urban Environment		

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only and assumed to be 100% vacant (redevelopment).*

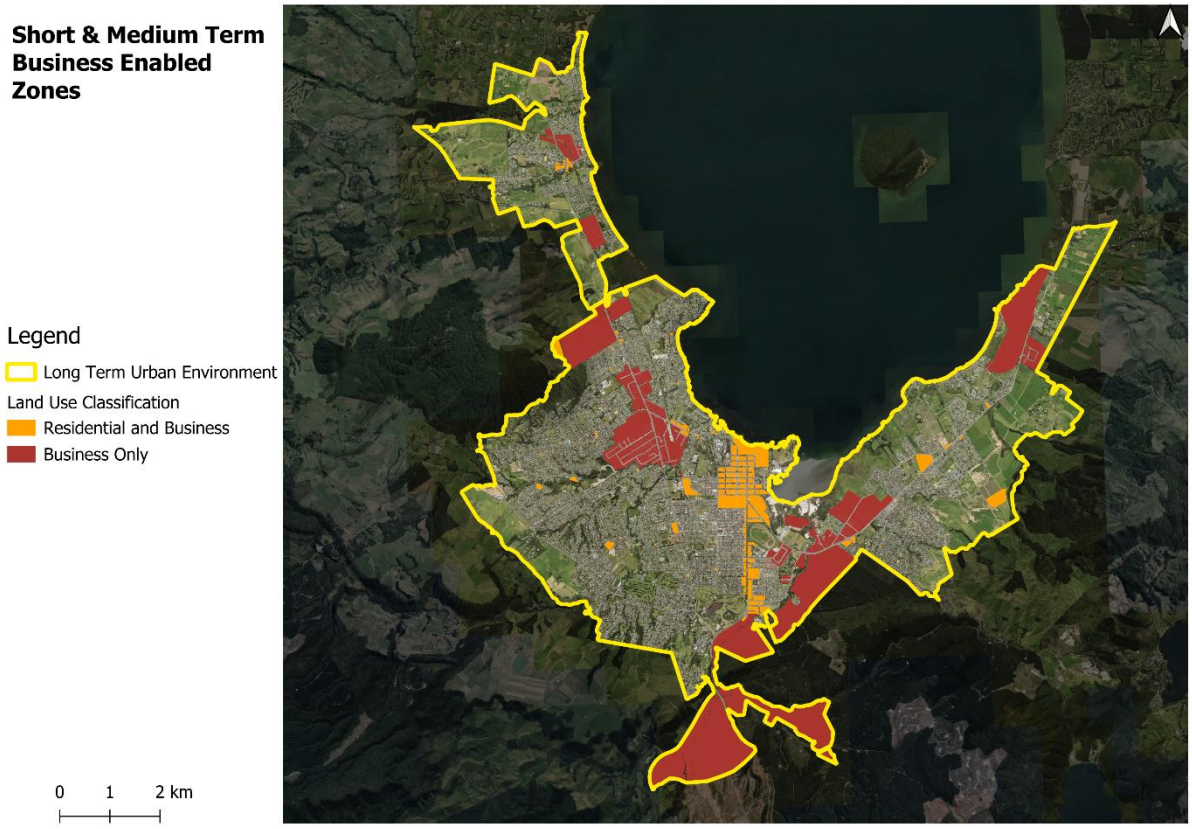
[108] Clause 3.4(2).

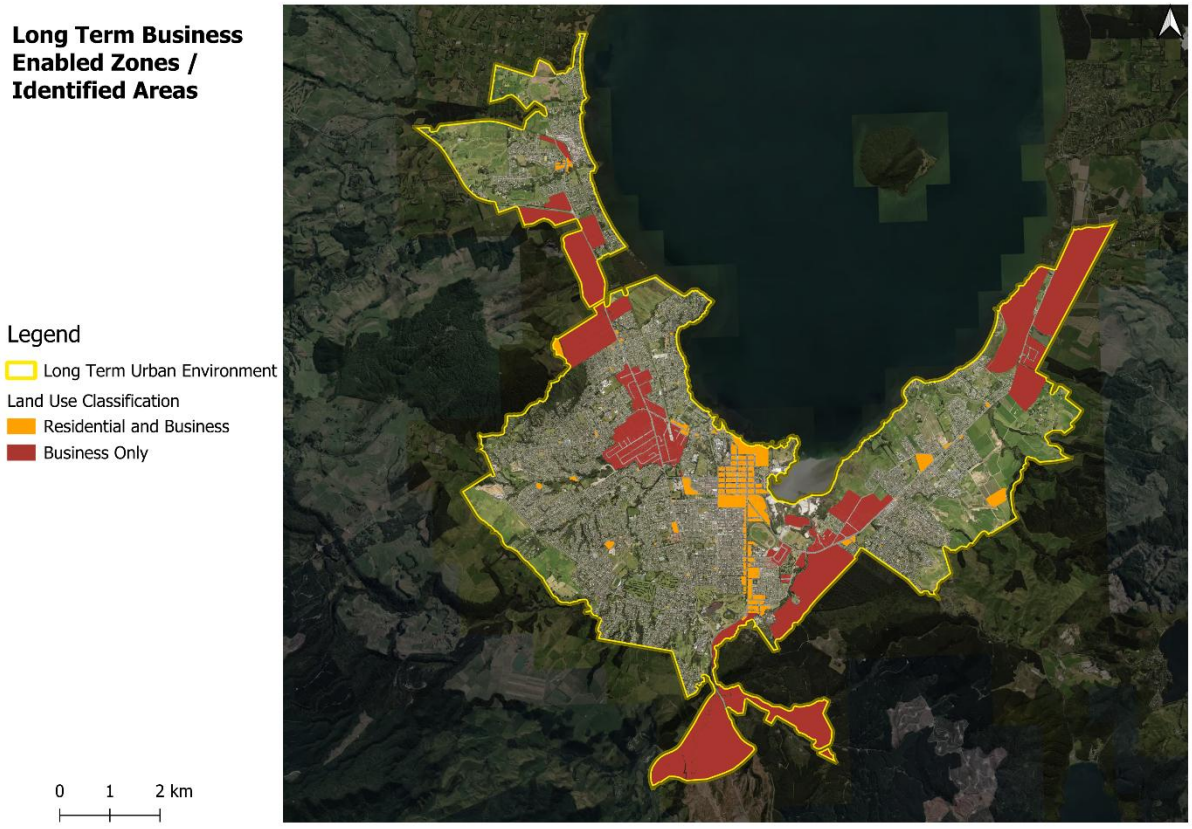
[109] In the HBA 2021, the Future Community Asset Reserve in Pukehāngi (now Future Growth Zone) was included as a long term business zone. This land was consented for a retirement village which is currently being developed. It has therefore been removed from business zones in this HBA.

[110] While some district plans already provide for some small scale commercial activity in High Density Residential zones, the scale of that potential capacity is challenging to predict and as such, HBA's commonly take a conservative approach and exclude High Density Residential Zones from business capacity modelling. M.E/Savvy would recommend a similar approach for Rotorua in the future.

[111] The PC 2 Commercial Precinct (Pukehāngi) is not able to be mapped as there is not a suitable parcel boundary to show the location of this precinct yet.

Figure 12.3 – Short and Long Term Land Zoned for Business in Rotorua's Urban Environment





There are some minor changes in business zoning between the short-medium term and the long term. Notably, in the Eastern reporting area, there is a greenfield Commercial 3 (neighbourhood centre) Zone on Wharenui Road in the Wharenui Development Plan Area. This operative zone is included in the short-medium term spatial framework, but the decision was made to exclude it from the long term spatial framework of the HBA and instead replace it with two alternative (and smaller) neighbourhood centres that could be more strategically located should extensive residential zoning occur on the rural land east of Te Ngae Road. This was the approach taken in the HBA 2021 and it has been retained for consistency. As the location of those potential future centres is not known, the long term map still shows the operative Commercial 3 Zone, although a smaller area is applied in the underlying capacity model (Section 13).

The Transitional – Residential 1 to Light Industrial Zone is treated as a Light Industrial Zone in the long term but is not a business zone in the short term (where it remains residential capacity).

Other changes in long term zoning are driven by the FDS. The FDS makes the following zone changes in the long term:

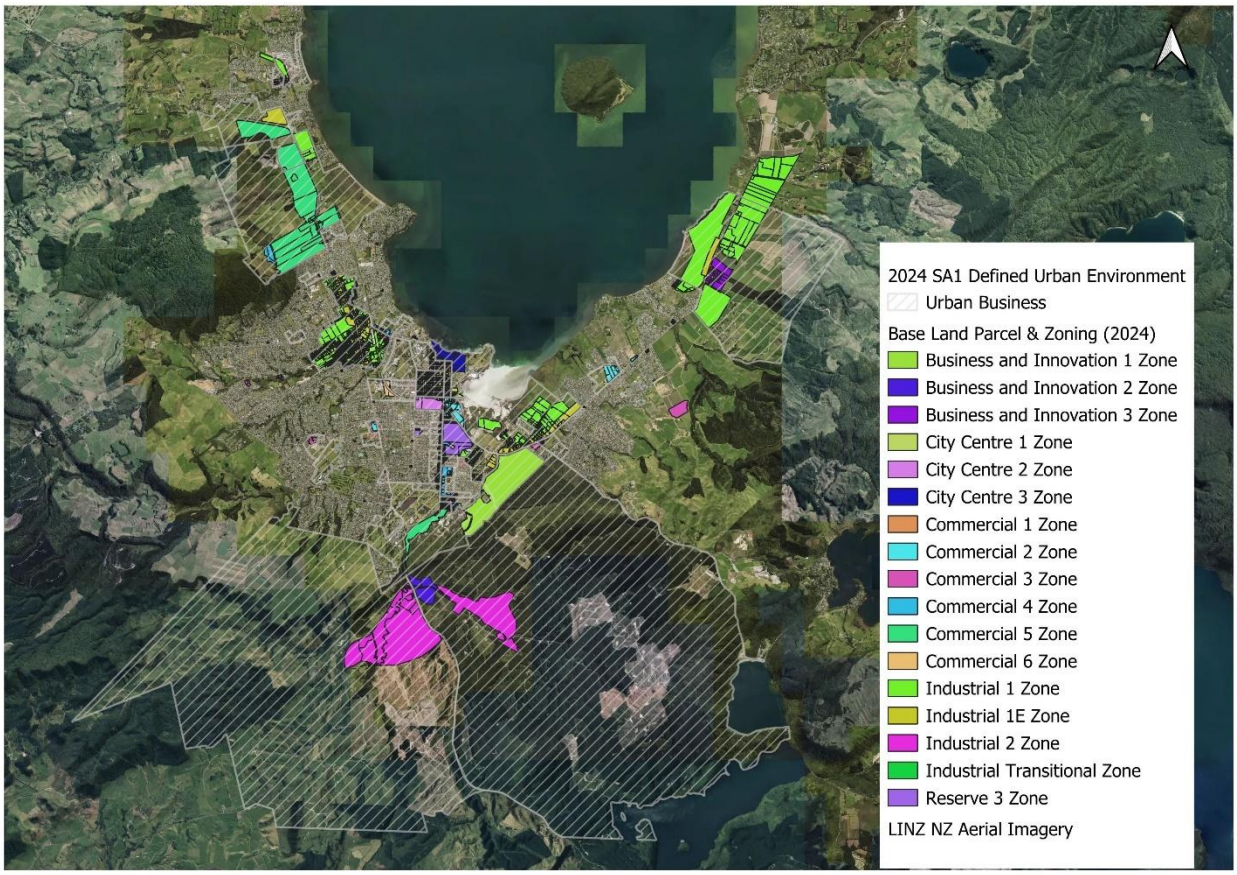
- The established Light Industrial Zone in Ngongotahā is rezoned to High Density Residential to encourage more housing (and housing choice) close to the town centre.
- The greenfield Light Industrial Zone in Ngongotahā is rezoned to Medium Density Residential.
- Two blocks of greenfield land on State Highway 5 (SH 5 South and West) are rezoned from rural to Commercial 5 Zone (Tourism).
- One block of greenfield land south of Ngongotahā (known as Tamarahi) is rezoned from rural to Light Industrial Zone. This area was included as a long term business zone in the HBA 2021.[112]
- Two blocks of greenfield land north and south of the Eastgate Business Park are rezoned from rural to Light Industrial Zone. The southern block was included as a long term business zone in the HBA 2021, although was assumed at the time to have the same zoning as the Eastgate Business Park.

All other business zones do not change in extent between the short and the long term.

The business enabled zones mapped above (Figure 12.3) follow property and other boundaries. SNZ BD employment data is only available (at its finest level of resolution) at SA1 boundaries. To estimate the share of urban environment employment that falls within the combined urban business zones, the SA1s that most closely align with the business zone extent have been selected. Figure 12.4 maps the overlap of selected SA1s to the urban business zones. Overall, this approach is slightly conservative (generous) in terms of ensuring sufficient business zone capacity as it may slightly overstate the share of employment located in urban business zones in 2023 as some SA1s include residential and rural areas where employment may also be located. This approach is considered more appropriate than underestimating future business zone demand to inform future planning decisions.

[112] I.e. it had been identified in the Spatial Plan that was superseded by the FDS.

Figure 12.4 – Urban Business Zones and Selected SA1s (Long Term Zoning Shown)



Based on this approach, an estimated 68% of total district employment in 2023 is based in business enabled zones in the urban environment, with an estimated 19% located in other zones in the main urban environment (primarily in residential zones). This means that just within the urban environment, 78% of employment is located within business zones. These shares are consistent with the shares calculated in the HBA 2021 (for 2020) when rounded.

Some economic sectors have an above average propensity to locate in an urban business zone as opposed to other locations in the district. Sectors which have demonstrated (2023) a high propensity to locate in an urban business zone include:

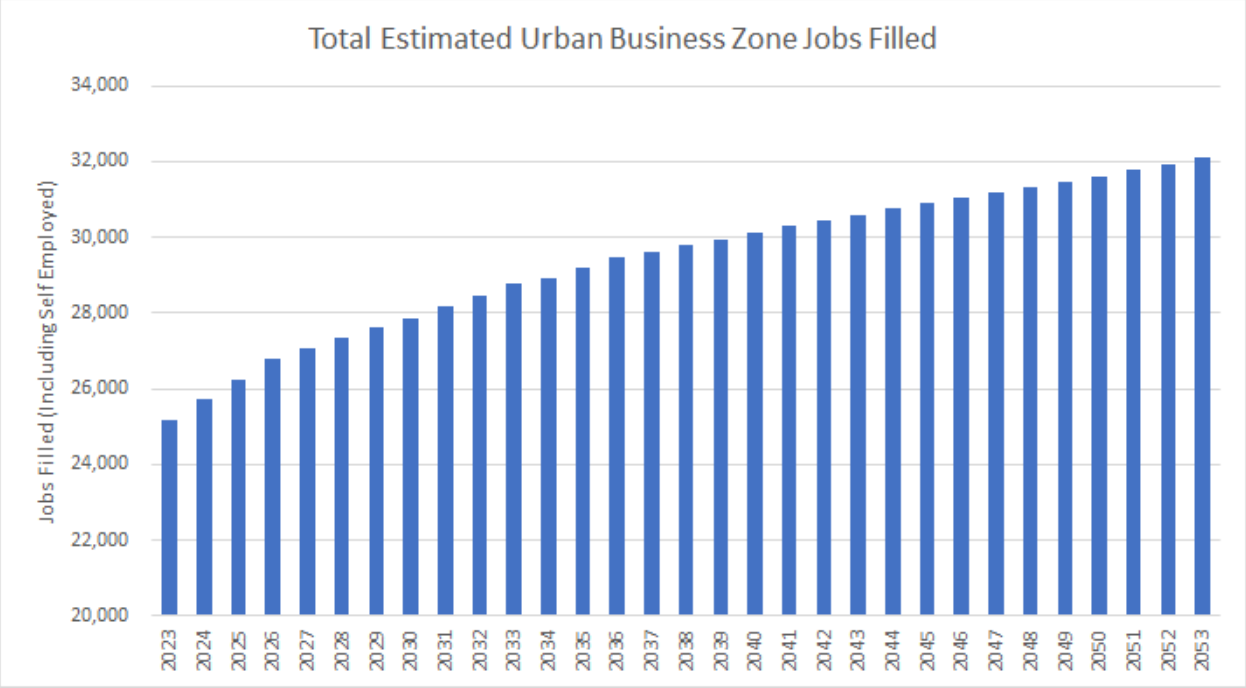
- most manufacturing sectors;
- Water, Sewerage, Drainage & Waste Services;
- Wholesale Trade;
- Retail Trade;
- Finance & Insurance;
- Tourist Accommodation;
- Food Services;
- Local and Central Government administration and services;

- Professional Services; and
- Health and Social Services.

The following demand assessment focusses just on the 68% of district employment estimated to be in urban business zones. This is the portion of demand that Council needs to ensure is sufficiently provided for in terms of zoned or identified capacity within the urban environment. This share is applied to the rebased Infometrics district-wide employment projections. The demand model assumes that the share of district employment in urban business zones by sector remains constant over time, based on 2023 trends.[113]

Figure 12.5 shows the estimated employment growth projections seeking an urban business zone location increasing from approximately 25,180 in 2023 to approximately 32,110 in 2053. An estimated 1,600 additional filled jobs are projected in the short term between 2023 and 2026 (growth of 6.3% or close to 530 additional jobs on average per annum). By 2033 (the medium term), an additional 3,590 filled jobs are projected (total growth of 14% or an annual average growth rate of just over 360 per annum). By 2053, the total growth of urban business zone jobs is projected at 6,930 or a 28% increase over 2023 (230 annual average growth over the long term). These employment projections do not include the competitiveness margin required by the NPS-UD. This is discussed further below.

Figure 12.5 – Estimated Urban Business Zone Employment Projections (Infometrics Rebased)



Consistent with the HBA 2021, these urban business zone employment projections have been disaggregated over 14 different types of land uses or building typologies based on prior M.E research.[114]

[113] This assumption potentially masks changing preferences in some sectors as to where they locate but is considered appropriate for the purpose of this analysis.

[114] These typologies should not be confused with 'activities' defined in the District Plan, although there are similarities and activities in the Plan have been matched to the typologies as part of the capacity assessment.

That research looked at the trends in building types or land uses across the country occupied by businesses, examined at the detailed 6-digit ANZSIC level. M.E has calibrated the distribution to Rotorua's economic structure (2023) and then summarised it at 48 economic sectors. This percentage allocation is also assumed to hold constant over time.

Table 12.2 shows the result of applying that land use/building typology structure to projected urban business zone employment. There is strong demand for shops, commercial offices (although not in the short term) and other types of commercial buildings, and moderately strong demand for factories, warehouses, food and beverage outlets, and education/training buildings. Table 12.2 also summarises projected urban business zone employment by land use category. Currently demand for Commercial land/building types dominates the employment structure (2023). This category is also expected to have an above average employment growth rate in urban Rotorua over the long term, along with Tourist Accommodation.

Table 12.2 – Estimated Urban Business Zone Employment Projections by Land Use Typology 2023-2053

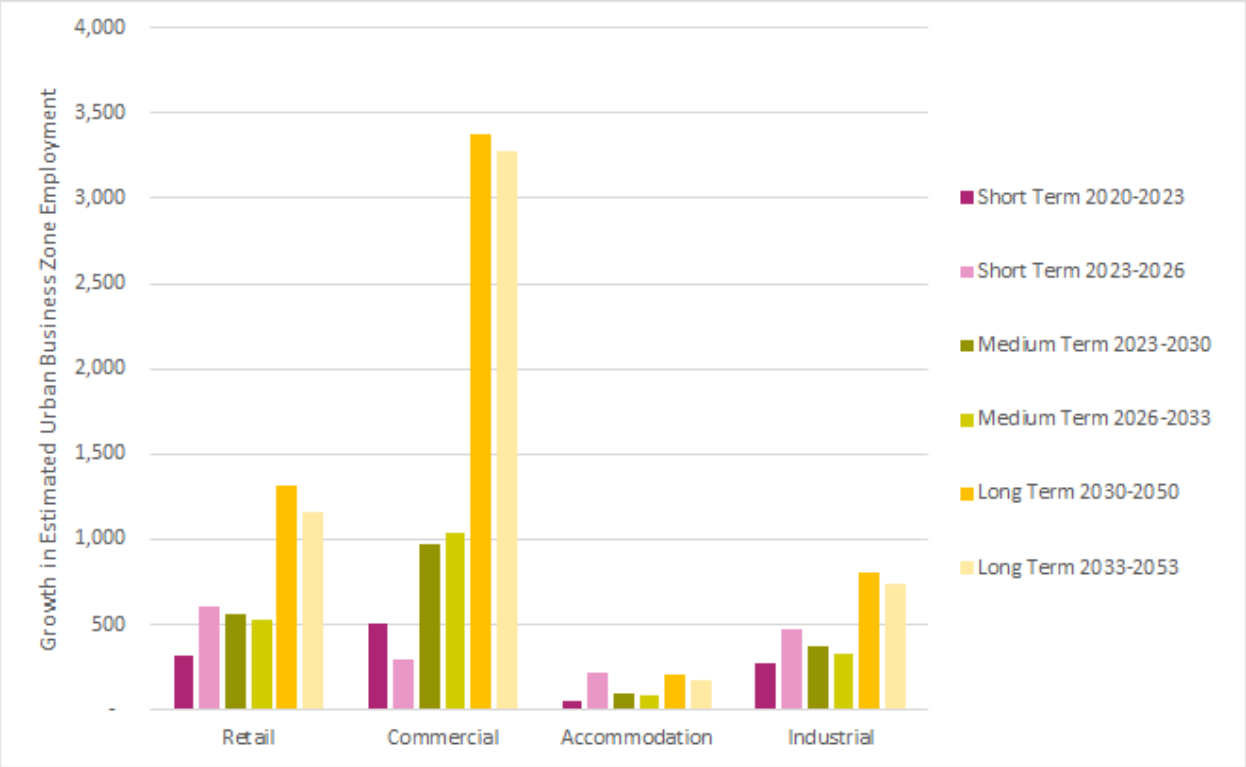
Category	Land Use / Building Type	Urban Business Enabled Zone Jobs 2023	Job Growth (n)			Job Growth (%)		
			2023-2026 Short Term	2023-2033 Medium Term	2023-2053 Long Term	2023-2026 Short Term	2023-2033 Medium Term	2023-2053 Long Term
Retail	Shops---Commercial	4,550	330	770	1,290	7%	17%	28%
	Shops---Food and Beverage	1,420	270	360	470	19%	25%	33%
	Total Retail	**5,970**	**600**	**1,130**	**1,760**	**10%**	**19%**	**29%**
Commercial	Office---Commercial	5,540	- 110	270	1,030	-2%	5%	19%
	Office---Retail	150	-	10	30	0%	7%	20%
	Yard---Commercial	140	10	20	20	7%	14%	14%
	Other Built---Commercial	3,680	280	790	2,020	8%	21%	55%
	Education	790	100	200	380	13%	25%	48%
	Outdoor---Commercial	360	20	50	100	6%	14%	28%
	Total Commercial	**10,660**	**300**	**1,340**	**3,580**	**3%**	**13%**	**34%**
Accommodation	**Total Accommodation**	**1,190**	**220**	**300**	**390**	**18%**	**25%**	**33%**
Industrial	Warehouse	2,850	170	300	340	6%	11%	12%
	Factory	2,330	80	200	510	3%	9%	22%
	Yard---Industrial	1,480	160	230	310	11%	16%	21%
	Other Built---Industrial	620	60	80	60	10%	13%	10%
	Outdoor---Industrial	80	-	- 10	- 10	0%	-13%	-13%
	Total Industrial	**7,360**	**470**	**800**	**1,210**	**6%**	**11%**	**16%**
Total Urban Business Zone Demand Growth (jobs filled)		25,180	1,600	3,590	6,930	6%	14%	28%

Source: M.E Rotorua Urban Business Land Demand Model (HBA 2024), Infometrics/RLC. Preferred Growth Scenario.

Projected demand within business enabled zones in defined urban environment only (as defined by SA1 2018)

Figure 12.6 compares net growth in urban business zone employment in the short, medium and long term for each land use category to those that underpinned the HBA 2021. The time periods are discrete and not cumulative from the respective base years. The current HBA projections are shown by the light bars, and the 2020 based projections are shown by the dark bars.

Figure 12.6 – Comparison of Current Urban Business Zone Employment Projections with HBA 2021



Overall, short term growth for Retail, Tourist Accommodation and Industrial is now higher, driven by the recovery of several sectors post Covid-19. For Commercial demand, employment is lower in the short term as many industries that fall within this category were not impacted by Covid-19, and in fact some, especially professional services and health care and social assistance jobs, increased faster than projected. A consequence of the rebasing approach is that there is a small correction in these sectors (either a stabilising or minor reduction) in the short term while other parts of the economy recover. Medium term growth is however broadly similar and long term growth is slightly lower on account of employment growth gradually slowing over time. Total (cumulative) growth over the long term is slightly higher than in the HBA 2021 on account of achieving a similar long term employment level, but off a lower base in 2023.

12.2 Likely Future Demand for Urban Business Zone Land

Some businesses will require more land area and built space than others, and this has obvious implications for development capacity. For example, on average industrial activities are likely to require more land area than most retail shops for a given number of workers. To assess land area and floorspace requirements for projected employment growth, employment is translated into likely building floorspace and developable land area[115] demand using estimated ratios per worker in each building typology/land use. This is derived from the same national research discussed above and is consistent with the assumptions in the HBA

[115] This is the area of already subdivided sites and for larger greenfield sites, excludes 30% of gross site area for roads and open space/reserves.

2021.[116] As discussed above, the appropriateness of the floorspace ratios (in the short term at least) has been validated (to a reasonable degree of accuracy).

Having applied the ratios of land area/worker to the employment distributed over building typologies / land uses in urban business zones, Table 12.3, Figure 12.7 and Figure 12.8 show the results at the land use typology and/or category level. Strong demand in the short term is estimated for urban business zone land, slowing over the medium and long term, in keeping with the location and structure of (rebased) district employment projections.

Between 2023 and 2053, it is estimated that around 87.2ha of developable zoned land will be required to accommodate employment growth seeking an urban business zone.[117] This compares with 80.2ha modelled in the HBA 2021. Nearly half of this zoned land demand (50.2ha) occurs in the next 10 years. When the competitiveness margin is added,[118] long term developable land demand in urban business zones increases to 102.8ha (2053) (Table 12.3).

According to the model, the building typology / land use showing the greatest demand (24.2ha) over the long term is 'Other' commercial buildings. These are neither offices, schools, nor commercial yards, but in the case of Rotorua, include demand for activities like police stations/facilities, fire stations, district courts, security, hospitals, ambulance services, churches and funeral services. These industries are driven strongly by household growth projected in the district.

The building typology / land use that is projected to need the most land in the short term (i.e. to 2026) is warehouse space. It is estimated that 6.0ha of developable land in urban business zones is needed to accommodate growth in warehouse type developments (large utilitarian buildings) and around 10.4ha is needed by 2033, but relatively little after that out to 2053. Demand for land to accommodate industrial factories is larger overall compared to demand for warehouses, but that demand is weighted more towards the long term rather than the short to medium term. Demand for industrial yard based land is however more evenly spread over the time periods (although noting that the time periods themselves have increasing lengths, hence a gradual reduction in the annual average demand over time). Total Industrial category land demand over the long term is projected to be 34.2ha, slightly higher than long term Industrial land demand modelled in the HBA 2021 (30.7ha).

[116] The assumptions can be found in Appendix 9.

[117] This approach assumes all employment growth requires vacant land/new floorspace.

[118] Clause 3.22 of the NPS-UD – 20% added in the short and medium term and 15% added in the (discrete) long term.

Table 12.3 – Projected Land Demand in Urban Business Zones by Land Use Typology and Category 2023-2053 (Without and With Margin)

Category	Land Use / Building Type	Developable Land Demand (ha)					
		Cumulative			Cumulative with Competitiveness Margin		
		2023-2026 Short Term	2023-2033 Medium Term	2023-2053 Long Term	2023-2026 Short Term	2023-2033 Medium Term	2023-2053 Long Term
Retail	Shops-Commercial	1.7	3.9	6.4	2.0	4.6	7.6
	Shops-Food and Beverage	2.3	3.1	4.0	2.7	3.7	4.7
	Total Retail	**4.0**	**6.9**	**10.4**	**4.7**	**8.3**	**12.3**
Commercial	Office-Commercial	-	0.8	3.1	-	1.0	3.6
	Office-Retail	-	0.0	0.1	-	0.1	0.2
	Yard-Commercial	0.2	0.4	0.4	0.3	0.5	0.5
	Other Built-Commercial	3.3	9.4	24.2	4.0	11.3	28.3
	Education	1.7	3.4	6.4	2.0	4.1	7.6
	Outdoor-Commercial	0.1	0.3	0.5	0.1	0.3	0.6
	Total Commercial	**5.4**	**14.3**	**34.8**	**6.5**	**17.2**	**40.7**
Accommodation	**Total Accommodation**	**4.5**	**6.0**	**7.8**	**5.4**	**7.2**	**9.3**
Industrial	Warehouse	6.0	10.4	11.9	7.3	12.5	14.2
	Factory	2.0	5.3	13.5	2.4	6.4	15.8
	Yard-Industrial	4.3	6.2	8.1	5.1	7.5	9.7
	Other Built-Industrial	0.7	1.0	0.7	0.8	1.2	0.8
	Outdoor-Industrial	-	-	-	-	-	-
	Total Industrial	**13.0**	**22.9**	**34.2**	**15.6**	**27.5**	**40.5**
Total Urban Business Zone Demand Growth (ha)		26.8	50.2	87.2	32.2	60.3	102.8

Source: M.E Rotorua Urban Business Land Demand Model (HBA 2024). Negative Office Commercial Employment has not been equated with negative demand for land in the short term to avoid this reducing the net total for the Commercial Category (as office land is typically not substitutable for other types of commercial land use). Medium and long term Office Commercial land demand retains a net growth approach.

Projected demand within business enabled zones in defined urban environment only (as defined by SA1 2018)

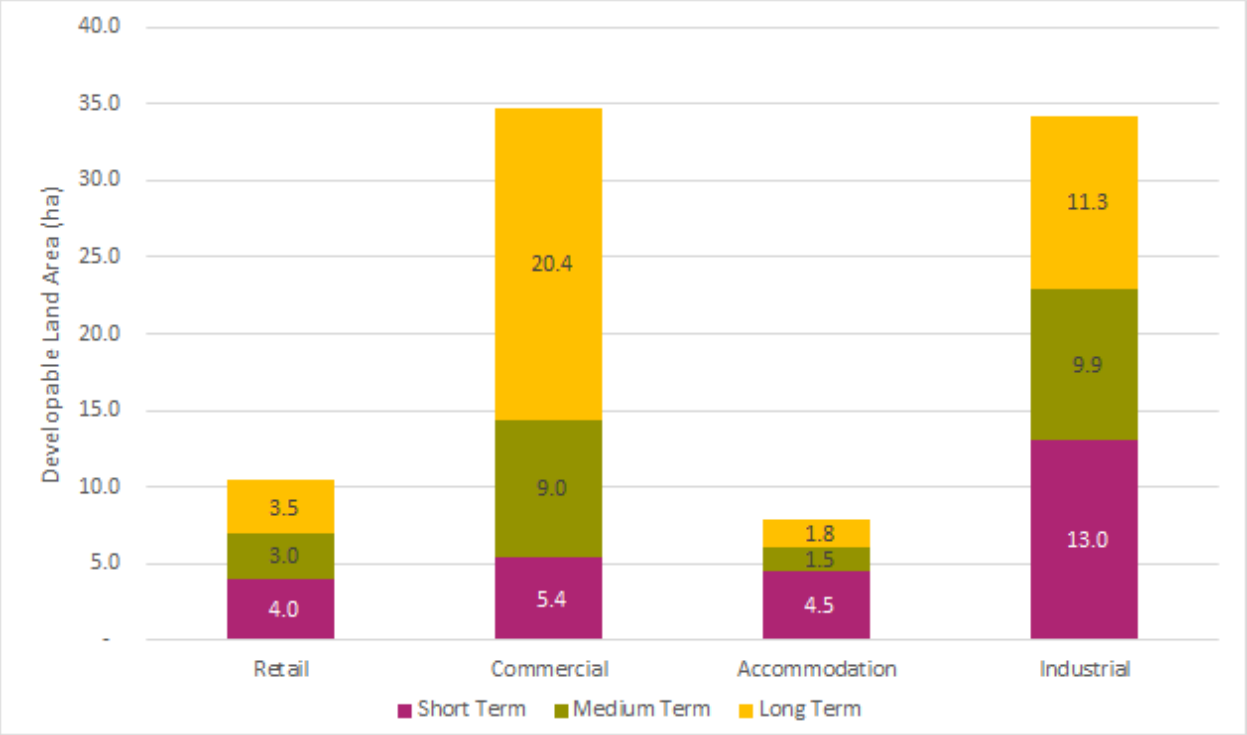
The combined demand for zoned land to accommodate growth of retail shop space in the urban environment is estimated at 6.4ha over the long term[119] excluding the competitiveness margin. Care is needed as the Retail category (shops and food and beverage) was impacted by Covid-19 (and recent economic conditions) and the growth in employment in the short term is focussed on recovery to previously projected employment levels for 2026.[120] The demand model is predicated on land demand being demand for vacant land (new development), but CBRE has shown that retail land is still under-utilised (especially non-prime vacancies in the CBD) and so some of this already developed shop/restaurant land could be used to accommodate demand in the short term. In the medium and long term, total Retail land demand (10.4ha)[121] is likely to be overstated because it includes the short term demand. A portion however is likely to be net additional to what is developed for retail shops and food and beverage at present.

[119] The 'retail' category results in this model do not supersede specific retail demand modelling - it is a high level, total urban business area model that does not distinguish retail store types, sizes or centre functions.

[120] By 2023, retail sector employment was 91.3% of previously projected retail employment for that year.

[121] Total retail demand in the HBA 2021 was 9.2ha in the long term.

Figure 12.7 - Projected Land Demand in Urban Business Zones by Category 2023-2053 (No Margin)



Like the Retail category, care is needed with interpreting the model results for Tourist Accommodation sector land demand in the short term (4.5ha). As a Covid-19 impacted sector, the short term land demand is driven by strong projected recovery of Tourist Accommodation sector employment.[122] Employment in this category is still below the level it was at the time of the HBA 2021 (i.e. 2020).

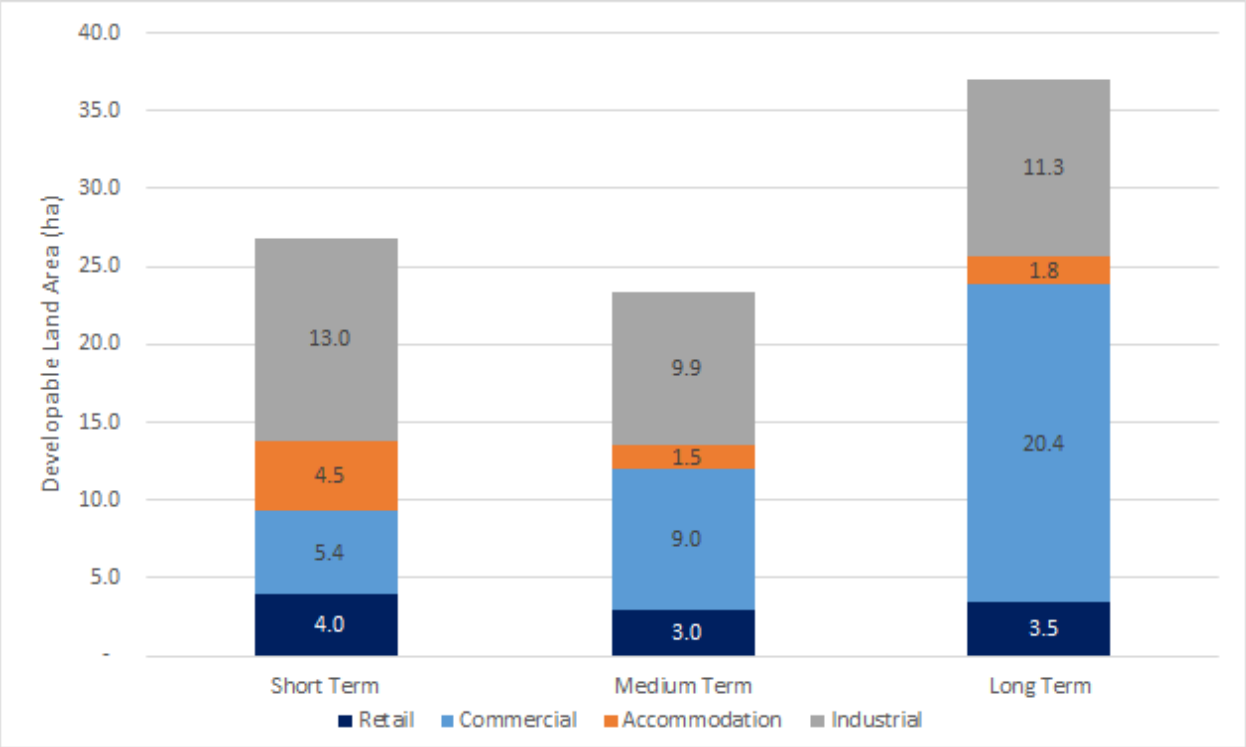
Importantly, there are a number of motels in Rotorua's urban environment that are not currently being used for Tourist Accommodation (and are being used for emergency housing). As these alternative uses reduce (in line with consent expiry, growth in social housing and changes in government policy) and the premises return to Tourist Accommodation use, so too will they absorb some of the projected employment growth in this category, with no associated demand for vacant land. In the medium and long term (7.8ha demand),[123] land demand is likely to be overstated because it includes the short term demand. However, some projected land demand is likely to be net additional land demand to what is developed for Tourist Accommodation at present.

No demand for new/vacant land for commercial offices is anticipated in the short term (to 2026) across the urban business zones. Office vacancies (as reported by CBRE) may therefore increase over that period before starting to improve. However, because of the large amount of office vacancies at present (2023), the demand for land for commercial offices in the medium and long term may be over-stated as some may be absorbed by existing vacant office premises (particularly if these are redeveloped/upgraded to prime office space),with no associated requirement to use vacant land.

[122] By 2023, Tourist Accommodation sector employment was 86.9% of previously projected Tourist Accommodation employment for that year.

[123] In the HBA 2021, long term Tourist Accommodation category land demand was 5.2ha.

Figure 12.8 – Projected Land Demand in Urban Business Zones by Period 2023-2053 (No Margin)



Demand for land to accommodate growth in all types of Commercial activity is 34.8ha by 2053 (excluding the margin),[124] followed closely to total Industrial land use demand of 34.2ha.

Figure 12.7 highlights where the demand is focussed in the short, medium and long term in Rotorua's urban business zones, with Industrial land being of greatest demand in the short term, Industrial and Commercial land being of greatest demand in the medium term and Commercial land being the greatest overall demand in the long term. This is not substantially different from the HBA 2021 results.

For brevity, the equivalent analysis expressed in terms of sqm of GFA (floorspace) demand projected for urban business zones is set out in Appendix 9. The results show the same trends and broad order of magnitude between categories and over time as for land demand projections. The caveats regarding short term (recovery) demand for visitor Tourist Accommodation and Retail apply, as does the ability of vacant office and retail space (particularly in the CBD) to absorb some of short/medium term demand without generating demand for development on vacant land.

12.3 Discussion, Stakeholder Feedback and Recent Research

The measure of additional land demand is considered more relevant for future planning for Industrial growth as industrial activities are more land extensive and not easily accommodated in mixed-use buildings. The measure of additional land demand is also likely to be more relevant for medium and long term planning for retail growth as retail activities are generally limited to the ground floor. However, the measure of additional floorspace is most relevant for future planning of Commercial and Tourist Accommodation

[124] This compares to 35.1ha projected in the long term in the HBA 2021.

growth (particularly commercial office) as the bulk of these activities is more easily located above ground (with lobbies often limited to the ground floor) and in conjunction with retail activities. This is particularly so in City Centre zones. However, as some styles of visitor accommodation and commercial activities (including commercial yards) are reliant on land area more than built space, the land demand results still need to be considered.

It is important to note that this demand analysis does not dictate specifically which zones and locations within the urban environment are needed to accommodate projected demand. Across the business enabled zones there are options available to accommodate a mx of building typologies / land uses depending on the rules of the District Plan and the nexus between activities and the typologies used in the capacity model. This is discussed further in Section 13 with regards to business capacity.

Two key pieces of research commissioned by the Council since the HBA 2021 provide additional insight on business land/floorspace demand within urban Rotorua, including through stakeholder engagement carried out by the report authors. A brief summary of key findings in those reports (focussing on points relevant to current and future demand) is included below. Aspects of the following summary are also relevant to the assessment of the suitability of business zone locations in urban Rotorua (discussed in Section 14).

12.3.1 Inner-city Retail Study, Colliers (2024)

This study is an in-depth study to comprehensively assess the current state of the inner-city retail sector, identify contributing factors to its decline, evaluate its growth potential, and recommend strategies for revitalisation and attracting new businesses. Overall, Colliers found that the property market for Rotorua's CBD revealed "*a persistent vacancy issue, signalling a lack of ability to retain and attract new retailers as well as an oversized retail footprint*" relative to demand (Colliers, page 4). They found that the appeal of the inner-city to consumers is adversely impacted by:

- concerns over crime, safety and security;
- the high levels of homelessness in the city and the use of Tourist Accommodation for transitional and emergency housing;[125]
- criticism of parking policies and costs in the CBD;
- lack of retail diversity (which adversely affects the appeal of the inner-city to consumers);
- unattractive streetscapes;
- underinvestment in building stock (driven by low capital and rental returns);
- building strengthening concerns make redevelopment unfeasible;
- high council rates relative to the value of the buildings;
- sub-optimal use of land within the inner city (lost opportunities); and
- the disconnect between the inner-city and anchor points around the fringe of the CBD (including the lakefront).

[125] This issue has been steadily declining since its peak in 2020/2021 and the practice of using motels for emergency housing is projected (by MHUD) to be largely ended by the end of 2025.

One stakeholder surveyed by Colliers stated that "*there is no problem in attracting new retailers to Rotorua, just not into the central CBD*". Some inner-city businesses and property owners stated that they felt disillusioned by the lack of positive changes over time in the CBD.

This research suggests that retail demand modelled for the HBA 2024 is likely to be focussed on business zones that enable large format retail development or that are outside of the City Centre 1 Zone (mid-city), as least while the above issues remain in the city-centre. However, the Collier's report makes a number of recommendations that could assist with the revitalisation of the inner-city. M.E/Savvy support those recommendations and include some of them in the recommendations section of this HBA (Section 16.2).

12.3.2 Rotorua Industrial Sector – Economic and Land Assessment, MRCagney (NZ) Ltd et al. (2024)

RLC commissioned a consortium of MRCagney, Colliers, and MartinJenkins to provide a Rotorua Industrial Sector Economic and Land Assessment, Industrial Land Strategy, and an associated Implementation Plan. This research is to understand the state of play in Rotorua's industrial sector and to provide actionable insights and recommendations to support Rotorua's economic development goals. The 2024 report covers the Economic and Land Assessment, with the Industrial Strategy and Implementation Plan a focus for 2025.

The report provides detailed analysis on industrial sectors that are currently large contributors to district GDP or that have an above average concentration within Rotorua relative to the national average. In terms for future demand in the industrial sector the report discusses Rotorua's expected (business as usual) industrial growth outlook, but also identifies areas/opportunities for industrial demand that may not be anticipated in the Infometrics projections relied on for this HBA. These have been identified from average annual employment growth rates over the last 10 years and three sectors in particular have gone from zero employment to significant positive employment now. These emerging industrial sectors are:

3. Prefabricated wooden building manufacturing. This industry has no employment in 2015 and currently has 68 employees and a GDP contribution of $5.8m. It is more than nine times more concentrated in Rotorua than in the national economy (i.e. has a location quotient of 9.3).

4. Cleaning compound manufacturing. This sector now has 13 employees and a GDP contribution of $1.6m. It has a location quotient approaching 1 meaning that it has gone from non-existent to nearly approaching the national average.

5. Other professional and scientific equipment manufacturing. The sector now has 15 employees and a GDP contribution of $1.7m. It also has a location quotient approaching 1.

Three other industries have increased their concentration in Rotorua by more than 3 location points in the last 10 years, along with positive employment growth. These industries to watch include lifting and material handling equipment manufacturing, synthetic resin and synthetic rubber manufacturing, and machine tool and parts manufacturing.

While some of this growth may already be captured in the Infometrics employment projections (rebased for this HBA), it will be important that the employment projections are updated in the near future (prior to the next HBA) so that any structural changes in the industrial economy of Rotorua are appropriately captured, as this has flow on effects for industrial land demand in urban business zones.

The MRCagney et al. report also provides some discussion on demand for specific industrial zone locations in urban Rotorua. Key findings are as follows:

- Ngongotahā – In the longer term, changes in demand are likely to arise due to changes in land values and the attitudes of neighbouring occupiers. Given its town centre location and the amenities it provides, there is likely to be growing demand for alternative uses for the currently industrially zoned land as the population of Ngongotahā grows. This will place upward pressure on land prices. Over time, this will put pressure on legacy industries and reduce demand for new industrial development as cheaper land becomes available elsewhere in the district.
- Mangakakahi/Fairy Springs – This industrial location is close to the town centre, relatively central to the urban labour market and has relative ease of access to State Highway 5. These attributes have made this location a favoured one by local businesses and it is described as the prime industrial hub. MRCagney et al. considered that this industrial area would support demand from traditional industrial uses in the long term (although the City Entranceway Mixed Use Zone would also support strong commercial and retail demand for similar reasons). They observed that the location was becoming more mixed use, which will make it harder for any existing land extensive industrial activities to remain feasible (as land prices increase).
- Ngāpuna – This industrial location also benefits from proximity to the town centre and the local workforce. The major transportation link is State Highway 30 which connects to the north with State Highway 33, which is the primary route to the Port of Tauranga. This transport route also links Rotorua with Rangiuru where the Rangiuru Business Park is being developed. The Ngāpuna area contains several transport, logistics and automotive companies and a small number of sites of wood processing companies (e.g., Hume Pine, Claymark, McAlpines). MRCagney consider that over the short term future industry will continue to be the primary occupier of land given high levels of demand, and a likely resistance to relocating, particularly if freehold land is unavailable. Growth in the local residential population, however, will drive demand for greater retail, entertainment and service amenities in the area (an issue shared with Mangakakahi/Fairy Springs.
- Eastgate - Direct access to the airport and State Highway 30, which forms part of the primary route to the Port of Tauranga, bolsters the appeal of the area. The Eastgate Business Park has a current site coverage (of occupied sites) of 30% which is higher than other industrial areas due to only limited industrial yard based activities. It is the newest industrial area in Rotorua, with all buildings developed since 2000. It has also supplied larger average section sizes to the market than in other older industrial areas. “Despite concerns voiced during stakeholder feedback regarding the precinct’s distance from the city and the local workforce, the Eastgate Business Park has elicited strong demand, with leasing opportunities being rare. The Eastgate industrial project has also met with agency success despite the challenging economic conditions currently prevailing. This indicates that if land or buildings were available in the area, they would elicit reasonable levels of demand” (page 74).
- Peka Block (Heavy Industrial Zone) – At the intersection of State Highway 5 and 30, this land south of downtown Rotorua has been largely undeveloped. There are a few established industrial activities, only one of which is on the Whenua Māori parcels. The leasehold nature of most of this land is key deterrent to demand: “Rotorua businesses spoken to have indicated that they are currently unwilling to consider leasehold land for expansion or consolidation opportunities” (page

78). However, according to the MRCagney et al. report, the Peka Trust is developing 36ha of land into an industrial park over four stages, with the potential to develop up to 90ha over the long term (the property is 135ha in total). Stage 1 (around 13ha[126] and 13 sections along SH5) is due to be completed in mid-2025, with stage 2 (7ha) coming on board in 2027, and stages 3 and 4 commencing from 2028 or 2029 (with proposed completion of these stages by 2035). There are currently five interested potential tenants for the 13 initial sections. This indicates that there are both local and out-of-region businesses that are prepared to take up leasehold land opportunities.

[126] It is not known if this is a gross or net developable land area. Currently the HBA 2024 capacity model identifies just 9.1ha of net developable land capacity in the Peka Block (consistent with the HBA 2021 approach advised by Council). This may or may not be conservative relative to the proposed stage 1 release area. As the Stage 2 release proposed for the Peka Block coincides with the timing of the next HBA update (i.e. indicatively 2027), it is recommended that the development capacity assigned to the Peka Block is revisited at that time. The proposed scale of development for stages 1-2 (20ha) is considered in the sufficiency findings in Section 15 (MRCagney et al. identify infrastructure constraints for stages 3 and 4, so that is not considered to represent development capacity at this time).

13 Business Capacity

This section assesses the business land and floorspace development capacity that is plan enabled in Rotorua's urban business zones. This is based on current planning rules applied to vacant parcels that have been identified in those zones through a desk-top and ground survey. A comparison with plan enabled capacity estimated in the HBA 2021 is provided and key drivers of change are discussed.

Except where stated, much of the approach for this section is consistent with the capacity modelling approach used in the HBA 2021. Further information on the approach used to quantify plan enabled capacity in the urban environment is contained in the HBA 2021 Main Report and Technical Report. As noted in previous sections, the capacity assessment does not include capacity created through potential redevelopment of brownfield sites,[127] or increased utilisation of already developed sites, except where the under-utilised parcel area is clearly delineated and unused.

13.1 Current Stock-Take of Vacant Business Land

To identify current (June 2024) vacant land in urban business zones, the vacant land parcels identified for the HBA 2021 (June 2021) in the short/medium term formed the starting point. Some of those parcels that have since been developed and occupied were removed and newly vacant land parcels (i.e. created by demolition/removal of buildings) were added. Further consideration was given to some vacant parcels not previously included in the HBA 2021 (and that remained vacant), with some included this time to apply a less conservative position on vacant development capacity. Last, the long term vacant land parcels that were identified through the Spatial Plan for the HBA 2021 were discarded and replaced with the long term greenfield business areas identified in the FDS 2024 (noting that the Tamarahi area was carried over from the Spatial Plan).

Figure 13.1 maps the final vacant land parcels in Rotorua's urban business zones as of June 2024 according to short/medium and long term zoning.[128] In a number of cases, only a portion of the site is considered vacant, although the map shows the total parcel. A minor limitation of the business capacity modelling is that the ground survey of vacant sites was conducted in June 2024, but the base year of demand (which it gets compared against) is March 2023 (i.e., the year end of the Infometrics employment projections). We do not consider that the difference in timing materially impacts the analysis findings.

The total area of parcels confirmed as vacant business capacity was 52.5ha in the short and medium term (based on operative zoning excluding the Industrial Transitional Zone) and 240.6ha in the long term (based on operative zoning and identified future growth areas) (Figure 13.2). This is the developable land area and takes into account not only the vacant share of the parcel determined by the ground survey, but that some

[127] The only exception to this is the small Industrial Transitional Zone where it is assumed that in the long term, existing (and old) housing stock would be removed to enable industrial development.

[128] Please note, in Figure 13.1 Tamarahi is incorrectly shown as Industrial 1E Zone instead of Industrial 1 Zone.

parcels in greenfield areas were large in size and had no or limited internal roads. This means that the gross vacant parcel area would over-estimate the likely developable area (once the land is fully subdivided).

Figure 13.1 – Vacant Land Parcels in Urban Business Enabled Zones June 2024

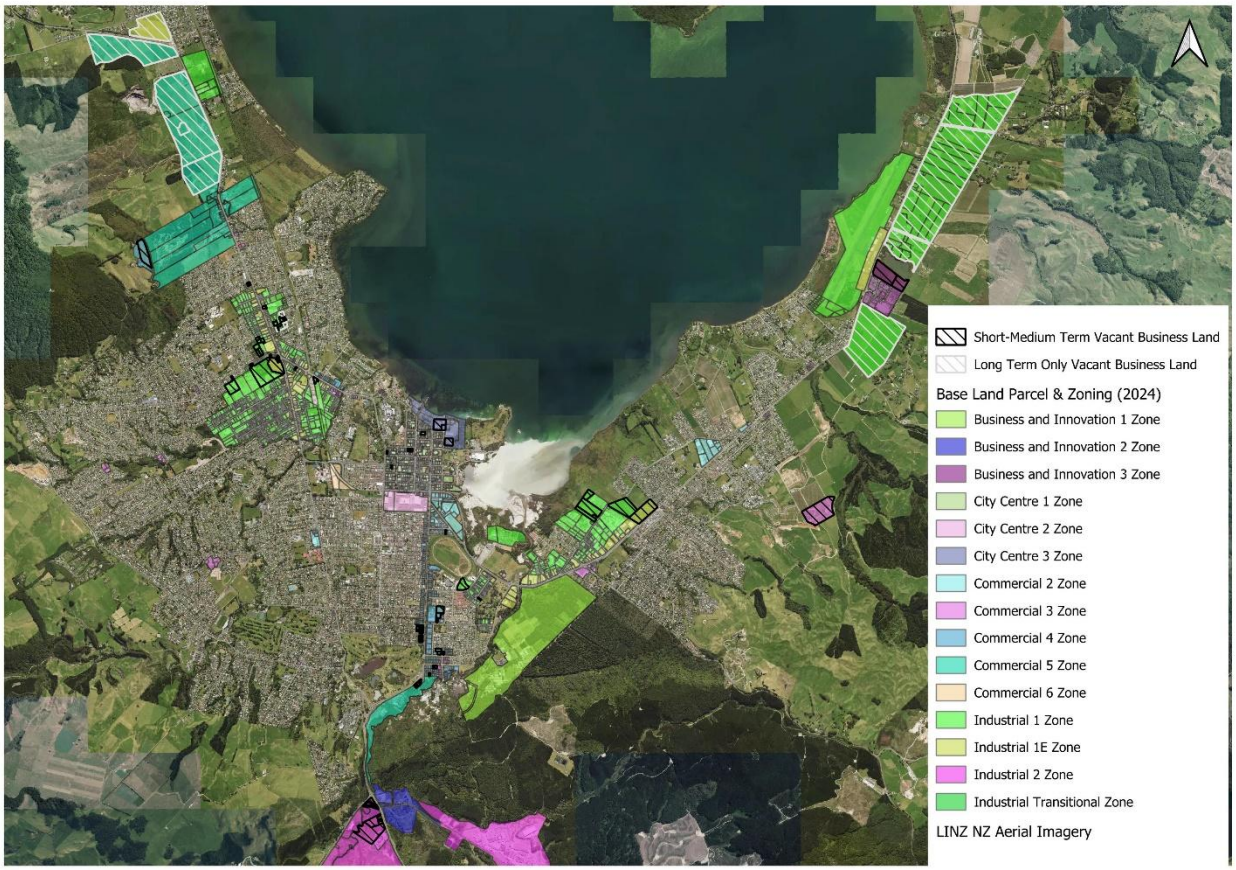
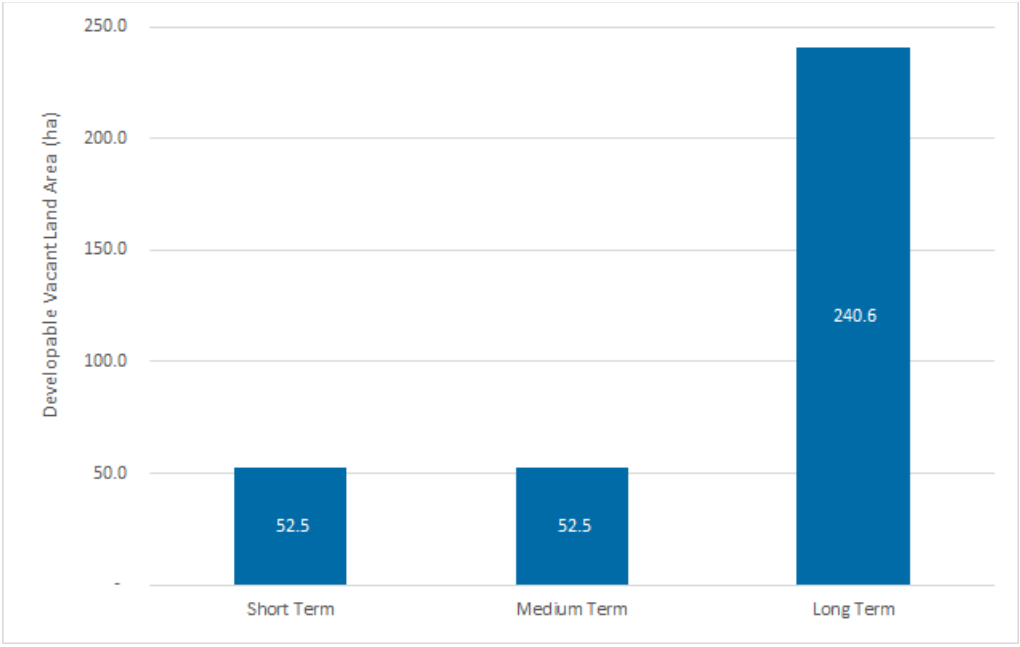


Figure 13.2 – Total Developable Vacant Land Area in Urban Business Zones June 2024 by Time Period



In order to bring all vacant parcels to a consistent net developable area, 30% of parcel area was excluded from selected large parcels to accommodate likely final road and open space areas.[129] For FDS growth areas, the capacity model adopted the developable land areas published in the FDS report.

13.1.1 Vacant Land by Zone and Reporting Area

In the short and medium term, 44% of vacant business zone land is located within the Western area, followed by 40% in the Eastern area. Just 16% is available in the Central Area and no vacant land is included in Ngongotahā (Table 13.1). This is not to say that there is no vacant Industrial zoned land in Ngongotahā, however, it has been agreed with Council to exclude any parcels in the Wikaraka industrial area on the basis that the FDS signals rezoning of this land to High Density Residential Zone in the long term. On that basis, it is considered unlikely that a landowner would pursue industrial development in the short-medium term and forgo the opportunity for higher value development (or returns) in the long term. Overall, the distribution of short-medium term vacant land capacity by reporting area is very similar to the HBA 2021.

In the long term (and largely driven by the FDS), the Eastern area dominates vacant capacity (59% of the total). The Western area accounts for 10% of the total, the Central area accounts for 3% of the total, and the Ngongotahā area accounts for 27% of the total (Table 13.1).

Table 13.1 – Developable Vacant Land Area by Reporting Area

Reporting Area	Total Vacant		
	2023-2026 Short Term	2023-2033 Medium Term	2023-2053 Long Term
Central	8.2	8.2	8.2
Eastern	21.2	21.2	141.8
Western	23.1	23.1	24.5
Ngongotahā	-	-	66.1
Total	52.5	52.5	240.6

Source: M.E Business Capacity Model 2024. Vacant includes sites under construction on the basis that they do not absorb employment demand until occupied.

Table 13.2 provides a breakdown of vacant developable land area (June 2024) by business enabled zone. In the short and medium term, 30% of the vacant developable land area is in the Light Industrial Zone and 17% is in the Heavy Industrial Zone. A further 14% is in the City Entranceway Tourist Accommodation Zone, followed by 12% of the total in the City Entranceway Mixed Use Zone. The Eastgate Business Park contains 10% of zoned vacant business land, followed by 9% in the Neighbourhood Centre Zone (but limited to Wharenui Road). Approximately 5% is in the Northern Edge of the CBD, and 1% in the Mid City Zone. The commercial precincts in the Pukehāngi Plan Change Structure Plan make up the remaining 1% of short and medium term vacant land capacity.

[129] While some sites in the Heavy Industrial zone were large and had not undergone land development, no deduction was made in this zone given the nature of development anticipated.

Under long term (indicative) zoning, an additional 188.1ha of vacant business land is identified. This increase is attributable to the inclusion of the Industrial Transitional Zone and the FDS growth areas. There is a net reduction in Neighbourhood Centre vacant capacity, reflecting the change from the large zone area in the Wharenui Road Development Plan area to two more tightly zoned potential centres elsewhere (but nearby).

Under long term zoning, the Light Industrial Zone (existing and indicative) accounts for 62% of total vacant developable land area, followed by the City Entranceway Tourism Zone which would have 24% of the total). Together these two zones have an 86% of vacant developable land area in the long term. While retaining the same vacant land area, the City Entranceway Mixed Use Zone has a 3% share of the long term total. There is no change in the vacant area within the Heavy Industrial Zone, but relative to other vacant land, it drops to a 4% share in the long term.

Importantly, there are several urban business zones that have (or are assumed to have) no current vacant capacity, with none also provided for in the long term. These 'fully occupied' zones include the Southern Edge (City Centre 2) Zone, most compact commercial centres (inclusive of Ngongotahā centre), Trade Central (Commercial 6 Zone) and the Scion and Waipa Business Park zones (Table 13.2).

Table 13.2 – Developable Vacant Land Area by Zone June 2024

Business Zone	Zone Description	Total Vacant		
		2023-2026 Short Term	2023-2033 Medium Term	2023-2053 Long Term
City Centre 1 Zone	Mid City	0.6	0.6	0.6
City Centre 2 Zone	Southern Edge	-	-	-
City Centre 3 Zone	Northern Edge	2.6	2.6	2.6
Commercial 1 Zone	Ngongotahā Centre	-	-	-
Commercial 2 Zone	Compact Commercial Centres	0.1	0.1	0.1
Commercial 3 Zone	Neighbourhood Centres	4.6	4.6	1.0
Commercial 4 Zone	City Entranceway Accommodation	7.2	7.2	7.2
Commercial 5 Zone	City Entranceway Tourism	-	-	58.1
Commercial 6 Zone	Trade Central	-	-	-
Industrial 1 Zone	Light Industrial	16.0	16.0	148.2
Industrial 1E Zone	City Entranceway Mixed Use	6.3	6.3	6.3
Industrial 2 Zone	Heavy Industrial	9.1	9.1	9.1
Industrial Transitional Zone **	Future Light Industrial	-	-	1.4
Business and Innovation 1 Zone *	Scion Business Park	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	5.3	5.3	5.3
PC 2 Commercial Precinct	Pukehangi Plan Change	0.8	0.8	0.8
Total		52.5	52.5	240.6

Source: M.E Business Capacity Model 2024. Vacant includes sites under construction on the basis that they do not absorb employment demand until occupied.

13.1.2 Comparison with the HBA 2021

Table 13.3 provides a comparison of estimated vacant business land in the short and medium term with that contained in the HBA 2021. Commentary is included in the table to explain changes at a zone level. Overall, this HBA 2024 identifies 2.3ha less vacant business land than in the HBA 2021, which is a minor net reduction. As discussed above, take up of vacant sites since June 2021 is not the only driver of change. There has been some demolition of buildings in the City Entranceway Tourist Accommodation Zone that has increased vacant capacity (at a rate greater than take up within the zone). There has also been demolition of the old QE health building in the Northern Edge Zone, but this was more than offset by take-up of other sites within the zone for the new health spa facility on the lakefront and replacement QE health building. In that zone, vacant capacity has had a net reduction of 2.65ha. In the Eastgate Business Park, vacant capacity has reduced by 1.83ha, and this is a gross reduction attributable purely to take-up.

Table 13.3 – Changes in Vacant Business Land between June 2021 and June 2024 – Short Term Zoning

Business Zone	Zone Descripton	June 2021 Survey (ha)	June 2024 Survey (ha)	Change (ha)	Comment
City Centre 1 Zone	Mid City	0.1	0.6	0.53	No take up. Inclusion of some vacant land not previously included.
City Centre 2 Zone	Southern Edge	-	-	-	No change
City Centre 3 Zone	Northern Edge	5.2	2.6	-2.65	Combination of take up and demolition to create vacant site - net reduction
Commercial 1 Zone	Ngongotahā Centre	-	-	-	No change
Commercial 2 Zone	Compact Commercial Centres	0.1	0.1	-0.00	No change (minor variation in gross area calculations)
Commercial 3 Zone	Neighbourhood Centres	4.7	4.6	-0.12	Removal of parcels no longer considered vacant capacity.
Commercial 4 Zone	City Entranceway Accommodation	5.0	7.2	2.19	Combination of take up (one site) and demolition on some sites - net increase.
Commercial 5 Zone	City Entranceway Tourism	-	-	-	No change
Commercial 6 Zone	Trade Central	-	-	-	No change
Industrial 1 Zone	Light Industrial	15.7	16.0	0.24	Combination of take up, removal of some parcels no longer considered vacant capacity and inclusion of some vacant land not previously included - net increase
Industrial 1E Zone	City Entranceway Mixed Use	6.9	6.3	-0.60	Combination of take up and inclusion of some vacant land not previously included - net reduction
Industrial 2 Zone	Heavy Industrial	9.1	9.1	-0.05	No change (minor variation in gross area calculations)
Industrial Transitional Zone **	Future Light Industrial	-	-	-	No change
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	No change
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	No change
Business and Innovation 3 Zone	Eastgate Business Park	7.2	5.3	-1.83	Take up of some vacant sites - gross reduction
PC 2 Commercial Precinct	Pukehangi Plan Change	0.8	0.8	-	No change
Total		54.8	52.5	-2.3	Minor net reduction

Source: M.E Business Capacity Model 2021 and 2024. Vacant includes sites under construction on the basis that they do not absorb employment demand until occupied.

Table 13.4 compares estimated long term vacant business land between the HBA 2021 and this HBA update. The land areas include the vacant capacity in the short/medium term. In most cases the change in vacant land area at the zone level is attributable to the changes in the short term zoning. Overall, long term vacant business land has increased a significant 133.3ha compared to long term vacant business land in the HBA 2021 on account of the FDS 2024 identifying more greenfield growth areas than the Spatial Plan which preceded it.

Care is needed as Table 13.4 shows that vacant capacity in the Eastgate Business Park zone has decreased by 43.19ha but this is due to long term growth areas in the Eastern reporting area being assigned to the Light Industrial Zone in the HBA 2024 instead (and further increased in size). In the HBA 2021, there was no vacant capacity in the City Entranceway Tourism Zone, but the FDS identifies a substantial 58.1ha of vacant land in this zone in the long term (west and south of State Highway 5), and accounts for 44% of the net increase in vacant land in the long term between HBAs.

Table 13.4 – Changes in Vacant Business Land between June 2021 and June 2024 – Long Term Zoning

Business Zone	Zone Descripton	June 2021 Survey (ha)	June 2024 Survey (ha)	Change (ha)	Comment
City Centre 1 Zone	Mid City	0.1	0.6	0.53	See short term comment
City Centre 2 Zone	Southern Edge	-	-	-	No change
City Centre 3 Zone	Northern Edge	5.2	2.6	-2.65	See short term comment
Commercial 1 Zone	Ngongotahā Centre	-	-	-	No change
Commercial 2 Zone	Compact Commercial Centres	0.1	0.1	-0.00	See short term comment
Commercial 3 Zone	Neighbourhood Centres	1.1	1.0	-0.15	See short term comment
Commercial 4 Zone *	City Entranceway Accommodation	5.0	7.2	2.19	See short term comment
Commercial 5 Zone	City Entranceway Tourism	-	58.1	58.08	FDS 2024 added State Highway 5 West and South (long term rezoning strategy)
Commercial 6 Zone	Trade Central	-	-	-	No change
Industrial 1 Zone	Light Industrial	15.7	148.2	132.45	The FDS 2024 identifies Tamarahi (see note below), Eastgate South (see note below) and Eastgate North (new) for future development capacity.
Industrial 1E Zone	City Entranceway Mixed Use	15.5	6.3	-9.20	The Spatial Plan identified Tamarahi for long term capacity, but the FDS changed this to Light Industrial Zone capacity (see above). Difference also relates to short term changes.
Industrial 2 Zone	Heavy Industrial	9.1	9.1	-0.05	See short term comment
Industrial Transitional Zone **	Future Light Industrial	1.4	1.4	-0.00	No change
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	No change
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	No change
Business and Innovation 3 Zone	Eastgate Business Park	48.5	5.3	-43.19	The Spatial Plan idenfitied an area south of Eastgate Business Park and this was assumed in the HBA 2021 to have Business and Innovation 3 Zoning. While some of this land is also identified in the FDS, it is treated as Industrial 1 Zone (Light Industrial) for the HBA 2024.
PC 2 Commercial Precinct	Pukehangi Plan Change	0.8	0.8	-	No change
	Future Community Asset Reserve	4.7	-	-4.74	This future urban zone has been consented for housing (currently under development) and is no longer included as a business enabled zone.
Total		107.3	240.6	133.3	Significant net increase attributable to the FDS 2024

*Source: M.E Business Capacity Model 2021 and 2024. Vacant includes sites under construction on the basis that they do not absorb employment demand until occupied. * In the HBA 2021, the Commercial 4 Zone (Fenton Street) was proposed for a more mixed use, intensive zone in the Spatial Plan. These changes have now been implemented-zone wide in PC9 and split zoning no longer applies.*

13.1.3 Accuracy of HBA 2021 Short Term Land Demand

By isolating the parcels that were vacant in the HBA 2021 (in June 2021) and no-longer vacant in June 2024 because of development and occupation by one or more businesses, it is possible to test the accuracy of the short term business land demand projections in the HBA 2021. This is a more tangible test of the accuracy of short term floorspace projections from the HBA 2021 than the comparison of floorspace

projections with consented non-residential building floorspace *assumed* to have been developed (and discussed earlier in Section 11).

The HBA 2021 projected demand for 14.8ha of urban business land in the short term (2020-2023). Actual take up of vacant business zoned land in the last three years was approximately half of that, at 7.6ha.[130]This included all of the vacant business land that was under construction as of June 2021 (estimated at 6.8ha) but suggests that not all of the vacant land that was consented but not under construction at that time (1.7ha), has in fact been developed in the past three years. It suggests that very little development on vacant sites was instigated after 2021.

Of that total 7.6ha of vacant land take-up, 56% was in the Northern Edge Zone, 24% was in the Eastgate Business Park, 11% was in the Light Industrial zone and the remaining 9% was in the City Entranceway Mixed Use Zone. The new QE Health facility in the Northern Edge Zone was in fact a transfer of an existing business located a short distance away (and since demolished), so technically is not attributable to demand growth (as modelled in the demand model). As such, 7.6ha of take-up might be an overstatement of recent business land take-up.

As discussed in the validation of the floorspace demand assumptions reported in the HBA 2021, and also in Section 12, the growth projections used at the time did not anticipate Covid-19 and this is likely to have dampened demand (and supply) for Retail and Tourist Accommodation development especially, but also some (but not all) commercial activities during the last three years. Industrial demand growth was expected to be the least impacted by Covid-19 (but not totally immune from its direct and indirect effects). However, actual take up of vacant Industrial land over the last three years appears to be 2.7ha compared with 7.6ha projected for that period (35% accurate).

Looking at total Industrial category employment growth between 2020 and 2023 (base years of the last and current HBAs), the net increase in Industrial employment was just 41 workers in urban business zones compared to 270 projected by Infometrics for that period (15% accurate). As these accuracy rates don't match, it implies that neither the employment projections nor the land per worker ratios have been accurate over the recent past.

There are however many assumptions underpinning the demand and capacity modelling in this HBA (and other HBAs carried out for Tier 1 and 2 local authorities) and the effects of Covid-19 would not have been possible to anticipate in the employment projections. The validation exercise is not a straightforward one. It does however highlight the limitations of the modelling.

For added context, it was projected in the HBA 2021 that there was demand for 1ha of Tourist Accommodation land by 2023. There was take up of 0.41ha of vacant business land for Tourist Accommodation (41% accurate, despite a decline in Tourist Accommodation employment). There was projected demand for 4.4ha of Commercial land by 2023. There was take up of 4.5ha for Commercial activities (102% accurate, or lower if you exclude the relocated QE Health facility). While 1.8ha of Retail land demand was projected, there was not vacant land identified in the HBA 2021 that was taken up by Retail development in the period 2020-2023.

[130] Total estimated take up of business zoned land was 7.7ha, but one site was used for a residential dwelling rather than a business activity.

Future updates of business demand and capacity (if approaches and assumptions are maintained) *may* (without the influence of a global pandemic) provide better opportunities to validate the appropriateness of assumptions used in the modelling and employment projections. In the meantime, the modelling is still considered fit for purpose and aligned with NPS-UD guidelines.

13.2 Estimated Floorspace Capacity on Vacant Land

The NPS-UD requires that vacant business capacity also be expressed in floorspace terms. To calculate the building envelope on each vacant business site, Council provided data from the district plan on site coverage[131] and building height rules by zone, sub-zone and precinct.[132] Some of these parameters were recently changed as a result of PC 9, particularly building heights in some commercial zones. These two parameters were applied to the developable vacant site area to estimate the ground floor GFA and the maximum number of storeys (upper floor GFA[133]) enabled by the plan in the short, medium and long term.

As part of the data collection for RER housing capacity (Section 8), the Council estimated the likely storeys of development in mixed use zones (i.e., those where business and housing is enabled). This approach was extended to Business Only classified zones. These 'likely storeys' are less than the number of storeys implied by plan enabled building heights. The HBA takes a conservative approach and applies this 'expected' storeys to the business modelling of maximum building envelope. This is a slight departure from the NPS-UD guidance, but one that reflects the situation in Rotorua where building heights are rarely maximised.

13.2.1 Cross over with Housing Capacity

Many of the district's business enabled zones also provide for residential activity (namely apartments). Generally, this is limited to above ground floors. As per the HBA 2021, Council has agreed on estimates for the share of 'likely' building storeys in mixed business zones that are estimated to be taken up by residential apartments. These storeys are deducted from the likely building envelope. This was necessary to avoid over estimating business capacity. The model reduced the number of storeys available for business capacity by subtracting the estimated residential floor take-up.

The same estimates were used to ensure that residential capacity was not over-stated in mixed business zones (i.e., the share of total enabled building envelopes that was likely to be occupied by business activity (including Tourist Accommodation) was removed. Through this process, double counting of capacity between the housing and business capacity modelling is avoided.

[131] Where a site coverage is not specified in the plan, a likely site coverage was estimated based on an analysis of recent development patterns. These assumptions have been maintained from the HBA 2021.

[132] Sub-zones defined for the capacity modelling include: City Centre 1 Zone – properties fronting Tutanekai Street and rest of the zone; City Centre 2 Zone – precincts A and B are defined separately from the rest of the zone; City Centre 3 Zone – precincts 2 and 2 are defined separately from the rest of the zone; Light Industrial Zone and City Entranceway Mixed Use – properties adjoining residential zones are defined separately from the rest of the zone; Light Industrial Zone – properties adjoining the Transitional Industrial Zone are defined separately from the rest of the zone.

[133] An average of 3m was applied to calculate storeys from building height provisions. Upper floor GFA was calculated as ground floor area multiplied by the number of above ground storeys.

13.2.2 Vacant Land GFA by Reporting Area and Zone

Table 13.5 shows the final estimates of maximum building floorspace on developable vacant land in Rotorua's urban business zones (as of June 2024), having applied the relevant development parameters. In total, the urban business zones have remaining vacant capacity for a maximum of 443,100sqm GFA in the short and medium term, increasing to 1.524 million sqm GFA under long term zoning. The Eastern area dominates business floorspace capacity in the short and medium term (45%) and long term (76%), with Western and Central areas with less than a third each in the short and medium term, and a reduced share of the total in the long term (although there is a small increase in capacity in real (GFA) terms in the Western area). The addition of future growth areas in Ngongotahā in the long term means that it has a 7% share of estimated long term floorspace capacity occurring on vacant land parcels.

Table 13.5 – Developable Vacant Land GFA – Short-Long Term by Reporting Area

Reporting Area	Maximum Building Envelope on Developable Vacant Land		
	2023-2026	2023-2033	2023-2053
	Short Term	Medium Term	Long Term
Central	125,500	125,500	125,500
Eastern	199,400	199,400	1,165,500
Western	118,200	118,200	127,300
Ngongotahā	-	-	106,600
Total	443,100	443,100	1,524,900

Source: M.E Business Capacity Model 2024.

In the short and medium term, 27% of the maximum (but likely) building floorspace is located in the Light Industrial Zone. A further 20% is in the Eastgate Business Park and 17% is in the City Entranceway Tourist Accommodation Zone. The Northern Edge zone accounts for 11% of floorspace capacity. Other zones have minor shares broadly commensurate with the distribution of vacant developable land area. In the long term, the Light Industrial Zone accounts for 76% of vacant site floorspace capacity, with the other zones dropping shares pro-rata.

Table 13.6 – Developable Vacant Land GFA – Short-Long Term by Business Zone

Business Zone	Zone Description	Maximum Building Envelope on Developable Vacant Land (sqm)		
		2023-2026	2023-2033	2023-2053
		Short Term	Medium Term	Long Term
City Centre 1 Zone	Mid City	18,300	18,300	18,300
City Centre 2 Zone	Southern Edge	-	-	-
City Centre 3 Zone	Northern Edge	50,400	50,400	50,400
Commercial 1 Zone	Ngongotahā Centre	-	-	-
Commercial 2 Zone	Compact Commercial Centres	1,000	1,000	1,000
Commercial 3 Zone	Neighbourhood Centres	34,500	34,500	7,400
Commercial 4 Zone	City Entranceway Accommodation	73,400	73,400	73,400
Commercial 5 Zone	City Entranceway Tourism	-	-	62,900
Commercial 6 Zone	Trade Central	-	-	-
Industrial 1 Zone	Light Industrial	120,600	120,600	1,164,800
Industrial 1E Zone	City Entranceway Mixed Use	39,900	39,900	39,900
Industrial 2 Zone	Heavy Industrial	12,900	12,900	12,900
Industrial Transitional Zone **	Future Light Industrial	-	-	9,200
Business and Innovation 1 Zone *	Scion Business Park	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	86,500	86,500	86,500
PC 2 Commercial Precinct	Pukehangi Plan Change	5,600	5,600	5,600
Total		443,100	443,100	1,532,300

Source: M.E Business Capacity Model 2024. Vacant includes sites under construction on the basis that they do not absorb employment demand until occupied.

13.3 Results – Maximum Capacity Scenario

Using the same land uses / building typologies identified to place business demand 'on the ground' (Section 12.2), a matrix that approximately aligns these space types with the activities that are permitted, controlled or restricted discretion status in each of the business zones has been developed by M.E/Savvy.

With the matrix, a '1' denotes that a particular land use/building typology is enabled in the zone and a '0' means that it is not enabled. That same table shows a category summary of land uses enabled. So long as one land use in a category is enabled, that category applies. This approach shows that 5 zone-sub-zone combinations (8%) are associated with just one category of land use (i.e., are more specialist zones), 37 zone-sub-zone combinations (63%) are associated with 2 categories of land use, 17 (29%) are associated with three categories (i.e., are more mixed use) and none anticipate all four categories.

At a parcel level, the vacant developable land area identified and the calculated ground floor and upper floor GFA capacity is attributed to each land use / building typology that is coded '1' according to the zone

or sub-zone it is located within. The results (described in the following sections) are vacant land and GFA area by enabled space types – an output compatible with the demand modelling outputs.

Importantly, because there are many cases where multiple uses are allowed on one piece of land (discussed above), vacant land and floorspace capacities are not additive. The allocation of land/GFA to commercial land uses may mean that the land cannot be used for opposing/different land use types, for example. In other words, allocating vacant land for the development of an office block would remove the land as a potential hotel site, and vice versa. Therefore, the vacant land and GFA capacity in the following sections should not simply be summed (and accordingly totals are not shown across the space types).

Table 13.7 contains the vacant land capacity outputs for the Maximum Capacity Scenario in the short and medium term, summarised by Commercial, Retail, Tourist Accommodation and Industrial land uses. The assessment shows the maximum potential capacity – regardless of use and the amount available to each of the four broad categories. As discussed above, out of necessity, zone provisions in the plans are often broad, meaning that most parcels identified as vacant are able to meet a relatively wide range of needs. This means that capacity may not be exclusively sheeted back to one space type/category or another.

At the category level, only the City Entranceway Tourist Accommodation Zone is exclusively enabled for Tourist Accommodation land uses according to model assumptions (7.2ha)[134] In total however, there is a maximum of 10.4ha potentially available for Tourist Accommodation development in Rotorua's urban business zones. There is a maximum of 45.3ha of vacant developable land available for Commercial development, although this same land is potentially available for Retail development. As discussed above, up-take by one category could exclude up-take the other, although there is potential for Commercial to occur on upper floors above Retail in some zones, so some overlap is still feasible. This is discussed further in terms of floorspace capacity.

There is also a maximum of 36.8ha of vacant developable land available for Industrial development in the short and medium term. All of this occurs in zones that also enable some forms of Retail and Commercial development – so Industrial is likely to compete for the vacant land that is available.

Table 13.7 shows that the Light Industrial Zone, Heavy Industrial Zone and Eastgate Business Park zone contribute most to maximum vacant capacity for Commercial, Retail and Industrial development, with the City Entranceway Mixed Use Zone the next largest. The Northern Edge provides 2.6ha of vacant developable land potential for Commercial, Retail and Tourist Accommodation.

There is no zoned vacant capacity in Ngongotahā in the short and medium term for any category of land use. Commercial, Retail and Industrial capacity is potentially available in the Central, Western and Eastern areas of the urban environment, although the amount potentially available in the Central area is only small, particularly for Industrial. The Tourist Accommodation capacity is in Western and Central reporting areas only.

[134] While the zone enables ancillary retail and office activities and some tourism activities, this is intended to be in conjunction with Tourist Accommodation activities and so is assumed to be captured by the Tourist Accommodation demand.

Table 13.7 – Short & Medium Term Business Land Capacity by Category and Zone (ha) – Maximum Capacity Scenario

Business Zone	Zone Description	Vacant Developable Land by Land Use Category (Ha)			
		Commercial	Retail	Industrial	Accommo-dation
City Centre 1 Zone	Mid City	0.6	0.6	-	0.6
City Centre 2 Zone	Southern Edge	-	-	-	-
City Centre 3 Zone	Northern Edge	2.6	2.6	-	2.6
Commercial 1 Zone	Ngongotahā Centre	-	-	-	-
Commercial 2 Zone	Compact Commercial Centres	0.1	0.1	0.1	-
Commercial 3 Zone	Neighbourhood Centres	4.6	4.6	-	-
Commercial 4 Zone	City Entranceway Accommodation	-	-	-	7.2
Commercial 5 Zone	City Entranceway Tourism	-	-	-	-
Commercial 6 Zone	Trade Central	-	-	-	-
Industrial 1 Zone	Light Industrial	16.0	16.0	16.0	-
Industrial 1E Zone	City Entranceway Mixed Use	6.3	6.3	6.3	-
Industrial 2 Zone	Heavy Industrial	9.1	9.1	9.1	-
Industrial Transitional Zone **	Future Light Industrial	-	-	-	-
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	5.3	5.3	5.3	-
PC 2 Commercial Precinct	Pukehangi Plan Change	0.8	0.8	-	-
Total Urban Environment		45.3	45.3	36.8	10.4

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only.*
Maximum Capacity Scenario (Includes Overlap of Capacity Between Enabled Categories)

Table 13.8 contains the maximum vacant land capacity outputs according to identified long term zoning by category. The maximum vacant capacity for Commercial, Retail and Industrial development increases significantly compared to the short/medium term due to the identified future Light Industrial Zones north and south of the Eastgate Business Park and at Tamarahi (Ngongotahā) which enables activities in all three categories. The maximum capacity for Commercial and Retail development is somewhat higher (at 233.4ha each) than Industrial capacity (at 170.4ha) due to the inclusion of the identified City Entranceway Tourism Zones in the FDS which are available for commercial and retail activities. The maximum capacity for Tourist Accommodation does not change in the long term (and sits at up to 10.4ha).

Vacant ground floor business space is attributed to enabled building typologies in the same manner as vacant land area. However, an additional step is included in the model before vacant upper floorspace is attributed to relevant space types. Key assumptions include:

- there is no potential for Retail (i.e., 'Shops – Commercial' and 'Shops – Food and Beverage') to locate above ground floor (i.e., they are constrained to ground floor capacity only). This is to reflect their strong location preference for ground floor premises.

Table 13.8 – Long Term Business Land Capacity by Category and Zone (ha) – Maximum Capacity Scenario

Business Zone	Zone Description	Vacant Developable Land by Land Use Category (Ha)			
		Commercial	Retail	Industrial	Accommo-dation
City Centre 1 Zone	Mid City	0.6	0.6	-	0.6
City Centre 2 Zone	Southern Edge	-	-	-	-
City Centre 3 Zone	Northern Edge	2.6	2.6	-	2.6
Commercial 1 Zone	Ngongotahā Centre	-	-	-	-
Commercial 2 Zone	Compact Commercial Centres	0.1	0.1	0.1	-
Commercial 3 Zone	Neighbourhood Centres	1.0	1.0	-	-
Commercial 4 Zone	City Entranceway Accommodation	-	-	-	7.2
Commercial 5 Zone	City Entranceway Tourism	58.1	58.1	-	-
Commercial 6 Zone	Trade Central	-	-	-	-
Industrial 1 Zone	Light Industrial	148.2	148.2	148.2	-
Industrial 1E Zone	City Entranceway Mixed Use	6.3	6.3	6.3	-
Industrial 2 Zone	Heavy Industrial	9.1	9.1	9.1	-
Industrial Transitional Zone **	Future Light Industrial	1.4	1.4	1.4	-
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	5.3	5.3	5.3	-
PC 2 Commercial Precinct	Pukehangi Plan Change	0.8	0.8	-	-
Total Urban Environment		233.4	233.4	170.4	10.4

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only.*
Maximum Capacity Scenario (Includes Overlap of Capacity Between Enabled Categories)

- sites enabled for 'Warehouse', 'Factory' and 'Other Built – Industrial' building typologies are constrained to ground floor development (i.e., have no upper floorspace capacity or above ground floor separate tenancies). The reason for this is different from shops. Generally (but not always), warehouses and factories are taller (require high internal building height), single use buildings and are unlikely to have other land use activities developing above them (i.e., they are the single occupant of the site). Often, these activities may have some of their own office space on upper floors, but this is ancillary to the main use and the model excludes this space).
- Yards also, by nature, do not typically have floorspace 'above them' (with buildings tending to play a lesser role on the site). Therefore, any floorspace attributed to 'Yard – Commercial', 'Yard – Industrial' and 'Outdoor – Industrial' is limited to the ground floor only.

These assumptions take a conservative approach to estimating capacity. Overall, all Industrial floorspace capacity on vacant sites is ground floor only in the Capacity Model. This does not preclude such developments from building structures that achieve the maximum or likely building height.

The equivalent results for floorspace under the maximum capacity scenario are contained in Appendix 10. In summary, there is maximum capacity for up to 369,700sqm GFA of Commercial floorspace in the short and medium term on plan enabled vacant land, increasing up to 1.45 million sqm GFA in the long term. For all forms of Retail development, there is up to 183,200sqm GFA of floorspace capacity in the short and medium term, increasing up to nearly 778,100sqm GFA in the long term. For all forms of Industrial development, there is up to 135,000sqm GFA of floorspace capacity in the short and medium term,

increasing up to 706,100sqm GFA in the long term. Finally, there is up to 142,100sqm GFA for Tourist Accommodation development in the short, medium and long term.

13.4 Results – Alternative Capacity Scenario (Preferred)

The approach adopted in the previous sections to demonstrate vacant land (and GFA) capacity for future business development in Rotorua's urban environment reflects the flexibility of some district plan zones to enable a range of potential land uses. Hence the overlap of capacity. The approach does not assume a development outcome on any particular vacant parcel as this is unknown (except if it is under construction). However, it is possible to develop a potential "scenario" of development take-up on vacant land that reflects recent trends and potential market pressures, including maximising investment returns in particular parts of the district.

Maintaining the same general approach and assumptions from the HBA 2021 (with some minor tweaks and additions) a single, alternative scenario of vacant development capacity (land/GFA) has been developed that removes the overlap of capacity in those zones where flexibility is enabled between Retail, Commercial, Tourist Accommodation and/or Industrial activity. The scenario is indicative only, but sense checked based on recent development trends. The scenario is based on a series of allocation assumptions, which apply to vacant parcels in each zone and apply at the ground floor and upper floor levels, with land allocation reflecting the maximum coverage of each activity (on any floor) taking a bird's eye view of the hypothetical building (Table 13.9).

Table 13.9 – Alternative Capacity Scenario – Category Allocation Assumptions 2024 (Land and GFA)

Business Zone	Estimated Developable Land (ha)				Estimated Ground Floor GFA				Estimated Upper Floors GFA			
	Com-mercial	Retail	Industrial	Accom-modation	Com-mercial	Retail	Industrial	Accom-modation	Com-mercial	Retail	Industrial	Accom-modation
Business and Innovation 3 Zone	30%	10%	60%	0%	30%	10%	60%	0%	40%	0%	0%	0%
City Centre 1 Zone	70%	48%	0%	30%	48%	48%	0%	5%	70%	0%	0%	30%
City Centre 2 Zone	100%	80%	0%	0%	20%	80%	0%	0%	100%	0%	0%	0%
City Centre 3 Zone	80%	0%	0%	50%	80%	0%	0%	20%	50%	0%	0%	50%
Commercial 1 Zone	100%	50%	0%	0%	50%	50%	0%	0%	100%	0%	0%	0%
Commercial 2 Zone	100%	50%	0%	0%	50%	50%	0%	0%	100%	0%	0%	0%
Commercial 3 Zone	100%	70%	0%	0%	30%	70%	0%	0%	100%	0%	0%	0%
Commercial 4 Zone	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	100%
Commercial 5 Zone	100%	5%	0%	0%	95%	5%	0%	0%	100%	0%	0%	0%
Commercial 6 Zone	100%	100%	0%	0%	10%	90%	0%	0%	100%	0%	0%	0%
Industrial 1 Zone	10%	10%	80%	0%	10%	10%	80%	0%	20%	0%	0%	0%
Industrial 1E Zone	67%	33%	33%	0%	33%	33%	33%	0%	67%	0%	0%	0%
Industrial 2 Zone	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	0%	0%
Industrial Transitional Zone *	10%	10%	80%	0%	10%	10%	80%	0%	20%	0%	0%	0%
PC 2 Commercial Precinct	100%	70%	0%	0%	30%	70%	0%	0%	100%	0%	0%	0%

*Source: Savvy, ME Business Capacity Model 2024 - Alternative Capacit Scenario Assumptions. * Long Term Zone Only. Some changes have been made compared to the HBA 2021 to account for recent development trends and observations, as well as changes implemented by PC9. Where zones include allowance for industrial land use on the ground floor, the upper floor is limited to commercial and only to the spatial extent of the maximim of ground floor retail and commercial. This allows for industrial activities to have a higher study height, and matches the assumption of no industrial activity on a first floor (or above).*

By way of example, in the City Entranceway Mixed Use Zone, it was assumed that a third of sites/the site would be for Industrial development, a third for Retail development anticipated in that zone and a third for Commercial development anticipated in that zone. This is the ground floor allocation. Based on assumptions made elsewhere in the capacity model, only the Retail and Commercial development could have upper floor capacity, and this is limited to Commercial Use, hence two thirds of any upper floor building envelope is assigned to Commercial capacity (and this applies also to the land).

Other zones can be interpreted in a similar way. Only Commercial or Tourist Accommodation is assigned to upper floor floorspace capacity, and this has flow on consequences for the land allocation approach. The allocation has considered the nature of activity in each category that is anticipated by the District Plan and the forms of development that these activities tend to take.

As alluded to above, the Alternative Capacity Scenario eliminates the overlap in floorspace between capacities on the ground floor and upper floors (although they are treated separately), but because an aerial view is taken of the footprint of activities across multiple floors, there is still some overlap in the land allocation. This is necessary to acknowledge that land is available for mixed use buildings and that the mix of floorspace allocated to the ground and upper floors can differ. This differs from the Maximum Capacity Scenario where there is double or triple counting of total site land area even when mixed use buildings might eventuate.

Table 13.10 – Short & Medium Term Business Land Capacity by Category & Zone (ha) – Alternative Capacity Scenario

Business Zone	Zone Description	Vacant Developable Land by Land Use Category (Ha)			
		Commercial	Retail	Industrial	Accommo-dation
City Centre 1 Zone	Mid City	0.4	0.3	-	0.2
City Centre 2 Zone	Southern Edge	-	-	-	-
City Centre 3 Zone	Northern Edge	2.1	-	-	1.3
Commercial 1 Zone	Ngongotahā Centre	-	-	-	-
Commercial 2 Zone	Compact Commercial Centres	0.1	0.1	-	-
Commercial 3 Zone	Neighbourhood Centres	4.6	3.2	-	-
Commercial 4 Zone	City Entranceway Accommodation	-	-	-	7.2
Commercial 5 Zone	City Entranceway Tourism	-	-	-	-
Commercial 6 Zone	Trade Central	-	-	-	-
Industrial 1 Zone	Light Industrial	1.6	1.6	12.8	-
Industrial 1E Zone	City Entranceway Mixed Use	4.2	2.1	2.1	-
Industrial 2 Zone	Heavy Industrial	-	-	9.1	-
Industrial Transitional Zone **	Future Light Industrial	-	-	-	-
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	1.6	0.5	3.2	-
PC 2 Commercial Precinct	Pukehangi Plan Change	0.8	0.5	-	-
Total Urban Environment		15.4	8.3	27.1	8.6

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only.*

Alternative Capacity Scenario (Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)

Table 13.10 presents the results of the Alternative Capacity Scenario for vacant land area capacity in urban business zones in the short and medium term. Under these allocation assumptions, it is estimated that there is currently 15.4ha of vacant land capacity available for Commercial development (out of a maximum plan enabled capacity of 45.3ha), 8.3ha for Retail development (out of a maximum capacity of 45.3ha), 27.1ha for Industrial development (out of a maximum capacity of 36.8ha) and 8.6ha for Tourist Accommodation development (out of a maximum of 10.4ha). These significant reductions once double/triple counting is removed highlights the rationale of the Alternative Capacity Scenario and the risk of relying on a Maximum Capacity Scenario approach for understanding sufficiency of business zoning.

Table 13.11 presents the results of the Alternative Capacity Scenario for vacant land area capacity in urban business zones in the long term. Under these allocation assumptions, it is estimated that there could be 83.2ha of vacant land capacity available for Commercial development (a large increase due mainly to the estimated share of the identified future City Entranceway Tourism Zone taken up by Commercial activities), 22.1ha for Retail development, 134.0ha for Industrial development (a large increase attributable to the Industrial capacity apportioned to the future Light Industrial Zone areas identified in Eastgate north and south and Tamarahi), and 8.6ha for Tourist Accommodation development (no change from the short or medium term).

Table 13.11 – Long Term Business Land Capacity by Category & Zone (ha) – Alternative Capacity Scenario

Business Zone	Zone Description	Vacant Developable Land by Land Use Category (Ha)			
		Commercial	Retail	Industrial	Accommo-dation
City Centre 1 Zone	Mid City	0.4	0.3	-	0.2
City Centre 2 Zone	Southern Edge	-	-	-	-
City Centre 3 Zone	Northern Edge	2.1	-	-	1.3
Commercial 1 Zone	Ngongotahā Centre	-	-	-	-
Commercial 2 Zone	Compact Commercial Centres	0.1	0.1	-	-
Commercial 3 Zone	Neighbourhood Centres	1.0	0.7	-	-
Commercial 4 Zone	City Entranceway Accommodation	-	-	-	7.2
Commercial 5 Zone	City Entranceway Tourism	58.1	2.9	-	-
Commercial 6 Zone	Trade Central	-	-	-	-
Industrial 1 Zone	Light Industrial	14.8	14.8	118.5	-
Industrial 1E Zone	City Entranceway Mixed Use	4.2	2.1	2.1	-
Industrial 2 Zone	Heavy Industrial	-	-	9.1	-
Industrial Transitional Zone **	Future Light Industrial	0.1	0.1	1.1	-
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	1.6	0.5	3.2	-
PC 2 Commercial Precinct	Pukehangi Plan Change	0.8	0.5	-	-
Total Urban Environment		83.2	22.1	134.0	8.6

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only. Alternative Capacity Scenario (Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)*

Appendix 10 contains the floorspace capacity results in the short/medium and long term under the Alternative Capacity Scenario. Again, the estimated capacity likely to be available for each land use is significantly less than what is plan enabled in the Maximum Capacity Scenario.

While only a scenario of possible uptake of vacant capacity in urban business zones, and subject to a number of assumptions, the Alternative Capacity Scenario is the preferred capacity scenario for the purpose of sufficiency analysis and to inform future planning and decision making in this HBA (as it was for the HBA 2021). This is because the Maximum Capacity Scenario – while adhering to NPS-UD guidance – does not work well when zones provide for a range of activities that span different categories of land use.

13.4.1 Results – Alternative Conservative Capacity Scenario

There is another relevant issue to assessing vacant capacity in urban business zones in Rotorua that needs to be acknowledged. That is the relatively significant presence of whenua Māori within those business zones. There are good examples of successful development on whenua Māori land in Rotorua. It shows that when iwi are well resourced and have (or can generate) capital, that development of leasehold land can be commercially feasible (under a cash return model). However, when there is a lack of capital, experience, and connections for less experienced Māori land blocks owners, there is evidence that this is holding back the development of more Whenua Māori. Having the equity to get started is just the first hurdle for some iwi.

Based on the location of Whenua Māori land parcels relative to short term business zoning in the urban environment, it is calculated that on average 67% or 10.3ha of the vacant developable land estimated to be available for future Commercial development in the Alternative Capacity Scenario is Māori leasehold land. Most of this leasehold land (7.5ha) occurs in the Eastern area (where is makes up 81% of vacant capacity likely to be available for Commercial development). In the long term, Māori leasehold land makes up an average of 33% of likely Commercial land capacity, including a still substantial 40% share within the Eastern Area and a 54% share in the Western area.

Of the vacant developable land assumed to be available for Retail development in urban business zones, an average of 73% (6.1ha) falls on Māori leasehold land in the short and medium term. In the Eastern area, the leasehold share is 87% and in the Western area it is 49% of the estimated Retail total (Alternative Capacity Scenario). Under long term zoning, the amount of vacant zoned Māori leasehold land likely to be available for Retail development increases to 7.8ha. This accounts for 35% (on average) of the total in that time period, but in the Eastern area, the leasehold share decreases to 37% of that vacant and likely Retail capacity.

Of the vacant developable land assumed to be available for Industrial development in urban business zones, an average of 43% (11.7ha) falls on Māori leasehold land in the short and medium term. In the Eastern area, the leasehold share is 56% and in the Western area it is 36% of the estimated Industrial total (Alternative Capacity Scenario). Under long term zoning, the amount of vacant zoned Māori leasehold land likely to be available for Industrial development increases to 38.5ha. This accounts for 29% (on average) of the total in that time period. In the Eastern area, the leasehold share decreases to 30% of that vacant and likely Industrial capacity.

Vacant developable land assumed to be available for Tourist Accommodation development in the Alternative Capacity Scenario is almost all on fee simple/freehold land, with just 0.7ha Māori leasehold land (8%). This remains the same in the long term.

As per the approach in the HBA 2021, the effect of removing all Māori leasehold business land (that is not already under construction) from available vacant capacity to form an 'Alternative Conservative Capacity

Scenario' has been tested. This is a worst case scenario and is not intended to imply that vacant whenua land parcels in urban business zones will never be developed. As above, there is evidence that Māori leasehold land can be successfully developed in Rotorua's business zones, particularly in the CBD and CBD fringe when those landowners have the capital and capability to do so. There is also evidence elsewhere in New Zealand where leasehold land has been taken up by commercial and industrial development. There are known barriers to developing Whenua Māori land, and stakeholder feedback indicates that the general commercial development sector (i.e., those that need to source land for development) are highly unlikely to choose to invest and develop on leasehold land (unless some form of partnership development model can be agreed that is commercially feasible for both parties).

It is considered prudent to include this Alternative Conservative Capacity Scenario in the HBA to highlight the degree to which Council (through the District Plan and FDS) is reliant on the development of Whenua Māori to cater for future business growth. It helps to identify the potential planning risks associated with relying on that Whenua Māori in the context of obligations under the NPS-UD to ensure at least sufficient plan enabled, infrastructure ready and suitable (commercially feasible) capacity to meet demand in the short, medium, and long term. It also helps to clarify the importance of providing assistance to enable the development of Whenua Māori and to remove barriers.

The scenario represents the lower bound of estimated vacant development capacity (land and GFA) in Rotorua's urban business zones, with the Alternative Capacity Scenario forming an estimated upper bound. The reality is that vacant capacity is likely to be somewhere within this range.

Figure 13.3 compares the quantum and share of vacant business capacity that is Whenua Māori (for the long term) with those in the HBA 2021 which was guided by the Spatial Plan for long term growth areas. It shows that under the FDS 2024, the same or greater amount of vacant Whenua Māori would be zoned for business development capacity, particularly Commercial development. However, overall Whenua Māori land makes up a smaller share of total likely Commercial, Retail and Industrial vacant land capacity in the long term (although a higher share of Tourist Accommodation capacity). It is considered that the FDS has simultaneously improved the opportunities for iwi to develop their land for business activities and reduced the planning risk, should that Whenua Māori face challenges to realise that development opportunity.

Figure 13.3 – Change in Long Term Vacant Business Land by Category That is Whenua Māori

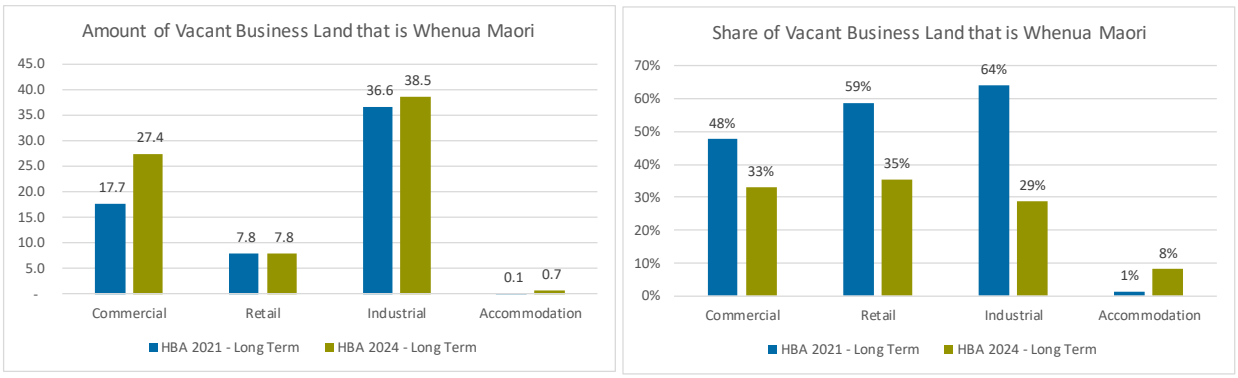


Table 13.12 – Short & Medium Term Business Land Capacity by Category & Zone (ha) – Alternative Conservative Capacity Scenario

Business Zone	Zone Description	Vacant Developable Land by Land Use Category (Ha)			
		Commercial	Retail	Industrial	Accommo-dation
City Centre 1 Zone	Mid City	0.4	0.3	-	0.2
City Centre 2 Zone	Southern Edge	-	-	-	-
City Centre 3 Zone	Northern Edge	1.3	-	-	0.8
Commercial 1 Zone	Ngongotahā Centre	-	-	-	-
Commercial 2 Zone	Compact Commercial Centres	-	-	-	-
Commercial 3 Zone	Neighbourhood Centres	-	-	-	-
Commercial 4 Zone	City Entranceway Accommodation	-	-	-	7.0
Commercial 5 Zone	City Entranceway Tourism	-	-	-	-
Commercial 6 Zone	Trade Central	-	-	-	-
Industrial 1 Zone	Light Industrial	0.7	0.7	5.9	-
Industrial 1E Zone	City Entranceway Mixed Use	0.3	0.1	0.1	-
Industrial 2 Zone	Heavy Industrial	-	-	6.2	-
Industrial Transitional Zone **	Future Light Industrial	-	-	-	-
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	1.6	0.5	3.2	-
PC 2 Commercial Precinct	Pukehangi Plan Change	0.8	0.5	-	-
Total Urban Environment		5.1	2.2	15.4	8.0

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only.*
Alternative Conservative Capacity Scenario (Excludes vacant Maori Land. Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)

Table 13.12 shows that under the Alternative Conservative Capacity Scenario (when vacant Whenua Māori land is excluded), there is 5.1ha of vacant developable land area for Commercial development in the short and medium term. In addition, there is 2.2ha of Retail land capacity, 15.4ha of Industrial land capacity (with 6.2ha of that in the Heavy Industrial Zone), and 8.0ha of Tourist Accommodation capacity. In the long term (Table 13.13), Commercial capacity (excluding Whenua Māori) increases to 55.8ha. Retail capacity increases to 14.3ha and Industrial capacity increases substantially to 95.5ha. Tourist Accommodation land capacity does not change in the long term. Appendix 10 contains the summary of vacant floorspace capacity for the Alternative Conservative Capacity Scenario in the short and long term.

Table 13.13 – Long Term Business Land Capacity by Category & Zone (ha) – Alternative Conservative Capacity Scenario

Business Zone	Zone Description	Vacant Developable Land by Land Use Category (Ha)			
		Commercial	Retail	Industrial	Accommo-dation
City Centre 1 Zone	Mid City	0.4	0.3	-	0.2
City Centre 2 Zone	Southern Edge	-	-	-	-
City Centre 3 Zone	Northern Edge	1.3	-	-	0.8
Commercial 1 Zone	Ngongotahā Centre	-	-	-	-
Commercial 2 Zone	Compact Commercial Centres	-	-	-	-
Commercial 3 Zone	Neighbourhood Centres	-	-	-	-
Commercial 4 Zone	City Entranceway Accommodation	-	-	-	7.0
Commercial 5 Zone	City Entranceway Tourism	40.7	2.0	-	-
Commercial 6 Zone	Trade Central	-	-	-	-
Industrial 1 Zone	Light Industrial	10.6	10.6	84.9	-
Industrial 1E Zone	City Entranceway Mixed Use	0.3	0.1	0.1	-
Industrial 2 Zone	Heavy Industrial	-	-	6.2	-
Industrial Transitional Zone **	Future Light Industrial	0.1	0.1	1.1	-
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	1.6	0.5	3.2	-
PC 2 Commercial Precinct	Pukehangi Plan Change	0.8	0.5	-	-
Total Urban Environment		55.8	14.3	95.5	8.0

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only. Alternative Conservative Capacity Scenario (Excludes vacant Maori Land. Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)*

14 Suitability of Business Capacity

This section examines the suitability of vacant land capacity in Rotorua's urban business zones from a development or developer perspective. Vacant development capacity may not translate to actual business properties available to the market unless it is suitable to develop. The NPS-UD provides flexibility on how 'suitability' is determined, but at a minimum, must include suitability in terms of location and site size. This HBA adopts a Multi Criteria Analysis ("MCA") approach in keeping with the HBA 2021.

14.1 Approach - MCA

An MCA approach has been used because it allows Council and other stakeholders to identify the key metrics that are important in the selection and development process for business land. MCA provides a way for councils to frame the development opportunities within their district by scoring them against a set of agreed criteria. Each criterion plays a large or small role in the development and locational decision, so is given a large or small share of the total decision making score.

An MCA framework has been set up for Commercial, Retail, Industrial and Tourist Accommodation development potential, consistent with the demand and capacity analysis. Business zones are assigned to each MCA framework based on the nexus between activities enabled by the District Plan and the land/building typologies used throughout this business assessment (subsequently grouped to land use categories). Given the flexibility of many business zones to provide for different types of activities (discussed in Section 13 with regards to the Maximum Capacity Scenario), most zone locations are in the Commercial and Retail MCA, with somewhat less in the Industrial MCA. Very few zones are assessed in the Tourist Accommodation MCA.

The MCA criteria and weighting used in the HBA 2021 has been relied on for this HBA update as they are still considered fit for purpose. The criteria and weighting were discussed in detail with two prominent non-residential developers in Rotorua for the HBA 2021. This engagement helped to refine what criteria (from a long list) were relevant and what were not, and also to adjust the weighting to reflect the key investment considerations applicable in Rotorua.[135] Table 14.1 summarises the final criteria and weighting assigned to each MCA framework. There is a mixture of unique and shared criterion. 'Access to major transport routes' and 'exposure/visibility', for example, are common to all development activities. 'Access to the port of Tauranga'[136] is a criterion important just for Industrial development/investment, and 'proximity to the lakeside/lake views' is a criterion important just to Tourist Accommodation development.

[135] Further discussion on that stakeholder engagement that influenced the criteria, weighting and subsequent scoring can be found in the HBA 2021 Main Report, from page 140 (see grey text boxes).

[136] In the HBA 2021 this was 'distance to Port of Tauranga' but has been changed to reflect industry preference for the longer but more direct route on State Highway 30.

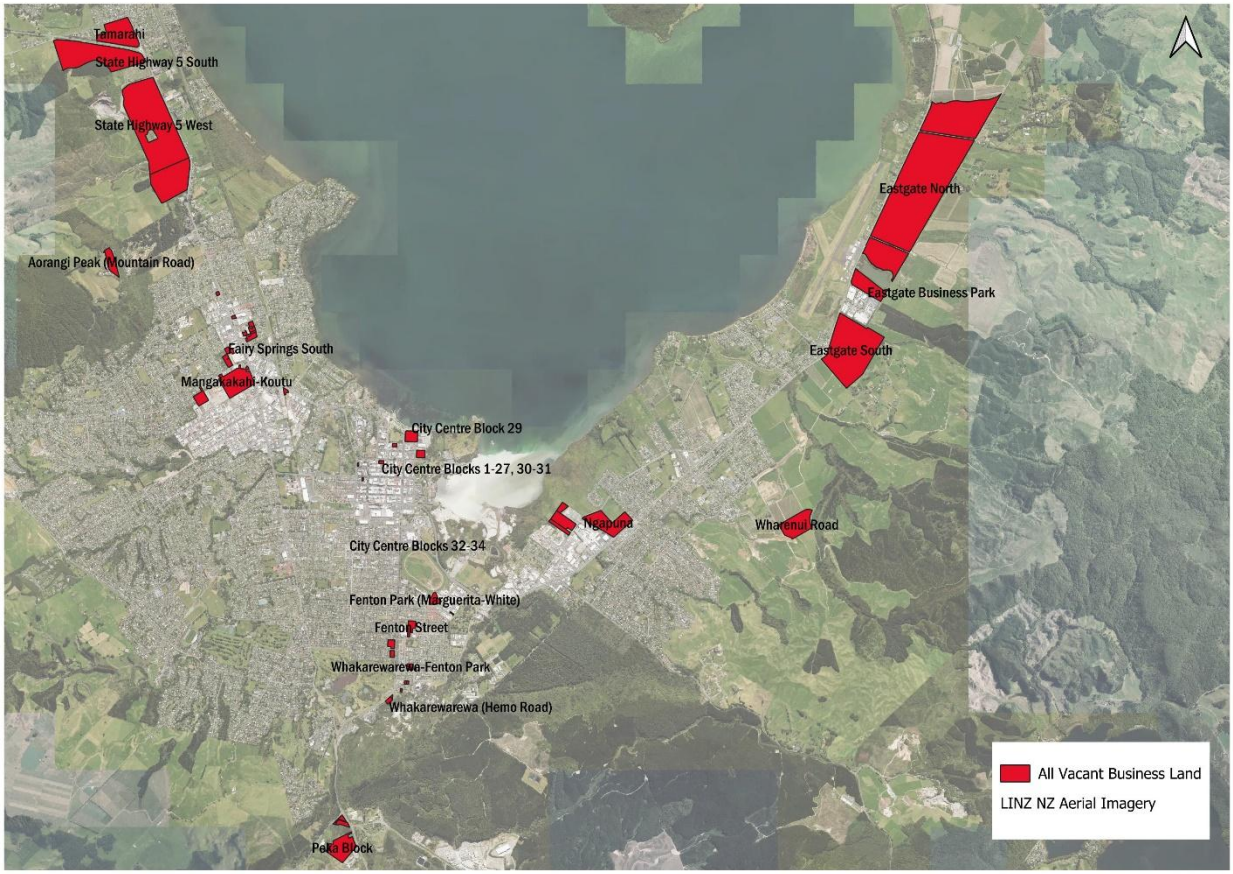
Table 14.1 – Matrix of Rotorua MCA Criteria and Weighting 2024

Criteria (Site Attributes for Investment / Development Decision Making)	Commercial	Retail	Industrial	Accom-modation
Ability to buffer adverse effects from residential and sensitive activities, distance from sensitive land uses			15%	
Ability to develop a range of space types including multi-storey buildings	8%			7%
Ability to utilise geothermal energy/ resource	4%			3%
Access to major Road / transport routes; good transport access, especially road/motorway	12%	14%	15%	14%
Co-location or clustering with complementary business activities	8%	14%	11%	
Access to Port of Tauranga			4%	
Existing or proposed public transport	4%	5%		3%
Exposure / profile / visibility	8%	10%	7%	10%
Flat land, large land parcel, contiguous sites (functional location)			7%	
Low level of traffic congestion in vicinity	4%	5%	7%	
Natural Hazards (i.e. flood, geotechnical issues, stormwater management)	8%	10%	7%	7%
Ownership structure (tenure i.e. predominantly freehold land)	12%		11%	10%
Parking availability	12%	10%		
Potential for co-location or clustering with complementary businesses				7%
Proximity to CBD				14%
Proximity to labour			4%	
Proximity to Lakeside amentiy, including water views				10%
Proximity to market - dense employment in walkable catchment		5%		
Proximity to market - dense resident or tourist population in walkable catchment	8%			
Proximity to market - dense resident population in walkable catchment		10%		
Proximity to market - tourist accommodation and attractions		5%		
Proximity to Rotorua Airport - transport to and from hotels				3%
Proximity to tourist activities (including bike parks)				3%
Service infrastructure in place	12%	14%	11%	7%
Total Consideration/Decision Making	100%	100%	100%	100%

Source: M.E: Rotorua HBA 2024 MCA

Figure 14.1 shows the locations (within which one or more business zones fall) that have been evaluated in the MCA for the HBA 2024, although for readability, only the locations where vacant land exists in the short/medium term and long term has been labelled. These locations have been retained from the HBA 2021 for consistency (except where the FDS business growth areas introduced new areas on the urban fringe).[137] A detailed zone and location level approach is adopted as this improves the reliability of the MCA and makes the results more tangible for Council. While this creates a much larger number of locations that need to be scored, this approach avoids the limitations associated with scoring broad areas.[138] The locations for the business enabled zones in the urban environment were determined by Council, to be meaningful in the local market context. Very large business zones have been divided into smaller locations to reflect locational differences.

Figure 14.1 – Locations Used to Evaluate Business Zones in Urban Rotorua – MCA 2024 (Vacant Land Locations Shown)



Each business zone location has been scored collaboratively with Council against the criteria and the ratings added up to provide an overall score. That scoring focusses on the relative differences between locations

[137] The Light Industrial Zone and City Entranceway Mixed Use Zone at the Airport location and the Light Industrial Zone at the Wastewater Treatment Plant / Ngāpuna location have been excluded from the MCA this time as those areas have been classified as excluded areas by Council for this HBA 2024 (I.e., not to be assessed as providing development capacity).

[138] The broad area approach is often more difficult to score because some areas may not include zones that enable some categories of land use (and so requires a 'theoretical' scoring approach) or are too large in extent to arrive at a score that is representative of the development opportunities within that area (i.e., relies of high level averages).

for a given development category (anticipated activities). The scoring is based on the current situation – in future there may be changes that could see the same location get a higher or lower score (i.e., if infrastructure is improved or if congestion gets worse). Changes to scoring since the HBA 2021 are discussed below.

Comparisons can then be made between where the plan enabled capacity resides (Section 13) and the MCA score (ranking) for those areas. If capacity is provided in the zone locations that score/rank highly in the MCA, Council can be more confident that development is likely to proceed so long as there is demand. Conversely, if capacity is provided in zone locations that score poorly against the decision making criteria, it is likely to be a low priority for development relative to better options elsewhere in the district (or outside of the district), and in some cases may not be taken up if the constraints to the location are significant.

A limitation of the MCA is that within each land use category there are a range of different forms of development – with each likely to have slightly different site requirements. For example, in the Retail category, there are different site requirements for small format retail versus large format retail. Similarly, within Commercial land use, there is everything from offices to tourist attractions to fire stations to contend with, just as in Industrial, there is both light and heavy industries that may require different types of development sites. It is difficult to cater for all possible development outcomes, so each framework necessarily assesses location suitability at a general level. To aid in this though, the scoring took into consideration the sort of commercial, retail etc activities that were anticipated in that zone, so scored them relative to their intended role.[139]

14.2 Infrastructure

'Service Infrastructure in place' (freshwater, wastewater, roading, power, high speed internet) is a criterion included in the MCA (with it being a particularly important consideration for Commercial and Industrial development decision making). This is a high level approach to capturing infrastructure constraints within the MCA, but this section provides further discussion on infrastructure readiness.

Generally roading infrastructure was not considered a constraint for business development in Rotorua (and for this reason has not been included in the assessment of Infrastructure Ready housing capacity in Part 2 of this report). There are some roading infrastructure projects underway at present to help improve service levels and accommodate growth, mainly in the Eastern Reporting Area to support the housing growth occurring up Wharenui Road[140], but the only constraint associated with these capital projects is the short term traffic congestion they are causing. While this can be captured in a criterion specifically on localised congestion in the MCA, it is not impacting on any existing business zones with vacant capacity at this time.

Council is currently underway designing the intersection upgrade for the Eastgate/Airport proposed business park. Depending on the timing of construction, this may be relevant for the MCA scoring in the next HBA update. Funded projects prioritised in the Regional Land Transport Strategy include the Malfroy Road/Old Taupo Road intersection upgrade ($5m) and the State Highway 30A Urban Revitalisation project

[139] Most criteria are however about the location and not the activity itself.

[140] These projects include service level upgrades on Porikapa Road (including development of a shared path), intersection upgrade of Wharenui Road and Te Ngae Road (by NZTA), and sealing of Wharenui Road to accommodate growth at Wharenui Rise and Manawa Gardens.

(urbanisation of State Highway 30A including Amohau Street and consequential local road and State Highway corridor changes ($36.6m)). Construction of these has yet to be initiated. Additional upgrades of the eastern corridor out to the Rotorua Airport are a 10 year priority. In the longer term, the Land Transport Strategy identifies a suite of planned transport upgrades and service level improvements (which will require funding).

Similarly, there was no perceived constraint with accessing high-speed fibre internet in Rotorua's urban business zones.

Feedback from stakeholders[141] highlighted that there was only one power network company operating in urban Rotorua (Unison). Their experience is that Unison has an aggressive approach, requiring new developments to fund upgrades to the network which adds additional costs that may not have been required when doing a similar development in other parts of the country. The feedback was that the network was not well maintained, with little reinvestment (and with the high sulphur content causing corrosion, particularly in the main geothermal field). This was stated as having flow-on effects for investors wanting surety on power supply and associated infrastructure in Rotorua. To account for this in the MCA, slightly lower scores were given to zone-locations within the main geothermal field where additional costs were considered more likely.[142]

The Council's LTP and Infrastructure Strategy provides sufficient water supply (reservoir and/or consented water take limits) and wastewater capacity (WWTP processing capacity) to cover anticipated long term employment growth in addition to anticipated housing growth in each reporting area. There is expected surplus capacity in the current infrastructure to cater for growth in the short term, and part of the medium term. Reservoir and WWTP investment will see additional capacity scheduled to come on-line in 2027 to cater for medium and long term growth. Timing of network extensions into greenfield growth areas may however need to wait for those scheduled capital works projects in some locations (especially in the Eastern area) and are aligned with the spatial extent and timing of FDS growth cells. The MCA gives a lower score to those locations that are not serviced by wastewater and water supply infrastructure today (but will be in the future) relative to those locations already serviced.

The approach to stormwater infrastructure in this HBA is to treat it as a constraint to development that drives up cost rather than a constraint that prevents development all together. This is consistent with the approach to commercially feasible housing capacity discussed in Section 6 of this Report and the MCA includes stormwater as part of the 'natural hazards/geotechnical constraints' criterion rather than the 'infrastructure' criterion.

14.3 Changes Since HBA 2021 Impacting Suitability

As signalled in the HBA 2021, it is important to revisit the scoring of zone-locations in the MCA in case there have been changes that positively or negatively impact on suitability for development/take-up. Not all

[141] HBA 2021 stakeholder engagement.

[142] Feedback gathered by MRCagney et al recently also identified corrosion from geothermal features contributing to building maintenance costs (citing examples on the fringe of the Ngāpuna industrial area).

criteria are likely to be variable over time, but others are. The following is an overview of some changes that have been made to the scoring of Operative business zone-locations for this HBA update:

- Scores relating to 'local traffic congestion' in Ngongotahā locations have been increased. At the time of the HBA 2021, these locations were impacted by road works projects which have been completed. As above, roading projects currently underway at the time of this HBA are not considered to be materially impacting business zones to warrant a lower score in the MCA.
- Scores relating to 'local traffic congestion' in Fairy Springs/Mangakakahi locations have been decreased as road access and road network issues was identified as a potential drawback of this areas in FDS engagement.
- The score relating to 'proximity to Tourist Accommodation or attractions' for the existing Fairy Springs Commercial 5 Zone (City Entranceway Tourism) has been upgraded to account for the proposed (FDS) addition of further Commercial 5 Zone adjoining this zone and extending towards Ngongotahā which will create a corridor of tourism activity. This scoring change applies to the Retail MCA framework.
- Some scores in the Commercial MCA for 'ability to develop a range of space types including multi-storey buildings' have been increased where PC9 increased building heights or added residential development potential.
- Some scores in the Tourist Accommodation MCA for 'ability to develop a range of space types including multi-storey buildings' have been increased where PC9 increased building heights in the Commercial 4 Zone, particularly along Fenton Street and Lake Road.
- Some scores for 'existing or proposed public transport' have been improved based on planned public transport improvements indicated in the FDS 2024 (and Regional Land Transport Strategy priorities).
- Scores for 'access to Port of Tauranga' in the Industrial MCA for location in Ngongotahā have been decreased slightly (from a 5 to a 4) to reflect feedback during the FDS engagement that State Highway 30/33 (as opposed to State Highway 36) is the prime route to the Port of Tauranga. This adjustment favours Industrial areas in the Eastern reporting area.

14.3.1 Scoring the FDS Growth Areas

The Tamarahi growth area and Eastgate South were carried over from the Spatial Plan into the FDS 2024 (with some changes in the extent of Eastgate South and also the assigned zoning of both growth areas)[143], and so had been scored as part of the HBA 2021 MCA. That scoring was revisited, including to account for any relevant implications arising from the land use proposed on adjoining land. This included the land on the opposite side of the State Highway 5 boundary of Tamarahi which the FDS identified for City Entranceway Tourism, and also residential growth areas planned for land adjoining Eastgate South. For

[143] In the HBA 2021 Eastgate South was assigned the same zoning as the Eastgate Business Park Zone but is now Light Industrial Zone. Tamarahi was City Entranceway Mixed Use in the Spatial Plan, but is Light Industrial Zone in the FDS 2024.

Eastgate North, and State Highway 5 South and West also identified in the FDS 2024, these areas did not form part of the MCA in the HBA 2021 and have now been added.[144]

MRCagney et al. provide some relevant descriptions of the three FDS areas that would enable industrial activity in their 2024 report 'Rotorua Industrial Sector – Economic and Land Assessment'. Those descriptions have helped inform the scoring of those three FDS areas to ensure that the MCA 2024 is consistent. The following is a brief summary of their assessment of the attributes/suitability of the Tamarahi FDS area (refer Section 12.3.2 of this HBA report for a summary of their commentary on the Eastgate location).

- "This land offers several advantages to industrial users and no issues regarding this site were raised during FDS engagement. The site falls within the statutory acknowledgement for Ngongotahā stream and has a sensitive receiving environment. Development potentially provides an opportunity to help address stormwater and water quality issues. Ngāti Whakaue Tribal Lands Inc. expressed aspirations for a mixed-use development on this site (i.e., the provision for light industry and/or supermarket).[145] The land is largely flat and its unfragmented landholdings makes it suitable for large scale development. The site provides excellent access to both State Highway 5 and State Highway 36 and is proximate to a local residential population (employment area). Some liquification/soft ground risks are identified on the site but could be managed through design/impact feasibility. There is low risk of the site flooding, but downstream impacts would need to be managed if the site is developed. In terms of water supply, although there is some spare capacity in the source, an upgrade to reticulation might be required to cater for further growth in Ngongotahā. This site falls outside the current wastewater service area but there may be spare capacity in the existing network that could be used. The assumption is that stormwater management will be through on-site detention. There are no known issues with transmission infrastructure in this location" (page 43).

14.4 MCA Results

The MCA analysis showed that there are no zone locations that 'tick all the boxes' (i.e., achieve the perfect score) in terms of what an investor or developer may be looking for in Rotorua, although this is rare in any market. The highest ranked locations when scored against the criteria achieve between 85-87% of the maximum possible score.

In terms of the range of overall suitability scores, only 35 points separated the top Retail development location from the bottom ranked location.[146] The range across locations with some form of Industrial potential was slightly broader (37 points).[147] The scores were more diverse for Commercial development

[144] Market Economics did apply the MCA evaluation to all of the long-list strategic growth areas identified in early consultation stages of the FDS. Where those locations were adopted in the final FDS 2024 report, the scores were used as a starting point, but again were re-evaluated for this HBA 2024 update (particularly where indicative zoning assigned to the land has since changed).

[145] The FDS has identified Tamarahi as Light Industrial Zone to avoid any significant distributional effect of large scale retail development on the Ngongotahā suburban centre.

[146] The least suitable site scored 54 out of 105 possible points.

[147] The least suitable site scored 79 out of 135 possible points.

locations (53 points between top and bottom ranked locations).[148] However, the greatest range was across the locations that enable Tourist Accommodation. While most locations scored relatively well, one location (City Entranceway Tourist Accommodation – Aorangi Peak (Mountain Road) scored 74 points less than the most suitable site.[149] Located on the urban-rural fringe well away from the CBD, this location is considered less suitable for motel and hotel development, although is likely to be suitable for lodge type development opportunities. Its score may improve in the future given the extensive areas of City Entranceway Tourism Zone identified by the FDS in the locality.

It is noted that while some zone locations score relatively low within a particular land use category, this can signal that while that particular land use is enabled in the Plan, it is more likely to be taken up by other 'more suitable' land uses. This aligns with the Alternative Capacity Scenario approach discussed in Section 13.4. An example of this is the Heavy Industrial Zone in Waipa. This zone location is assessed for suitability for Retail (although limited to takeaways) where it ranks 64th= out of 65 zone locations that provide for Retail development. On the contrary, it ranks 10th for Industrial development suitability (out of 27 zone locations). It is only when zone locations demonstrate poor suitability across all anticipated land use categories that the zoning is likely to experience limited or no development uptake or result in inefficient land use outcomes. Scarcity, however, can result in less suitable locations being developed when there is no alternative, and businesses want to locate in Rotorua.

The following graphs compare the desirability/suitability of zone locations across the urban environment (based on their total MCA score, in descending order) against the maximum potential vacant land capacity in those same areas (Maximum Capacity Scenario). While all locations have been scored (irrespective of whether they have vacant capacity or not, the graphs are limited to the locations containing vacant capacity as of June 2024).

Figure 14.2 shows that there is relatively little vacant Retail capacity in the business zone locations that score relatively high (most suitable). This includes the mid-city and CBD fringe commercial areas, and the City Entranceway Mixed Use zone in Fairy Springs South. While Retail activity enabled in the Industrial 1 (Light Industrial) Zone is limited, Fairy Springs South and Mangakakahi-Koutu also rank relatively well for that Retail activity (and better than the Light Industrial Zone in Ngāpuna). Of the FDS identified areas that enable some forms of retail activity in the long term, Tamarahi scores relatively well for Retail development attributes but is likely to be limited to retail that supports industrial development in the Light Industrial Zone. Eastgate South scores higher for Retail development potential than Eastgate North, mainly due to its proximity to existing and planned future urban residential areas. Eastgate South would have ranked slightly higher if it was not Whenua Māori (leasehold land).

Of the two Commercial 5 (City Entranceway Tourism) zones identified in the FDS, the larger State Highway 5 South block is considered slightly more suitable for Retail development anticipated in that zone than the State Highway 5 West block. This is due to its proximity to Ngongotahā residential areas/workforce and being adjacent to the Tamarahi Light Industrial Zone area. While providing a large amount of theoretical Retail capacity, Eastgate North (along with the Heavy Industrial Peka Block) are the least suitable locations for attracting Retail development at present. Any Retail in these locations will be largely limited to serving the local workforce.

[148] The least suitable site scored 56 out of 125 possible points.

[149] The least suitable site scored 51 out of 145 possible points.

Figure 14.2 - Suitability of Rotorua Retail Enabled Zone Locations vs. Maximum Retail Capacity

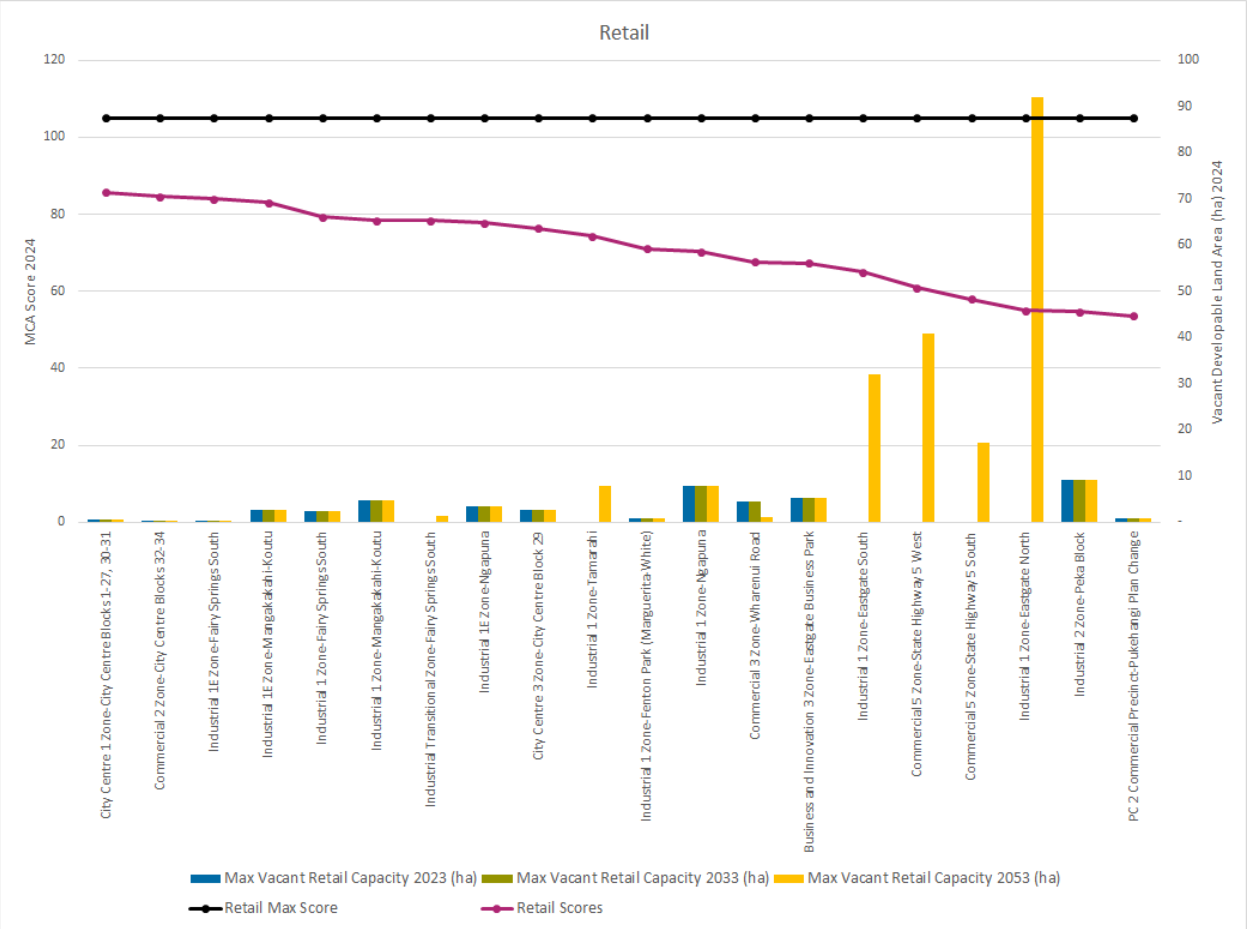


Figure 14.3 shows that the top three locations (containing vacant capacity) for Retail are the same for Commercial development, with the mid-city area scoring the highest in terms of suitability. The Northern Edge (City Centre 3 Zone) ranks slightly higher for Commercial development potential than it does for Retail development potential. All of the existing City Entranceway Mixed Use areas score relatively well for Commercial development. While the two FDS City Entranceway Tourism blocks on State Highway 5 ranked similarly for Retail development potential, the South block ranks relatively higher than the West block for Commercial potential (although the total weighted scores are still close).

While the future Eastgate South Light Industrial Zone outperformed the future Eastgate North Light Industrial zone location for Retail development potential (as enabled by the zone), the opposite is true for Commercial development. Proximity to urban residential land (current and future) and infrastructure readiness are key attributes of the Eastgate South area but freehold tenure and absence of natural hazards let it down relative to Eastgate North – both of which have moderate weighting in developer decision making. The Tamarahi Light Industrial Zone scores higher than either Eastgate FDS Light Industrial Zone from a commercial opportunity perspective – based on its proximity to nearby tourism growth areas and the residential community of Ngongotahā.

Figure 14.3 - Suitability of Rotorua Commercial Enabled Zone Locations vs. Maximum Commercial Capacity

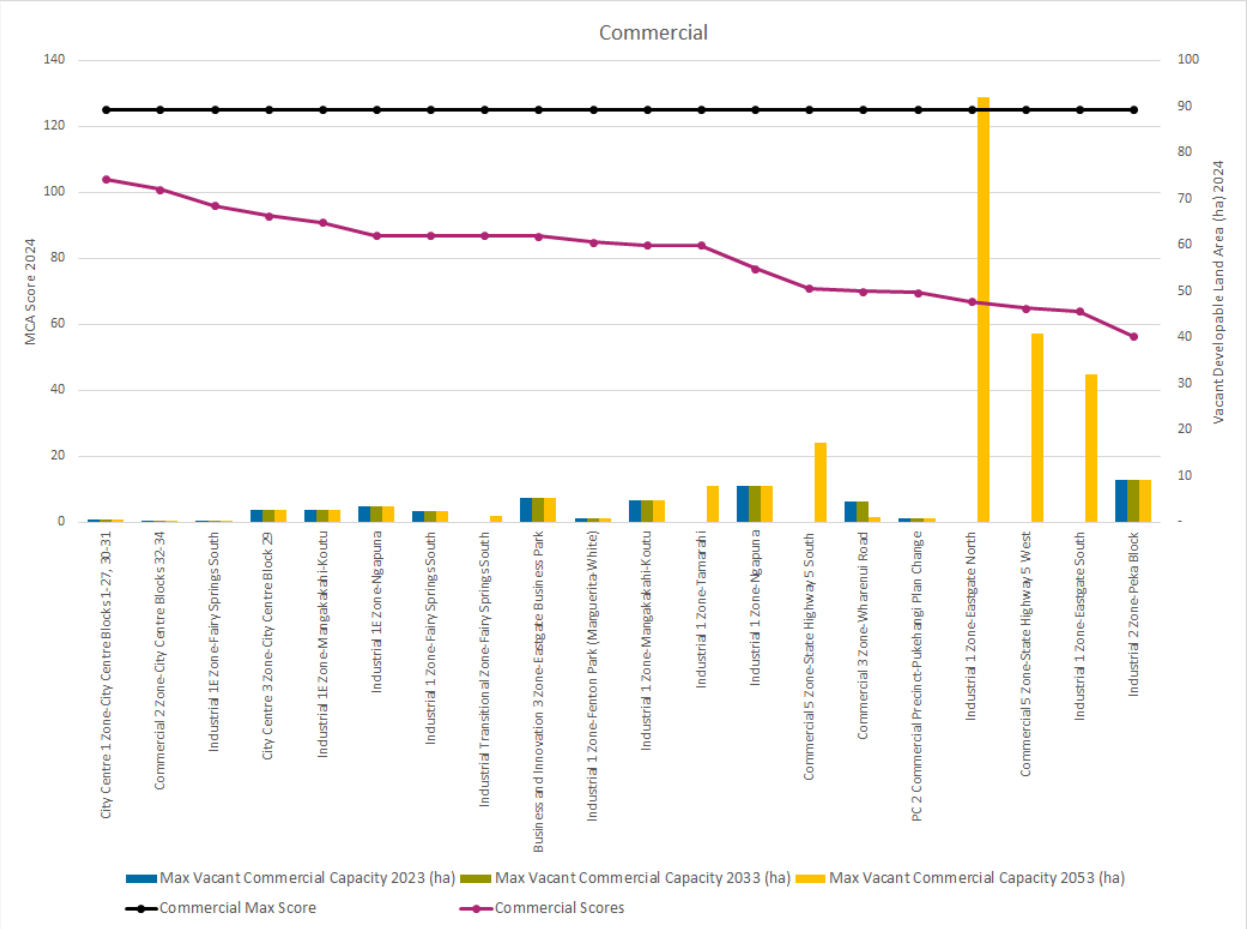


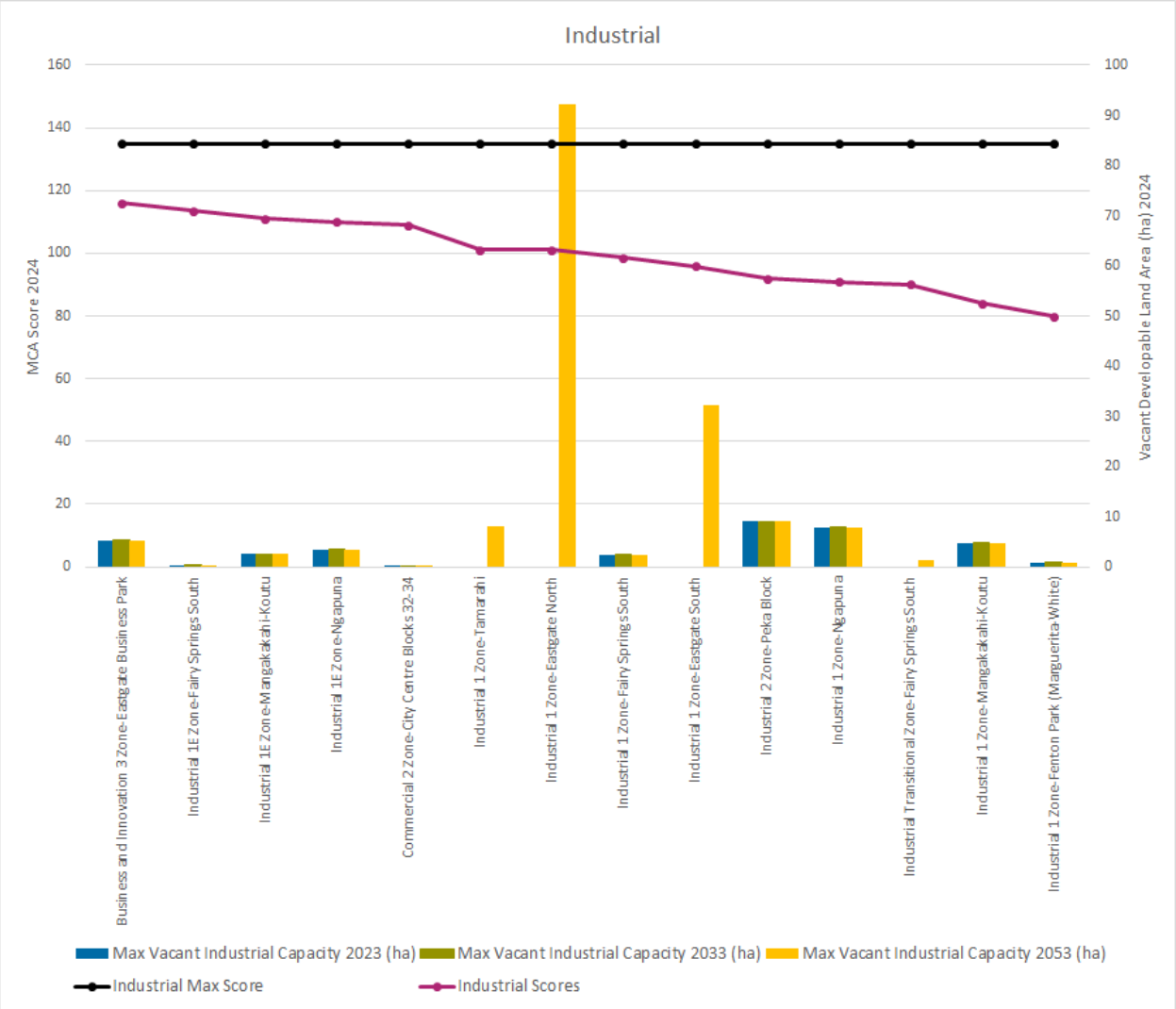
Figure 14.4 shows that the Eastgate Business Park ranks highest for Industrial development potential relative to all locations that have some vacant capacity now or in the future. This suggests that the vacant land in that business zone is likely to be developed for Industrial purposes. While adjoining the Business Park north and south, the two FDS Eastgate growth areas rank somewhat lower. This is a combination of leasehold tenure (for Eastgate South), more remote for the workforce (for Eastgate North), and a slightly less enabling zone compared to the Business Innovation 3 Zone, among other reasons.

Of interest, all of the City Entranceway Mixed Use zones rank higher for Industrial development than Light Industrial Zone locations. Some key reasons for this are that the Mixed Use Zone is on the main transport routes so scores higher for exposure/profile and the Light Industrial Zones often sit to the rear of the Mixed Use zone and adjoin residential zones (which creates greater opportunities for reverse sensitivity effects). Fairy Springs South and Mangakakahi-Koutu City Entranceway Mixed Use zones rank 2nd and 3rd, and this is consistent with feedback obtained in the MRCagney et al study which identified this area as the prime industrial location.

FDS growth areas Tamarahi and Eastgate North are ranked evenly for Industrial development potential (as enabled by their proposed Light Industrial zoning provisions) but for slightly different reasons. For example, Eastgate North scores higher for accessibility to the Port of Tauranga (being on State Highway 30) and for avoidance of natural hazard risks, while Tamarahi scores higher infrastructure servicing and slightly better exposure/profile opportunities.

The Eastgate South FDS area ranks slightly lower than many of the other locations with vacant Industrial land due to being wholly Whenua Māori (leasehold land), subject to some natural hazard issues and adjoining future residential zones. However, it still ranks slightly higher than the Heavy Industrial Zone (Peka Block and the remaining vacant land in the Ngāpuna Light Industrial Zone- most of which is also Whenua Māori, but also in an area with more congestion and less exposure for some sites).[150]

Figure 14.4 - Suitability of Rotorua Industrial Enabled Zone Locations vs. Maximum Industrial Capacity



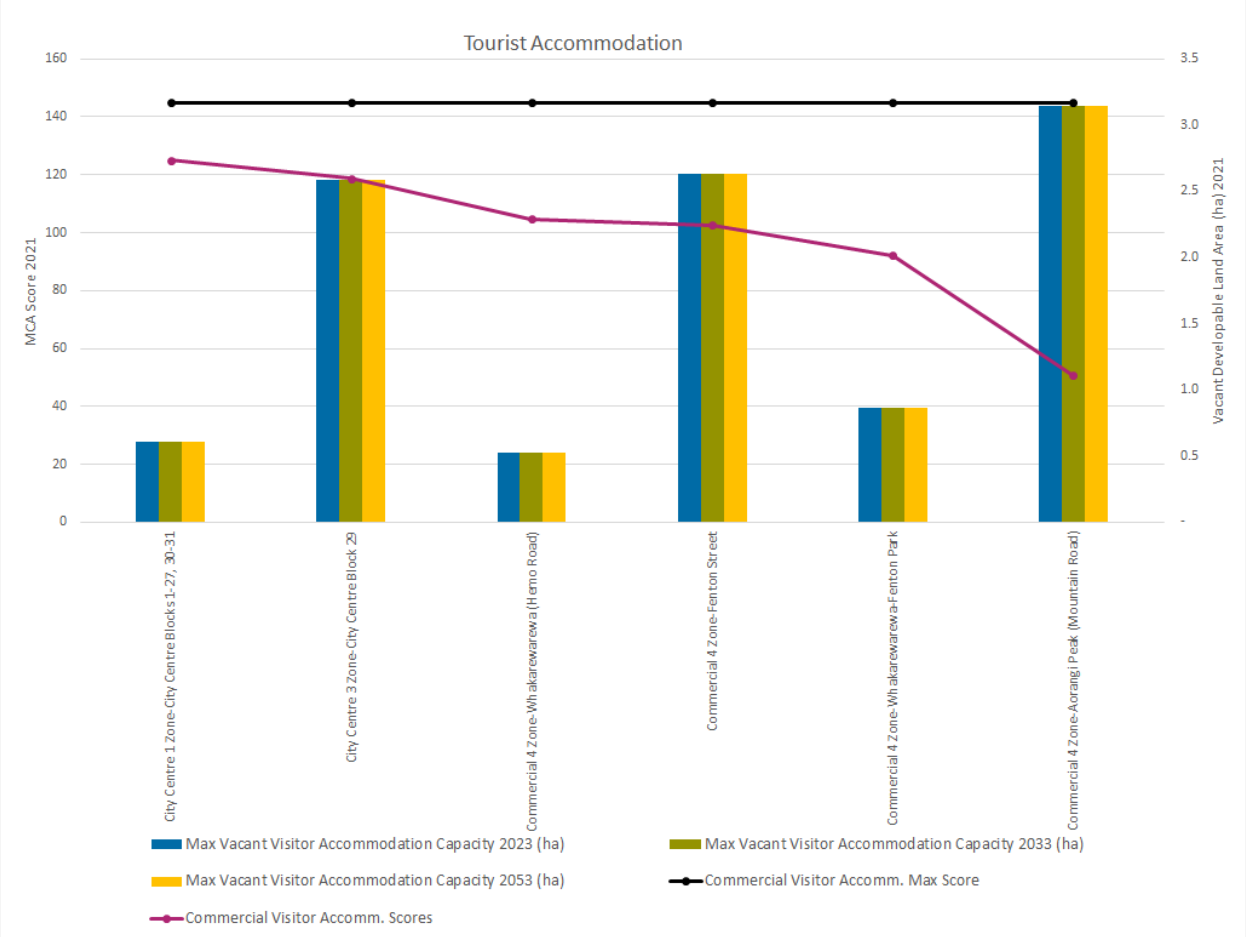
Last, Figure 14.5 shows the relative suitability (ranking) of business zones that enable Tourist Accommodation. As it does for Retail and Commercial development potential, the mid-city (City Centre 1 Zone) area scores highest for Tourist Accommodation potential, followed closely by the Northern Edge (City Centre 3 Zone). The latter has a large amount of vacant land (in a relative sense) that could potentially be used for hotel development (and potentially in conjunction with Retail and/or Commercial development on the ground floor). The two ends of Fenton Street (shown as the Fenton Street and Hemo Road locations)

[150] It is noted that while this vacant land has been scored for industrial capacity due to current operative zoning, local iwi have indicated that they do not want any further heavy industrial development to occur in the locality (which surrounds their cultural village) and also want existing heavy industrial activities to relocate.

achieve the same score for suitability for Tourist Accommodation – one close to the CBD and one close to tourist attractions. Both are locations where Tourist Accommodation is already located.

The location with the most vacant land enabling Tourist Accommodation is in the Mountain Road location. As discussed above, it is an isolated location at present and according to the MCA, may be the last to be taken-up for Tourist Accommodation when compared with other opportunities.

Figure 14.5 - Suitability of Rotorua Tourist Accommodation Enabled Zone Locations vs. Maximum Tourist Accommodation Capacity



14.4.1 Summary of Suitability

Overall, the significant majority of plan enabled capacity provided in Rotorua's urban business zones is considered suitable to develop. Some areas are more suitable than others for a particular land use, and some areas are more suitable for one land use than they are for another (which supports the rationale of the Alternative Capacity Scenario adopted for this HBA).

In terms of vacant developable land capacity to help cater for future employment demand growth (in addition to redevelopment and use of vacant premises), a portion does fall within zone locations determined to be relatively less suitable for Retail and Commercial development and this tends to include the vacant land that is Whenua Māori and in fringe locations. These areas may develop more slowly, (including for Industrial development where applicable) once market-ready for this reason.

It is therefore recommended that care is taken in assuming that the capacity provided in the Heavy Industrial Zone – Peka Block, Eastgate South Light Industrial Zone, and large vacant lots in the Ngāpuna Light Industrial Zone will be effective in catering for Industrial growth in urban Rotorua. The inclusion of these zones may overstate capacity and so a precautionary approach is recommended – this is considered further in the following Sufficiency section and is why the Alternative Conservative Capacity Scenario is modelled.

Based on the suitability assessment, priority should be given to zoning (and servicing) the Light Industrial Zone indicated in the FDS (Tamarahi). The FDS does already signal that it is likely to be zoned in the short-medium term which is supported. While the Eastgate North block ranks higher than the Eastgate South block for Industrial development, the FDS currently signals that the Eastgate South block will be prioritised for rezoning. From a compact urban form perspective, this approach is supported (and supported by the landowner (Ngāti Whakaue), but it should be carefully monitored so that the Eastgate North block can be rezoned if market growth is being constrained (due to the leasehold nature of the land).

The MCA shows that 'on paper' the CBD/mid-city area is prime for development (and redevelopment). There are however more factors that influence development and investment in this location than are able to be captured in the MCA. This includes (but is not limited to) the availability of land for sale, the size and position of the current vacant parcels, the ability to consolidate adjoining parcels to allow for development at scale, and the safety and street amenity of the mid-city area. The Northern Edge does not suffer from the same constraints as the mid-city area and is considered highly suitable for development (particularly Commercial and Tourist Accommodation) in the MCA. The continued development of this vacant land is highly likely, and this may increase the suitability of the mid-city area over time.

15 Sufficiency of Business Capacity

In this section the results of the demand and capacity assessments are brought together to provide a quantitative comparison to determine the sufficiency of capacity provided for in Rotorua's urban business zones in the short, medium, and long term. The suitability of capacity determined by the MCA as well as infrastructure capacity is also considered in the overall assessment. A comparison with sufficiency results contained in the HBA 2021 is provided and key drivers of change are discussed.

15.1 Results 2023-2053

This section compares the demand for urban business zone land by category against vacant developable land capacity (and associated building floorspace) according to the preferred **Alternative Capacity Scenario,** which removes overlap of capacity between the four categories of land use (based on assumptions set out in Figure 13.9). The sufficiency results under the Maximum Capacity Scenario are not preferred but are included in Appendix 11 for completeness, as are the sufficiency results under the Alternative Conservative Capacity Scenario which is an important sensitivity test for the Alternative Capacity Scenario.

Table 15.1 – Urban Business Land Sufficiency by Category (Ha) – Alternative Capacity Scenario

Category	Developable Land Demand and Capacity (ha)											
	Demand with Competitiveness Margin			Capacity (Alternative Capacity Scenario)			Sufficiency (n)			Sufficiency		
	2023-2026	2023-2033	2023-2053	2023-2026	2023-2033	2023-2053	2023-2026	2023-2033	2023-2053	2023-2026	2023-2033	2023-2053
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Retail	4.7	8.3	12.3	8.3	8.3	22.1	3.6	-0.01	9.7	Sufficient	Insufficient	Sufficient
Commercial	6.5	17.2	40.7	15.4	15.4	83.2	8.9	-1.9	42.5	Sufficient	Insufficient	Sufficient
Accommodation	5.4	7.2	9.3	8.6	8.6	8.6	3.3	1.4	-0.7	Sufficient	Sufficient	Insufficient
Industrial	15.6	27.5	40.5	27.1	27.1	134.0	11.5	-0.4	93.6	Sufficient	Insufficient	Sufficient
Total	32.2	60.3	102.8									

Source: M.E Rotorua Urban Business Land Demand Model (HBA 2024), M.E Business Capacity Model 2024.

Projected demand within business enabled zones in defined urban environment only (as defined by SA1 2018)

Alternative Capacity Scenario (Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)

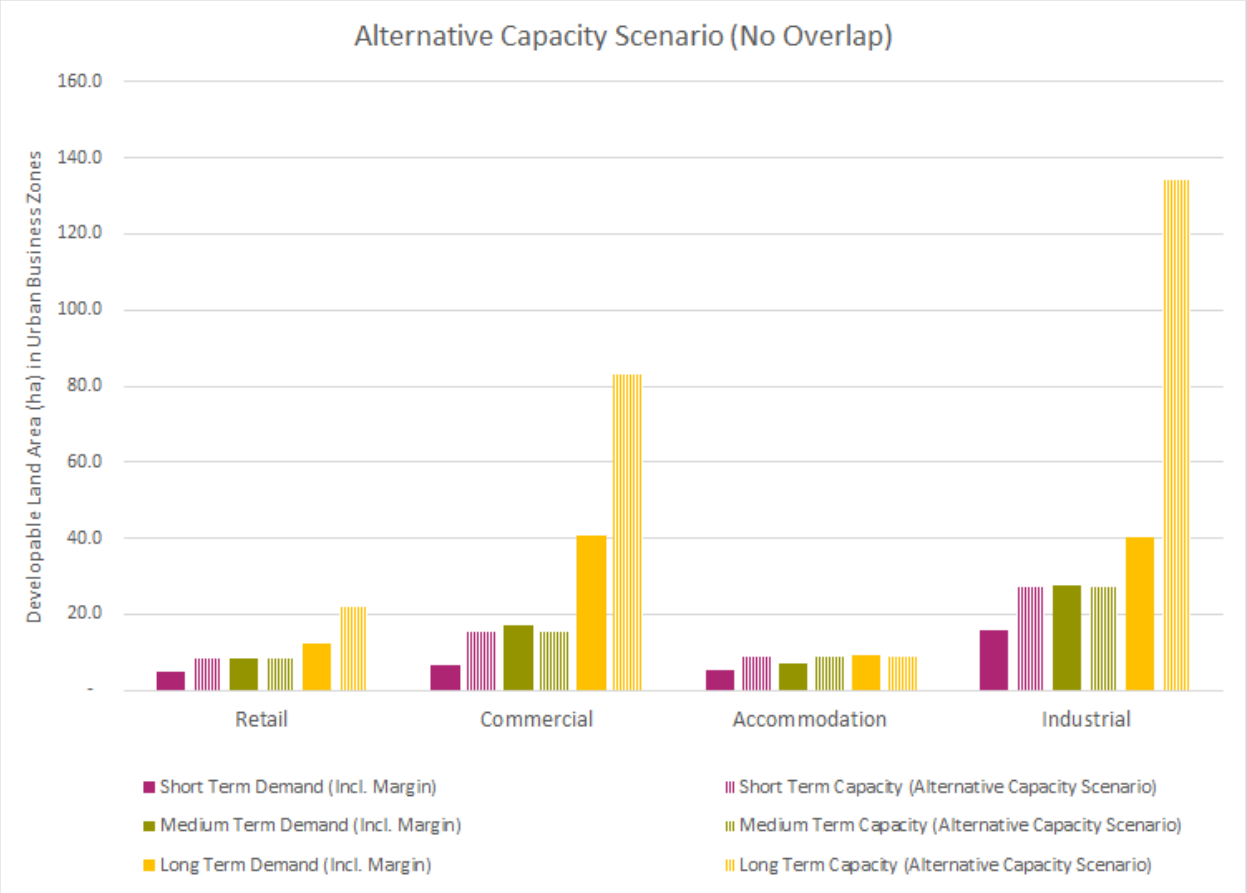
Table 15.1 and Figure 15.1 show that in the short term, there is at least sufficient vacant land capacity to cater for projected demand for urban business zones (inclusive of the competitiveness margin) out to 2026 across all land use categories. The same applies when considered in floorspace terms (Table 15.2).

Table 15.2 – Urban Business Floorspace Sufficiency by Category (sqm) – Alternative Capacity Scenario

Category	Floorspace Demand and Capacity (sqm GFA)											
	Demand with Competitiveness Margin			Capacity (Alternative Capacity Scenario)			Sufficiency (n)			Sufficiency		
	2020-2023	2020-2030	2020-2050	2020-2023	2024-2030	2031-2050	2020-2023	2020-2030	2020-2050	2020-2023	2024-2030	2031-2050
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Retail	25,900	45,500	67,300	39,200	39,200	85,700	13,300	- 6,300	18,400	Sufficient	Insufficient	Sufficient
Commercial	29,100	81,300	198,200	131,500	131,500	331,400	102,400	50,200	133,200	Sufficient	Sufficient	Sufficient
Accommodation	26,900	36,300	46,500	97,900	97,900	97,900	71,000	61,600	51,400	Sufficient	Sufficient	Sufficient
Industrial	70,700	127,000	190,600	91,600	91,600	548,500	20,900	- 35,400	357,900	Sufficient	Insufficient	Sufficient
Total	152,600	290,100	502,600									

Source: M.E Rotorua Urban Business Land Demand Model (HBA 2024), M.E Business Capacity Model 2024.
Projected demand within business enabled zones in defined urban environment only (as defined by SA1 2018)
Alternative Capacity Scenario (Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)

Figure 15.1 - Urban Business Land Sufficiency by Category (Ha) – Alternative Capacity Scenario



In the medium term (to 2033), there is estimated to be at least sufficient vacant land capacity (including potential floorspace capacity on that land) to cater for projected demand for urban business zones (inclusive of the competitiveness margin) for expected Tourist Accommodation growth. Prior to 2053, this changes to a minor shortfall of land capacity (of around 0.7ha), although the modelling indicates that from a floorspace perspective, there would be sufficient capacity in the long term to meet expected demand.

Recall that in the short term, there is strong growth in modelled demand for Tourist Accommodation driven by a continued recovery of employment post Covid-19. There are vacant/unutilised motels still in the market that can likely absorb that recovery while placing no additional demand on vacant land in the short term. As that short term demand is included in the total long term demand, it is considered that there is no real risk of insufficient Tourist Accommodation development capacity in the long term in Rotorua that would require a planning response.

Figure 15.2 – Summary of Sufficiency Results by Scenario – Tourist Accommodation Land Use Category

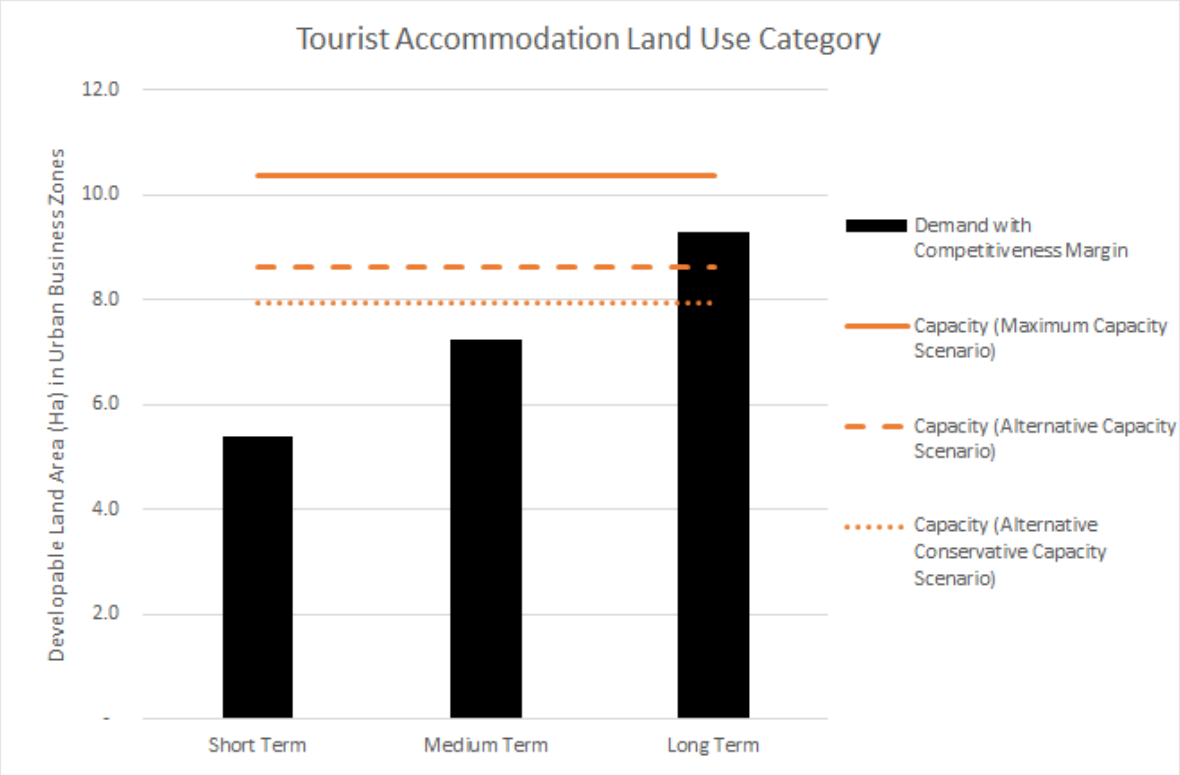


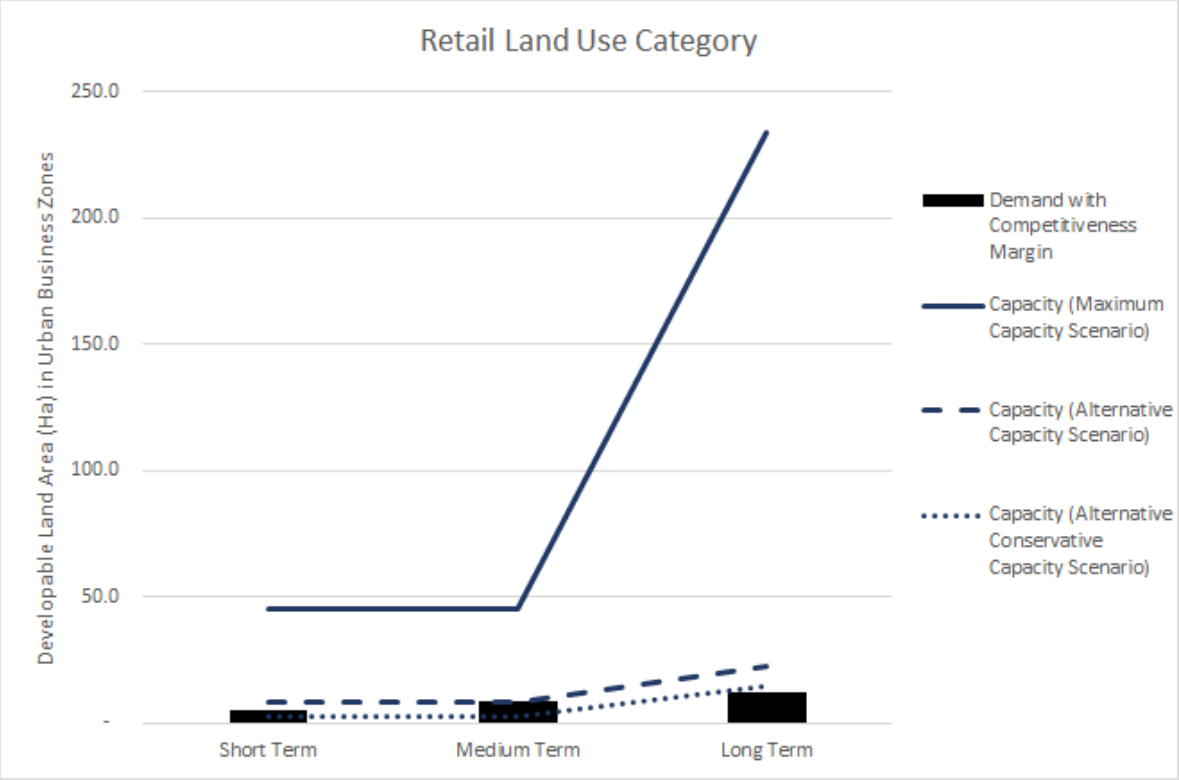
Figure 15.2 shows the sufficiency results under the Alternative Conservative Capacity Scenario, with Whenua Māori land enabling Tourist Accommodation excluded. Even under this worst cast outcome, there is expected to be sufficient land capacity in the short and medium term. The same caveat to the long term shortfall applies for this capacity scenario.

In the medium term (by 2033), there is projected to be an immaterial shortfall (less than 100sqm) of vacant land capacity for **Retail** development according to the modelling (Alternative Capacity Scenario). In floorspace term, this Retail shortfall is estimated at 6,300sqm (Table 15.2). As discussed in Section 12, the short term demand period includes some recovery of Retail employment and as such, some of this is likely to be absorbed within existing businesses, rather than sustaining all new businesses that require additional land/floorspace.

Further, there is still a large volume of vacant retail space in the CBD, and while it is not all in the preferred locations or of prime quality, some Retail demand growth in the short and medium term may be able to be accommodated in existing vacant tenancies, further reducing real demand for vacant Retail enabled land. On that basis, it is considered that there is no real risk of insufficient Retail development capacity in the medium term in Rotorua that would require a planning response.

However, Figure 15.3 shows the sufficiency results under the Alternative Conservative Capacity Scenario, with Whenua Māori land enabling Retail development excluded. It indicates a potential shortfall in the short and medium term which is unlikely to be mitigated through vacant tenancies in the CBD. If Council were to take a precautionary approach, a planning response may be warranted.

Figure 15.3 – Summary of Sufficiency Results by Scenario – Retail Land Use Category



Irrespective of the medium term shortfalls modelled under both capacity scenarios, the FDS introduces substantial capacity in the City Entranceway Tourism Zone which is assumed to provide some Retail capacity (that supports a tourism role in those locations). Similarly, some forms of retail are anticipated in the Light Industrial Zone (including garden centres, service stations, takeaway food, and retail ancillary to industrial activities) and the FDS identifies substantial capacity for this zone over the long term. While all FDS growth areas are treated as long term capacity in the HBA 2024, the Tamarahi and Eastgate South growth area is signalled in the FDS as potentially being rezoned in the short-medium term rather than in the long term. If this occurs, it will increase medium (and long) term Retail capacity and eliminate any modelled medium term shortfall at the total urban environment level. The FDS growth areas ensure that there is a surplus of Retail development capacity across urban business zones to meet expected long term demand (even if no vacant Whenua Māori land contributes to development capacity) (Figure 15.3). Ongoing monitoring of centre-based retail demand and capacity should also be considered by Council as a cross check to this broad HBA Retail modelling.

In the medium term (by 2033), there is projected to be a minor shortfall (1.9ha) of vacant land capacity for Commercial development according to the modelling. In floorspace term however, there remains a surplus of Commercial floorspace capacity (estimated at 50,200sqm GFA) (Table 15.2). This is because Commercial development can occur on ground and upper floors, meaning that floorspace capacity can meet demand

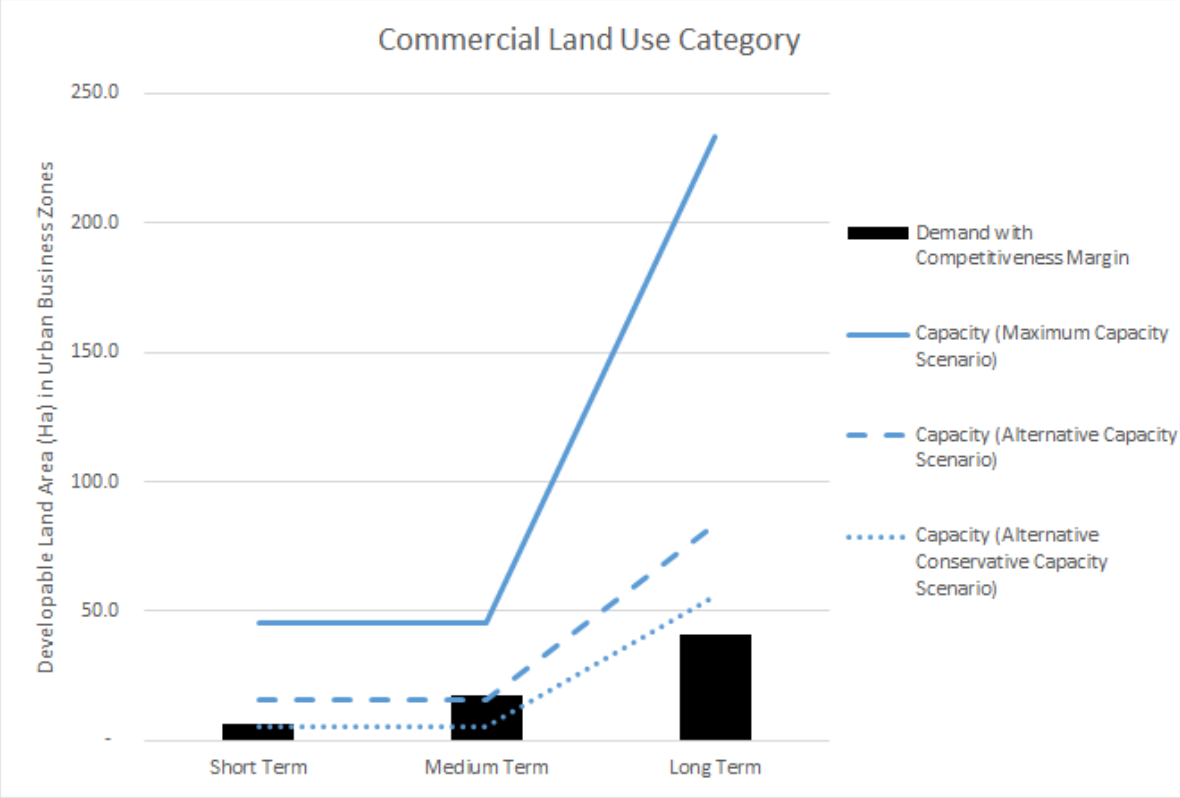
vertically (particularly for office based activities) rather than through the provision of more land. Care is however needed, because the Commercial category includes a range of activity types, and some will be more driven by a need for land and others will be more driven by a need for floorspace.

As discussed in Section 12, the short term demand period includes recovery of some, but not all Commercial activity employment (with some activities unaffected by Covid-19). As such, a portion of this projected demand is likely to be absorbed within existing Commercial businesses/organisations, rather than sustaining all new businesses that require additional land/floorspace. Further, there is still a large volume of vacant office space in the CBD, and while it is not all in the preferred locations or of prime quality, some Commercial office-based demand growth in the short and medium term may be able to be accommodated in existing vacant tenancies, future reducing demand for vacant Commercial enabled land.

On that basis, it is considered that there is minimal risk of insufficient Commercial development capacity in the medium term in Rotorua that would require a planning response, particularly when the floorspace capacity is shown to be sufficient.

However, Figure 15.4 shows the sufficiency results under the Alternative Conservative Capacity Scenario, with Whenua Māori land enabling Commercial development excluded. It indicates a potential shortfall in the short and medium term which, in the medium term, is unlikely to be mitigated through vacant tenancies in the CBD. If Council were to take a precautionary approach, a planning response may be warranted under this scenario.

Figure 15.4 – Summary of Sufficiency Results by Scenario – Commercial Land Use Category



The FDS introduces substantial capacity in the City Entranceway Tourism Zone which is assumed to provide substantial Commercial capacity, albeit focussed on commercial recreation and potentially some

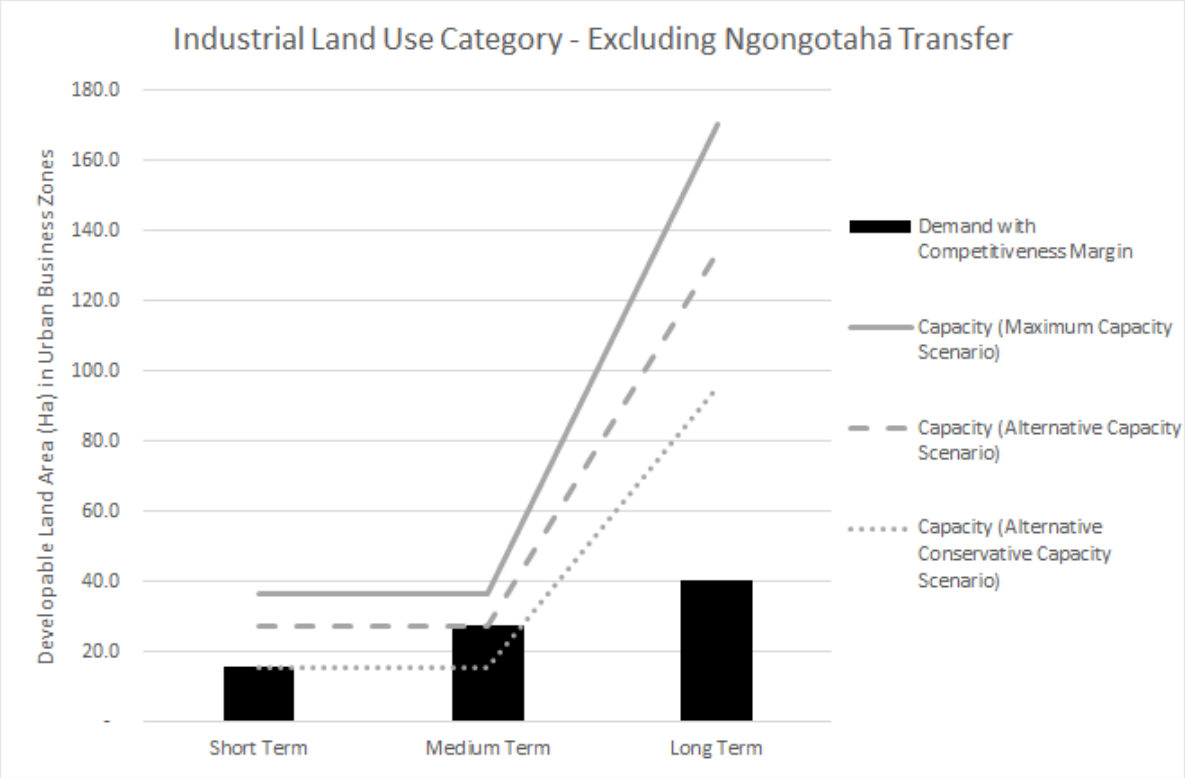
education/training activities. The Light Industrial Zone areas identified by the FDS in Tamarahi and Eastgate also provide limited additional commercial activity capacity (e.g. vet hospitals). When considering Commercial capacity as a whole, the FDS will increase medium (and long) term Commercial capacity and eliminate any medium term land shortfall at the total urban environment level under the Alternative Capacity Scenario if plan changes are pursued. It may or may not be sufficient to mitigate a medium term shortfall under the Conservative Alternative Scenario. As such, the take up of Whenua Māori land for Commercial development in the short term should be closely monitored. The FDS growth areas collectively ensure that there is significant surplus of Commercial development capacity across urban business zones to meet expected long term demand, including under a scenario when all vacant Whenua Māori capacity is excluded. Ongoing monitoring of centre-based commercial demand and capacity should also be considered by Council as a cross check to this broad HBA Commercial modelling.

In the medium term (by 2033), there is projected to be a slight shortfall (around 4,000sqm) of vacant land capacity for **Industrial** development according to the modelling (Alternative Capacity Scenario). In floorspace terms, this Industrial shortfall is estimated at 35,400sqm (Table 15.2). Unlike Tourist Accommodation, Retail and to some extent Commercial demand in the short term, Covid-19 recovery is not considered a key driver of employment growth. Rather, short, medium and long term demand growth for Industry is more business as usual growth that continually puts pressure on vacant zoned land.

Further, there are very little vacant tenancies that can help absorb growth in the short term, and more likely pent up demand for land that would allow existing business to expand. However, based on new information collected by MRCagney et al. in their 2024 research on Rotorua's industrial sector, it is evident that the HBA capacity model underestimates development capacity in the Heavy Industrial Zone (Peka Block). Taking account of stages 1 and 2 of that proposed development, a net additional 10.9ha of vacant, infrastructure served Heavy Industrial Zone capacity could be included in the capacity modelling. On that basis, it is considered that the risk of insufficient Industrial development capacity in the medium term in Rotorua is reduced. However, that outcome assumes that the Heavy Industrial Zone will absorb a substantial share of total industrial demand in the medium term. Zoned capacity may not be sufficient if demand is weighted towards the Light Industrial Zone. As such, a planning response that provides more Light Industrial Zone capacity in the medium term is considered prudent.

As the Peka Block is Whenua Māori, the additional industrial capacity currently excluded from the capacity model (and identified by MRCagney et al) does not change the results of the worst case capacity scenario where all vacant Whenua Māori land enabling Industrial development is not developed or taken up by the market. Under that scenario, is there a greater risk that a planning response may need to respond to (Figure 15.5). Counter to that, there are some positive signs that some of the leasehold sites in the proposed stage 1 Peka Block development have already been earmarked for businesses wanting to establish in that location. Monitoring this, and in particular the take up (or otherwise) of Whenua Māori in the existing Light Industrial Zone will be key for how much weight is given the Alternative Conservative Capacity Scenario sufficiency projection.

Figure 15.5 – Summary of Sufficiency Results by Scenario – Industrial Land Use Category Excluding Long Term Transfer of Ngongotahā Industrial Activity



Helpfully, the FDS already signals a planning response with the Tamarahi Light Industrial Zone and Eastgate South Light Industrial Zone growth areas identified for rezoning in the short-medium term rather than in the long term. Both zones provide capacity for light industrial activities and while Eastgate South is Whenua Māori, Tamarahi is freehold/fee simple land (even if owned as customary Māori land). Rezoning both in the short-medium term would significantly increase medium (and long) term Industrial capacity and further ensure a surplus of capacity in the medium term under the Alternative Capacity Scenario. However, it seems unlikely that the Tamarahi growth area alone could provide sufficient Industrial development capacity in the medium term under the Alternative Conservative Capacity Scenario given the overall small size of the block. As such, the take up of Whenua Māori land for Industrial development in the short and medium term would still need to be closely monitored as it may signal that some of Eastgate North needs to be zoned in the medium term as well.

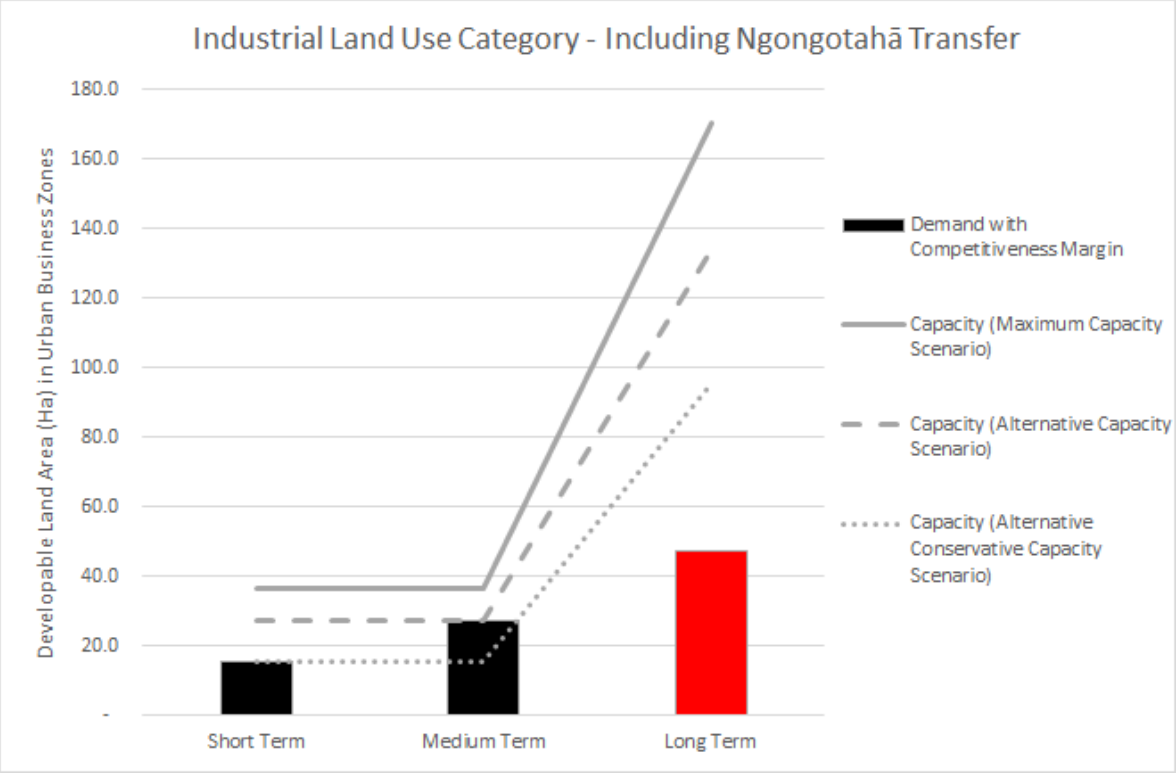
The FDS growth areas (inclusive of Eastgate North Light Industrial Zone) ensures that there is significant surplus of Industrial development capacity across urban business zones to meet expected long term demand, even under the worst case Alternative Conservative Capacity Scenario (Figure 15.5). As above, the net additional 10.9ha of Peka Block stage 1 and 2 capacity is over and above that result. This long term surplus would still be the case when transferred Industrial demand from the Wikaraka Street Light Industrial Zone in Ngongotahā is added to long term demand (Figure 15.6).

This transfer arises from the proposed rezoning of this land to High Density Residential, as signalled in the FDS in the long term.[151] The existing industrial area in Wikaraka Street is not intensively used, contains

[151] Subject to land contamination testing and therefore suitability for residential housing.

some vacant sites, and what appears to be some un-used buildings (many of which are of a poor standard). A like-for-like transfer of zoned land area is not considered realistic, and Savvy conservatively estimates that business that are forced to relocate would occupy a more consolidated/efficient footprint estimated at 7ha in developable land area (while still allowing for the yard-based nature of many existing activities). Figure 15.6 therefore adds 7ha of demand to employment driven long term demand growth.

Figure 15.6 – Summary of Sufficiency Results by Scenario – Industrial Land Use Category Including Long Term Transfer of Ngongotahā Industrial Activity



It is estimated that this additional 7ha of transferred existing businesses will be suited to a mix of Heavy Industrial Zone and Light Industrial Zone (or City Entranceway Mixed Use). While Tamarahi is the nearest substitute land (provided in the FDS in part to recognise the rezoning of Wikaraka Street in the long term), it is expected that only some of the transferring industrial businesses would be suited to Tamarahi (in terms of compatibility with the expected development mix and potential land price). Irrespective of where the transferred demand locates, Figure 15.6 shows that there is more than sufficient Industrial capacity to accommodate it across the appropriate urban business zones.

15.2 Comparison with HBA 2021

Table 15.3 compares the current (HBA 2024) performance of the District Plan and FDS to meet expected demand (inclusive of the competitiveness margin) with the performance of the District Plan and Spatial Plan that applied for the HBA 2021. There have been changes (explained in the previous sections) on both the demand and capacity side that mean that direct comparison is not straightforward. However, the direction of changes in surpluses or shortfalls in development capacity by land use category are as would be expected given continued growth in most sectors and changes introduced by PC9 and the FDS.

Key findings from this comparison are:

- Retail – for both vacant land and floorspace, the short term surplus is now reduced (as expected with no new Retail land zoned in the interim) and in the medium term, the small surplus in the 2021 assessment has turned into a slight shortfall in this 2024 assessment. However, the long term surplus is now larger thanks to the FDS.
- Commercial - the short term surplus of land is reduced (as expected with no new Commercial land zoned in the interim) and in the medium term, the small shortfall of land in the 2021 assessment has become slightly larger in this 2024 assessment. However, the long term shortfall is now a large surplus of land thanks to the FDS. From a floorspace perspective, the short and medium term surplus is now slightly larger. This is attributable to increased building heights enabled through PC9 which especially benefits commercial activity above the (Retail) ground floor. In the long term, the Commercial floorspace surplus is lower. This is a function of Eastgate North and South being earmarked for Light Industrial Zone rather than the same zoning as the Eastgate Business Park (which was assumed to attract more commercial development in the Alternative Capacity Scenario assumptions of the HBA 2021). All else being equal, the long term floorspace surplus would have been larger in 2024 that it was in 2021 if the current zoning had been applied in the Hba 2021.
- Industrial - for both vacant land and floorspace, the short term surplus is reduced (as expected with no new Industrial land zoned in the interim) and in the medium term, the small surplus in 2021 has turned into a slight shortfall in 2024. However, the long term surplus is now significantly larger thanks to the FDS.
- Tourist Accommodation – From a land perspective, the short and medium surplus is now smaller and the long term surplus changes to a slight shortfall. This is because demand is higher (in the short term and carries into the cumulative medium and long term demand periods), rather than take-up of land capacity in the interim. From a floorspace perspective, the short, medium and long term surplus is now slightly larger. This is attributable to increased building heights enabled through PC9 which especially benefits Tourist Accommodation activity above the (Retail) ground floor.

Table 15.3 – Comparison of Land and Floorspace Sufficiency (Alternative Capacity Scenario) HBA 2021 and HBA 2024

Category	Land Sufficiency (ha)			Floorspace Sufficiency (sqm)		
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Retail						
HBA 2021	5.9	2.1	2.5	25,500	4,900	6,400
HBA 2024	3.6	-0.0	9.7	13,300	-6,300	18,400
Commercial						
HBA 2021	9.1	-1.8	-3.8	101,000	48,500	210,700
HBA 2024	8.9	-1.9	42.5	102,400	50,200	133,200
Industrial						
HBA 2021	19.2	6.7	21.0	57,800	-500	104,700
HBA 2024	11.5	-0.4	93.6	20,900	-35,400	357,900
Tourist Accommodation						
HBA 2021	7.1	4.8	1.2	67,600	56,300	34,100
HBA 2024	3.3	1.4	-0.7	71,000	61,600	51,400

Source: M.E Business Land Demand Model 2021 and 2014, M.E Business Capacity Model 2021 and 2024.

Overall, PC9 and the FDS 2024 have made a positive contribution to capacity for expected growth in urban business zones compared to the Operative District Plan and 2018 Spatial Plan applicable at the time of the HBA 2021. While this HBA has treated all growth areas identified in the FDS as only providing development capacity in the long term, it is evident that the staged rezoning of this land – some of which is signalled for the short-medium term in the FDS report, would be effective in ensuring at least sufficient urban development capacity for business growth over the next 30 years. Ongoing monitoring of take up of vacant Whenua Māori business land (and redevelopment across all tenures) should also provide ample warning if other FDS growth areas need to be brought forward.

15.3 Zoned Sufficiency for 30 Years of Demand?

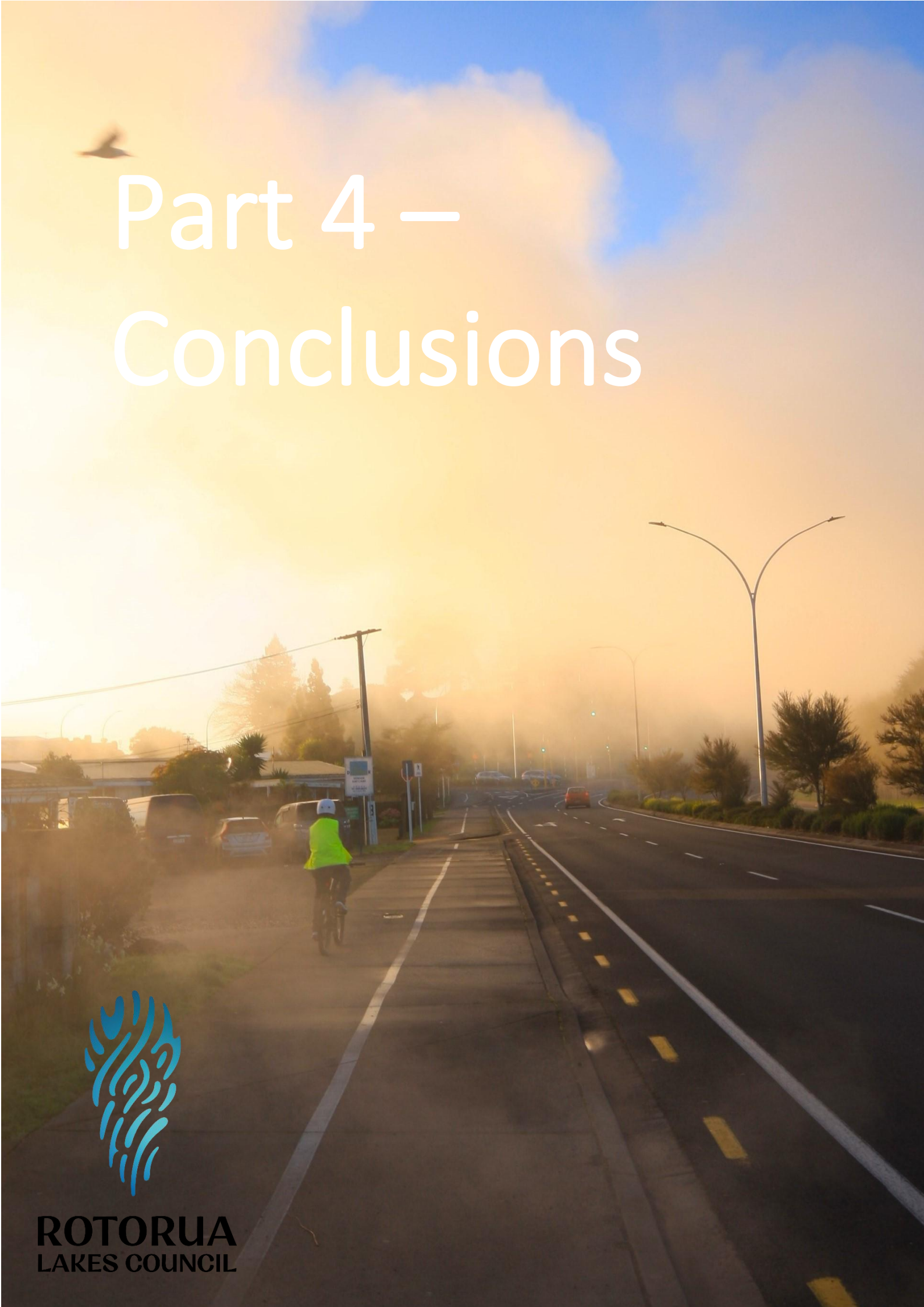
While Government has announced reforms which may require local authorities to provide sufficient zoned capacity to cater for 30 years of expected demand, the details of this policy are not yet known, and are not expected until mid-2025. However, for completeness, this HBA tests the implications *if* existing zoned capacity was required to meet long term demand growth (inclusive of a competitiveness margin). This scenario excludes the identified (but as yet un-zoned) future growth areas identified in the FDS.

Based on the preferred Alternative Capacity Scenario, it is confirmed that current zoning would not be sufficient to cater for long term demand for Retail, Commercial or Industrial growth.[152] These results apply for developable land and floorspace capacity. However, zoned capacity for Tourist Accommodation is considered sufficient for the long term. This result does not change from the sufficiency testing above, as the FDS does not identify any future growth areas that enable Tourism Tourist Accommodation.

Should this policy come into effect, Council would need to instigate rezoning of FDS growth areas (or other changes in provisions that generate net additional development capacity) for Commercial, Retail and Industrial land use as soon as practicable (or within timeframes advised by Government).

[152] Developable land shortfalls by 2053 are estimated at 4.0ha (Retail), 25.3ha (Commercial) and 13.3ha (Industrial). Accounting for the net additional 10.9ha of developable stage 1 and 2 land in the Peka Block (not included in the model) would still result in a shortfall in long term industrial capacity. These shortfalls are higher under the Alternative Conservative Capacity Scenario.

Part 4 – Conclusions



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16 Conclusions and Recommendations

This section draws together key findings and conclusions from the HBA 2024 update, including the updated housing market analysis, housing and business capacity assessments, sufficiency assessments, and impact of planning and infrastructure evaluations. It includes recommendations for RLC to help guide future planning and decision making.

16.1 Key Findings and Conclusions

Residential Findings and Conclusions

The HBA has modelled large increases in residential capacity across Rotorua's urban environment since the previous assessment in 2021. These have occurred as a result of the increased levels of development opportunity enabled on each parcel through PC9 together with sizeable increases in the greenfield areas of future urban expansion through the FDS.

The increased development opportunity has produced significant projected capacity surpluses in the sufficiency assessment at the city level across all three time periods. These are projected to become larger in the medium to long-term with market growth and further increases in capacity. Surpluses are projected to occur for both the greenfield and existing urban areas and are large in comparison to projected demand.

The projected surpluses range from 300 to 1,600 dwellings in the short-term. These increase to 2,200 to 5,200 dwellings in the medium-term, and to 10,100 to 24,700 dwellings in the long-term. In comparison, there is a total projected long-term growth of 7,700 additional dwellings, increasing to 9,100 dwellings with a margin.

There are some projected shortfalls in higher density dwellings. While the plan enabled development opportunity is large and expansive relative to demand, there is limited feasibility for this type of development within the commercial developer part of the market. Rotorua's market for higher density dwellings is not yet well established and is projected to become larger in the long-term. However, further planning provision for higher density development is unlikely to increase feasibility and remove projected shortfalls. With the exception of further ground floor capacity near the edge of the City Centre, spatial expansion of the Higher Density Residential Zone would necessarily occur in less feasible locations that are further from areas of central amenity.

This report has also examined housing affordability and the impacts of planning across Rotorua's urban environment. It has assessed changes in affordability that have occurred since the last HBA, and how the market may be impacted going forward with the substantive changes in planning provisions. The assessment has covered other impacts of planning and infrastructure on competitiveness within the market, the feasibility of development patterns encouraged by the provisions, and how the patterns of growth contribute to a well-functioning urban environment in Rotorua in the medium to long term.

Aspects of housing affordability for Rotorua's ownership and rental markets have increased over the past three years since the HBA 2021 but are generally lower than a decade earlier. This is mainly due to earlier

growth in house prices and rents, that have exceeded growth in household income. Recent changes in Rotorua's housing affordability have followed national trends, with Rotorua similarly affected by wider economic conditions, including interest rates.

Affordability within Rotorua's home ownership market is currently higher than most other Tier 2 urban economies and surrounding urban areas. Affordability within the rental market is within the mid-range of Tier 2 urban economies. Although rental affordability has increased since the HBA 2021, Rotorua's position relative to the national economy is lower than it was 10 years ago. Despite recently increased rental affordability, there are large pressures remaining within the lower end of Rotorua's market with high proportions of people on the Social Housing Register.

The assessment has not identified any infrastructure constraints to growth in Rotorua. Sizeable, planned extensions to the infrastructure network coverage within greenfield areas in the medium to long term contributes to the estimated significant growth in capacity surpluses. Part of this effect occurs through the greater increases in development opportunity (and likely yield) within the areas served by infrastructure networks.

The planning intensification provisions (PC9) introduced since the HBA 2021 substantially increase the development opportunity across most of Rotorua's urban environment. In addition to large increases in overall capacity, they enable a much greater range of dwelling types and sizes across the urban area that better align with patterns of demand.

There are important impacts from these changes to Rotorua's planning provisions. They enable and are likely to encourage the market to deliver a greater range of dwelling sizes and types through time. The increased housing choice is likely to have higher levels of housing affordability in comparison to development patterns enabled under the previous planning provisions. This occurs through the increased ability for households to make trade-offs in dwelling choice between size, typology, location and price.

The increased development opportunity is also likely to increase the number and feasibility of parcels with development potential. This is likely to occur at several scales, providing opportunities for an expanded range of developers in the market. Together with an increased number of greenfield areas, this is likely to encourage competition within Rotorua's housing development sector.

Importantly, many of these changes are likely to occur incrementally and gradually through time as new dwellings are added to the total dwelling stock with growth in demand. The effects arising from changes in development patterns are likely to become more significant over the medium to long term, rather than any immediate shift in changes to prices across the market.

Development opportunities are likely to be taken up at increasing intensities through time as the housing market becomes more established for different types of dwellings. The assessment has found that the feasibility of more intensive higher density dwelling options is likely to remain limited for the commercial developer part of Rotorua's market through the medium term, with feasibility more likely to increase in the long term. This opportunity may be taken up by other parts of the market, which make significant contributions to Rotorua's dwelling stock.

The planning provisions enable significant housing intensification to occur around Rotorua's commercial centres and across the suburban residential areas. Provision for higher density development forms the

main differentiation between central areas and other residential areas further from the main commercial centres.

It is considered likely that Rotorua's housing intensification will predominantly occur at the medium density scale within the local economic context. Provision for medium density development is undifferentiated across the urban environment between more central and outer suburban areas. While this increases housing choice across the suburban areas, this may reduce the level of intensification which is otherwise likely to be directed into more central areas. Increased development opportunity and housing choice may also occur in outer suburban areas at a lower scale.

Business Findings and Conclusions

Between 2023 and 2053, it is estimated that around 87.2ha of developable zoned land will be required to accommodate employment growth seeking an urban business zone in Rotorua. When the competitiveness margin is added, long term developable land demand in urban business zones increases to 102.8ha. This is made up of demand for 12.3ha of Retail land, 40.7ha of Commercial land, 9.3ha of Tourist Accommodation land and 40.5ha of Industrial land by 2053.

However, Retail, Tourist Accommodation and commercial office (as a sub-set of total Commercial) land demand in the long term is likely overstated as it is driven by short term employment recovery following Covid-19 impacts, with vacant tenancy space (and motels not currently being used for tourism) able to absorb some of that short term demand (reducing the vacant land needed for new development across all time periods).

Notwithstanding that, the results of the preferred Alternative Capacity Scenario for vacant land capacity in urban business zones show that there is an estimated 15.4ha of vacant land capacity available for Commercial development in the short-medium term (increasing to 83.2ha in the long term), 8.3ha for Retail development (increasing to 22.1ha in the long term), 27.1ha for Industrial development (increasing to 134.0ha in the long term) and 8.6ha for Tourist Accommodation development (staying the same in the long term). Overall, the significant majority of this plan enabled capacity provided in Rotorua's urban business zones is considered suitable for development.

This means that in the short term, there is at least sufficient vacant land capacity to cater for projected demand for urban business zones (inclusive of the competitiveness margin) out to 2026 across all land use categories. The same applies when considered in floorspace terms. There is also estimated to be at least sufficient capacity to meet expected demand (plus a margin) for Tourist Accommodation growth in the medium and long term.

No planning response is considered necessary to specifically address a shortfall of Retail capacity in the medium term. Additional retail capacity is identified in the FDS which indicates at least sufficient capacity in the long term, albeit that the Retail capacity identified is not within centres per se (rather it is a minor function of identified Light Industrial and City Entranceway Tourism zones).

In the medium term (by 2033), there is projected to be a minor shortfall (1.9ha) of vacant land capacity for Commercial development according to the modelling. In floorspace terms however, there remains a surplus of Commercial floorspace capacity (estimated at 50,200sqm GFA due to some vacant sites enabling Commercial development across multiple storeys). No planning response is considered necessary to

specifically address a shortfall of Commercial capacity in the medium term. Additional Commercial capacity is identified in the FDS which indicates at least sufficient capacity in the long term, albeit that Commercial capacity identified is not within centres per se (again, it is a minor function of the identified Light Industrial Zone and tourism focussed commercial capacity in the identified City Entranceway Tourism Zone).

In the medium term, there is projected to be a slight shortfall (less than a hectare) of vacant land capacity for Industrial development according to the modelling (Alternative Capacity Scenario). Further, there are very little vacant tenancies that can help absorb growth in the short term, and more likely pent up demand for land that would allow existing business to expand. New information collected by MRCagney et al in their 2024 research on Rotorua's industrial sector indicates that there may be additional capacity in the Peka Block Heavy Industrial Zone to that estimated within the HBA. Taking account of stages 1 and 2 of that proposed development, a net additional 10.9ha of vacant, infrastructure served Heavy Industrial Zone capacity could be included in the capacity modelling.

While this further reduces a risk of a shortfall arising in the medium-term, the model still relies on the Heavy Industrial Zone absorbing a substantial share of industrial land demand in the medium-term and a shortfall may be likely if demand is weighted more to light industrial activities. On that basis, it is considered that there may be a risk of insufficient Light Industrial development capacity in the medium term in Rotorua that would require a planning response.

The FDS growth areas ensure that there is a significant surplus of Industrial development capacity across urban business zones to meet expected long term demand. This long term surplus would still be the case when transferred Industrial demand from the Wikaraka Street Light Industrial Zone in Ngongotahā is added to long term demand. Rezoning Tamarahi and Eastgate South Light Industrial growth areas already identified in the FDS as short-medium term priorities will ensure at least sufficient industrial capacity out to 2033 for all industrial demand in conjunction with the Peka Block.

Overall, PC9 and the FDS 2024 have made a positive contribution to capacity for expected growth in urban business zones compared to the Operative District Plan and 2018 Spatial Plan applicable at the time of the HBA 2021. It is considered that the FDS has simultaneously improved the opportunities for iwi to develop their land for business activities and reduced the planning risk, should Whenua Māori face challenges to realise that development opportunity.

While this HBA has treated all business growth areas identified in the FDS as only providing development capacity in the long term, it is evident that the staged rezoning of this land – some of which is signalled for the short-medium term in the FDS report, would be effective in ensuring at least sufficient urban development capacity for business growth over the next 30 years. Ongoing monitoring of take up of vacant Whenua Māori business land (and redevelopment across all tenures) should also provide ample warning if other FDS growth areas need to be brought forward.

General Findings and Conclusions

Based on the housing and business assessment carried out for this HBA, including consideration of the impact of PC9 on the Operative District Plan, the FDS 2024 (with its proposed short-medium term growth area staging), and further targeted research that RLC have completed in the last three years and that is starting to inform planning and decisions making, M.E and Savvy Consulting consider that RLC satisfies

Policy 2 of the NPS-UD to provide at least sufficient development capacity to meet expected demand for housing and business land over the short, medium and long term.

We also consider that the level and type of development opportunity enabled by the updated planning provisions across different parts of Rotorua's urban environment satisfies Policy 5 of the NPS-UD. The scale and type of development enabled in each location align with the levels of accessibility and relative demand.

Rotorua's current planning provisions are also likely to encourage development patterns that contribute toward a well-functioning urban environment over the medium to long term as covered in Policy 1 of the NPS-UD. They are likely to result in greater economic benefits than the previous planning provisions, with the changes effective in alleviating the limitations identified in the HBA 2021. Recommendations

The HBA 2021 provided 9 key recommendations for RLC to consider and overall, Council has been proactive and effective in implementing those recommendations. A brief audit of the HBA 2021 recommendations is included in Appendix 12. Based on the findings of this HBA 2024, the following recommendations are made for Council's consideration over the next three years. Some of the recommendations for business areas consolidate recommendations that have already been made in recently completed assessments commissioned by RLC:

1. Consider provision for further differentiation in the intensity of medium density development opportunity across different parts of the Medium Density Residential Zone. This should be applied on a geographical basis to distinguish between central areas of higher accessibility (i.e. inner suburban areas and suburban areas closer to main suburban centres) vs. less central and outer suburban areas. Development opportunity for differentiated levels of medium density development across this zone would be likely to align with the patterns of relative demand across Rotorua's inner and outer suburban areas, which occur at a medium density scale within the local economic context.

2. Progress a plan change(s) to rezone the Tamarahi growth area and/or some or all of the Eastgate South growth area identified in the FDS to provide more capacity for expected light industrial growth.

3. Prepare a Master Plan for inner city revitalisation (with a phased implementation plan). This could consider:[153]

    a. A reduced commercial core (City Centre 1 Zone). While PC9 enabled greater residential development above the ground floor in the City Centre 1 Zone, this will require retail and commercial service activities on the ground floor of those mixed-use buildings. This will continue to dilute commercial activity over a wider area (sustaining poor levels of vibrancy and vitality and high vacancy rates). A reduction in the size of the City Centre 1 Zone is recommended.[154] This could be achieved by re-zoning some fringe land to High Density Residential instead (particularly on the western side of the inner city),[155] or at least enabling housing on the ground-floor in those locations. Potential for ground floor

[153] The DCA Rotorua Inner City Review of Revitalisation Initiatives 2007-2020 identifies that many of these same/similar initiatives are not new recommendations for Council.

[154] See recommendation by Colliers.

[155] As recommended in the Inner City Residential Analysis, Strategy and Action Plan (Place Collective, July 2024).

residential uses in these locations (within mid to higher density buildings) may increase the feasibility of redeveloping sites; and would concentrate further household demand into the CBD. Increased residential intensification in the fringes of the current City Centre 1 Zone would have associated economic benefits for the commercial core.

b. Strengthening the connection (including pedestrian connection) between the mall in the south of the CBD and the new lakefront developments to the north of the CBD, focussed on Tutanekai Street.

c. Investigating whether a precinct-based approach to redevelopment in the commercial core would be viable (i.e. support redevelopment rather than hinder it), looking at other city centres around the country for examples of where this is successfully achieved.

d. Parking requirements, particularly supporting access to mid and northern CBD core locations to balance out the ease of parking at the southern (mall) end.[156]

e. Identification of strategic redevelopment sites in the city centre (see for example the Tauranga CBD Blueprint led by Priority One).

f. A city design guide that delivers on the above as well as informing improved streetscapes, way finding, and locations for art installations and other focal points.

4. Consider a plan change for the city centre (or that includes the city centre). This could consider:

a. Implementation of any zoning changes identified in the city centre Master Plan.

b. Objectives and policies that prioritise the city centre for commercial activity growth (see for example Christchurch District Plan – while this was framed in the context of earthquake recovery, it may provide guidance on CBD prioritisation).

c. Amending any outdated or restrictive zoning provisions that may hinder the desired retail mix and offerings or limit flexibility in building design.[157]

d. Provisions that encourage the adaptive re-use of existing buildings and spaces and enable temporary uses in the city centre.

e. Streamlined/enabling consenting process for inner-city developments, particularly for strategic development sites identified in the Master Plan.

5. Non-regulatory recommendations for the city centre include consideration of:

a. Public private partnerships to deliver inner city revitalisation (redevelopment).

b. Council purchase of one (or more) strategic redevelopment site – demolished and marketed as a prime vacant land development opportunity. Consolidating parcels into single ownership and managing the relocation of existing tenants may make investment more attractive.

[156] This could encompass the parking actions currently prioritised in the Regional Land Transport Strategy.

[157] See recommendation by Colliers.

c. Promoting the CBD core for pop-up retail activity, allowing innovative local producers or retailers not present in Rotorua,[158] to test concepts/the market. Council could consider leasing a vacant tenancy to have an active role in attracting pop-up retail activity (see Colliers' list).

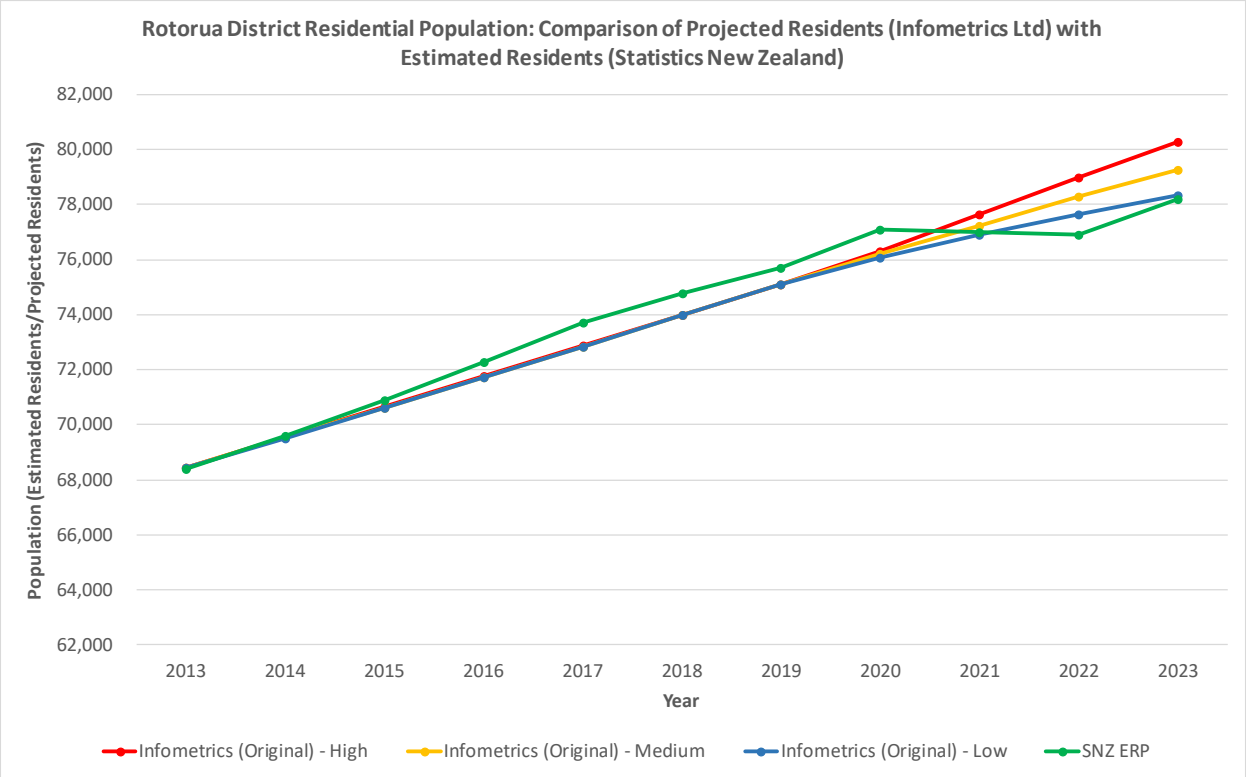
d. Increased event marketing in the inner city.

[158] See Colliers Report.

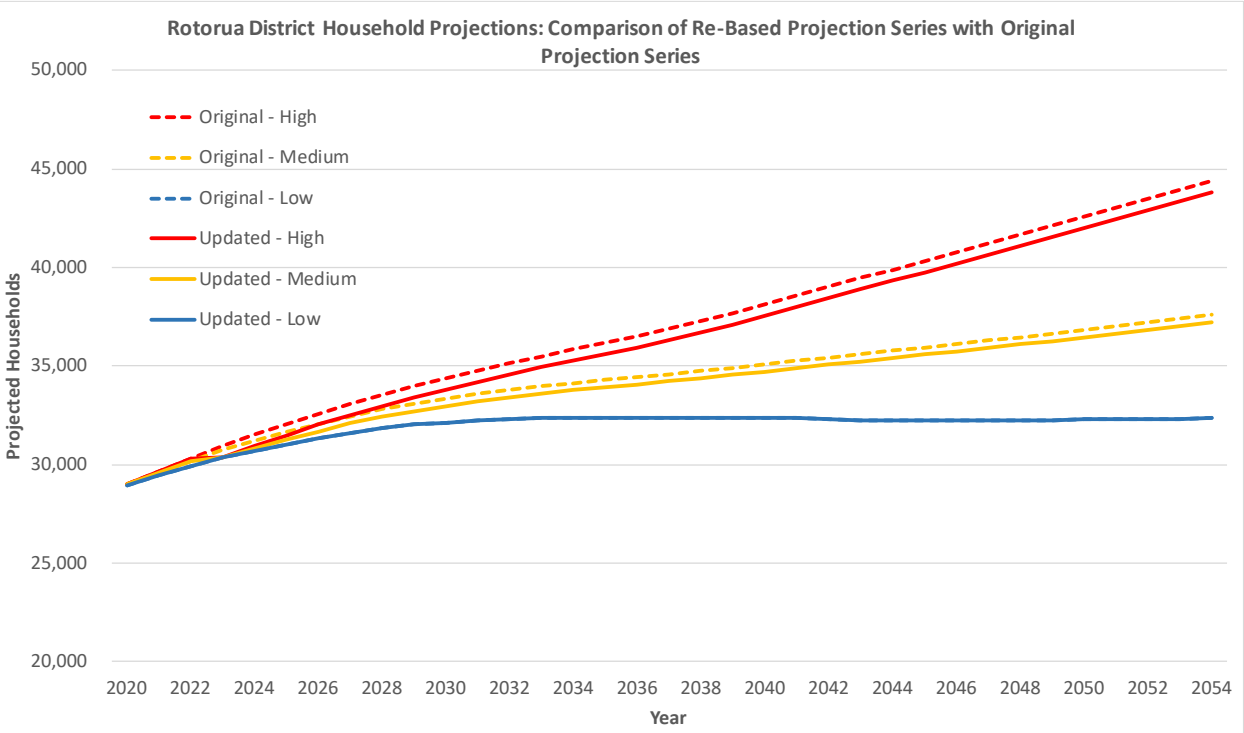
Appendix 1 – Updated Residential Demand Modelling Technical Information

This appendix contains further technical information used to inform the updated demand modelling undertaken in the 2024 HBA.

The following graph shows the estimated resident population (ERP) for Rotorua District in comparison to the projected population within the Infometrics Ltd 2020 projections, which forms a key driver of resident household growth. It shows a decrease in ERP occurring from 2020 to 2022, with the 2023 ERP close to the original low-series 2023 projected population.

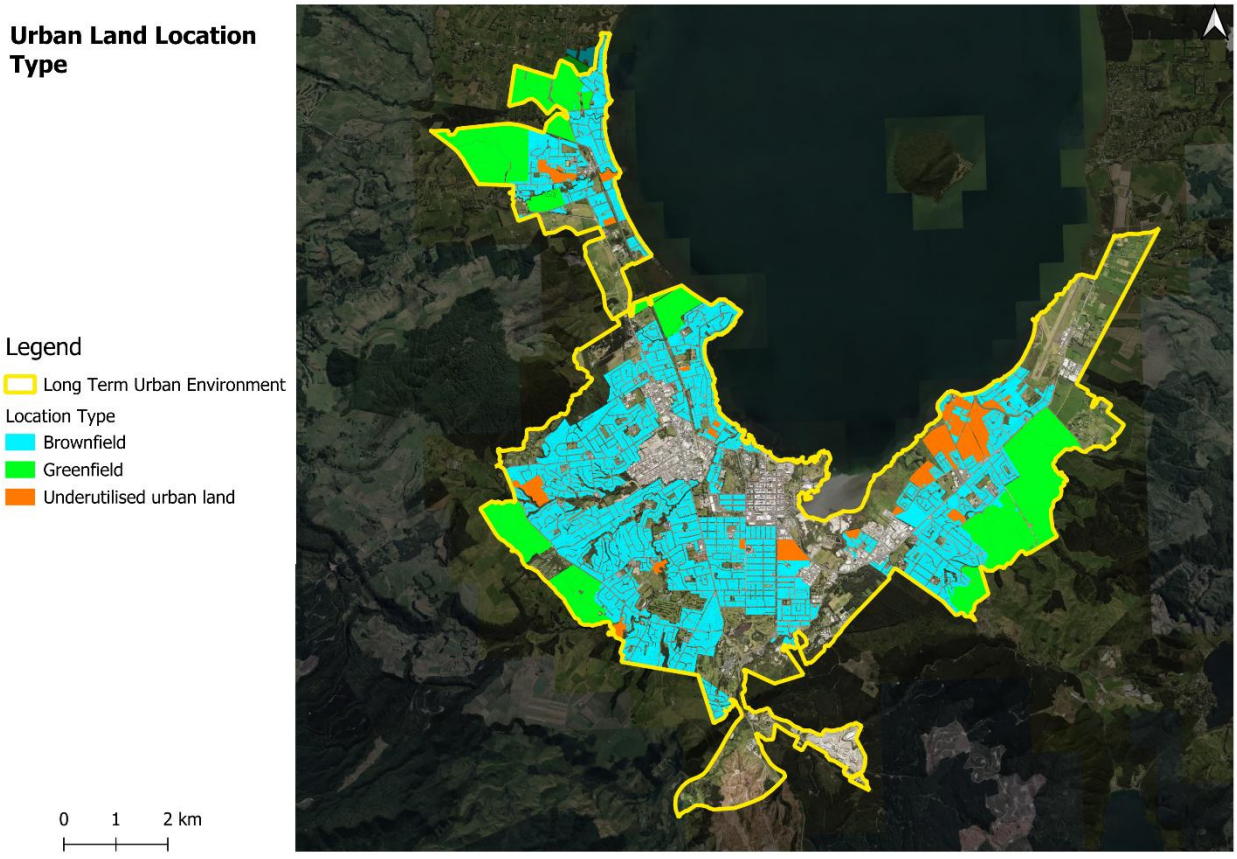


The following graph displays the original Infometrics Ltd district level projected households and the rebased projected household undertaken by M.E Ltd as part of the 2024 HBA assessment. The rebased medium and high-series projections have the same net growth occurring subsequent to 2023 as the original projections. The net growth has been applied to the updated estimated households existing in 2023.



Source: 'Original' household projection series (2013-2050) were produced by Infometrics Ltd (2020) for Rotorua Lakes District Council. M.E have re-based these projections for the 2024 HBA from current dwelling estimates and recent household growth to form the 'Updated' projection series. M.E have extrapolated both series to 2054.

Appendix 2 – Urban Parcels Enabling Housing by Location Type



Appendix 3 – Updated Residential Plan Enabled Capacity Modelling Technical Approach

This appendix provides an overview of the key stages of our technical assessment undertaken to model the residential plan enabled capacity in Rotorua's urban environment.

Technical Assessment Key Stages

This sub-section summarises the key stages undertaken in our technical assessment to plan enabled capacity. This assessment further extends our Rotorua residential capacity modelling capability initially undertaken during the 2021 HBA, and then further developed to inform the FDS and intensification plan change (PC9). As such, further detailed technical information is also available within these reports.

The key stages are summarised here:

- Development of a spatial framework for analysis. The geographic extent of the current and future urban environment was identified through zone extents and status (including FDS areas) in accordance with the NPS-UD. The urban environment was divided into logical geographic reporting areas applied within the report.
- Spatial integration of key datasets. The spatial data attributes were applied to each parcel within the urban environment. This includes rating database information and building consents used to estimate the existing base, zoning information and provisions, other planning information affecting development opportunity or cost, and any local information on constraints and exclusions.
- Calculation of net land areas for dwelling construction. Final net land areas within each parcel are calculated through removing excluded (and some constrained) areas. Greenfield areas are adjusted to allow for roads and reserves, and where appropriate, prior adjustment to take account of any undevelopable areas. Other larger parcels are also adjusted to allow for accessway requirements.
- Analysis of land and space requirements by typology and location. This stage identifies the land area and space required to construct each dwelling type in each location.
- FME geometric modelling to identify potential areas for infill development on existing urban parcels. The FME geometric modelling process identifies vacant areas on each parcel based on the spatial configuration of each site and its existing dwellings. This includes application of setback areas from existing dwellings, and calculation of minimum dimensions of remaining vacant areas on each site.
- Application of planning provisions to each parcel to identify the enabled typologies to be modelled on each parcel. The planning parameters are applied to the net land area on each parcel to estimate the net additional dwellings. These predominately include net land areas per dwelling for

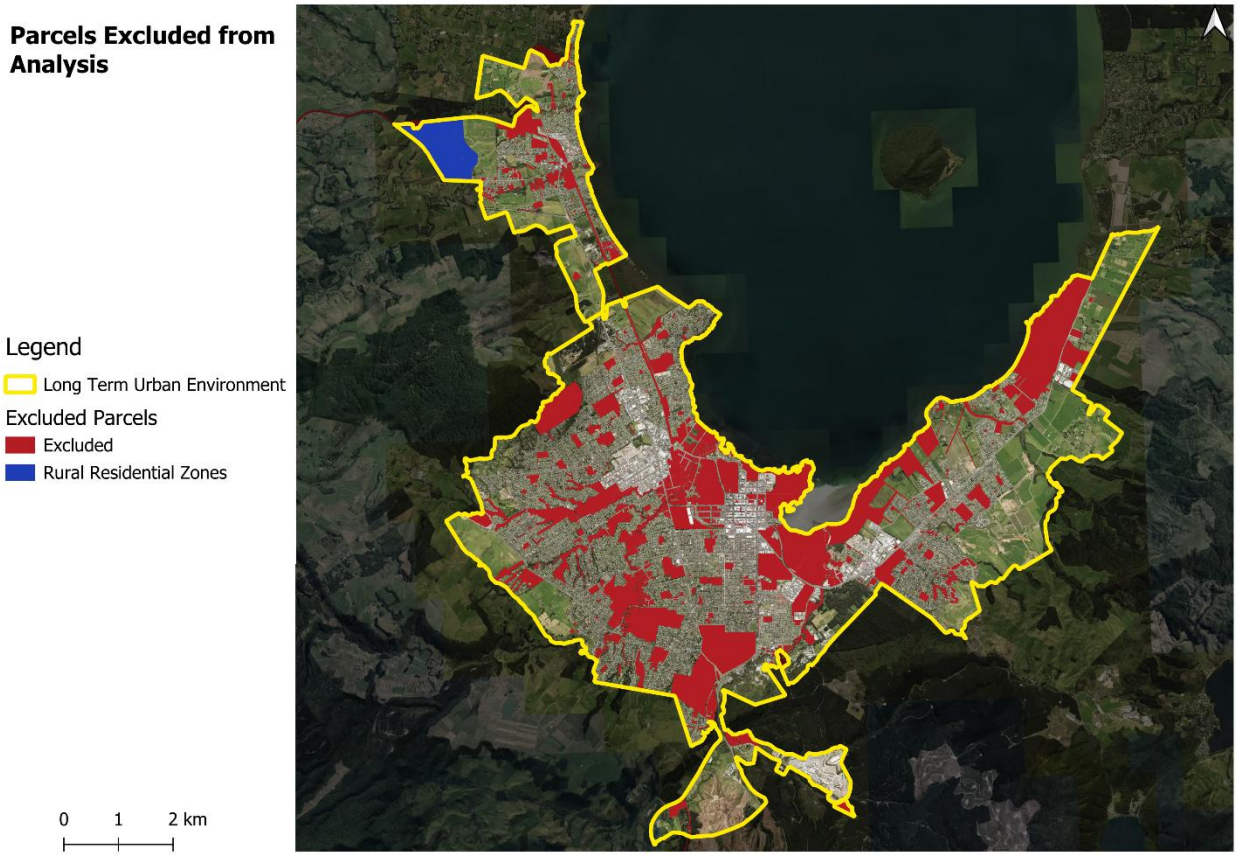
each enabled typology, maximum height, and any other factors affecting the enabled yield on each site (e.g. driveway width requirements).

Updates to Assessment Since 2021 HBA

A number of important technical updates have been undertaken in this assessment since the 2021 HBA. These include:

- Reassessment of the spatial framework. The spatial framework was re-examined within the context of the updated assessment. The spatial boundaries of the reporting areas remained consistent across urban areas contained within both assessments. Further areas of urban expansion under the FDS were allocated to form contiguous geographic areas with their adjacent reporting area.
- Updated flood modelling data. The modelling was updated to include the most recent flooding information undertaken during PC9 in Rotorua. It replaces earlier flood modelling applied within the modelling.
- Updated estimation of existing dwelling base. RLC undertook significant analyses of building consent data (2020 to 2023/2024) at the parcel level to provide an update to the number of existing dwellings within each parcel. This information was also applied within the model to exclude capacity on existing suburban-scale sites with dwellings recently constructed.
- Revision of constraints information and exclusions. RLC revised the parcel level data on identified constraints within the existing urban environment, with updates incorporated into the Model.
- Updated analysis of land and space requirements by dwelling typology. These parameters were updated within the context of intensification provisions and recent development patterns in other urban economies. This is an important stage where there are significant changes in the net land area required by each dwelling, including as a result of an expanded range of enabled typologies.
- Application of updated planning provisions and zoned areas. The modelling has been updated to reflect the final adopted version of PC9 and the FDS. This includes the geographic extent of zones, and updated provisions within zones.

Appendix 4 – Urban Parcels Excluded from Development Capacity



Appendix 5 – Detailed Plan Enabled Capacity Output Tables

This appendix contains the full plan enabled capacity output tables that are summarised within the main body of the report. The tables show the net additional dwellings enabled within each typology, development pathway and location type in each reporting area. The structure of these attributes is set out in Section 5.1.

Table 1 - Modelled Plan Enabled Capacity (Net Additional Dwellings) in Rotorua's Urban Environment: Short-Medium Term – No Infrastructure Constraints

Reporting Area	Location Type	INFILL CAPACITY						REDEVELOPMENT CAPACITY							GREENFIELD CAPACITY						Total Max Existing Urban + Greenfield
		Detached	Attached/Duplex	Attached/Terraced	Lowrise Apartments	Higher Density Apartments	Max Infill	Detached	Attached/Duplex	Attached/Terraced	Lowrise Apartments	Higher Density Apartments	Max Redevelopment	Max Infill or Redevelopment	Detached	Attached/Duplex	Attached/Terraced	Lowrise Apartments	Higher Density Apartments	Max Greenfield	
Ngongotahā	Brownfield	2,200	2,700	2,700	3,700	-	4,700	4,800	6,800	8,400	13,500	700	15,400	15,700	-	-	-	-	-	-	**15,700**
Ngongotahā	Underutilised Urban Land	100	200	300	300	-	300	500	800	1,200	1,100	-	1,200	1,200	-	-	-	-	-	-	**1,200**
Ngongotahā	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ngongotahā	***Total***	***2,300***	***2,900***	***3,000***	***4,000***	***-***	***5,000***	***5,300***	***7,500***	***9,600***	***14,500***	***700***	***16,600***	***16,900***	***-***	***-***	***-***	***-***	***-***	***-***	***16,900***
Western	Brownfield	13,100	16,100	15,800	23,400	400	29,600	25,800	36,700	45,700	82,400	1,800	88,100	90,100	-	-	-	-	-	-	**90,100**
Western	Underutilised Urban Land	600	800	1,300	1,100	-	1,300	600	1,000	1,500	1,300	-	1,500	1,500	-	-	-	-	-	-	**1,500**
Western	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	3,100	4,100	4,900	3,600	-	4,900	**4,900**
Western	***Total***	***13,700***	***16,900***	***17,100***	***24,500***	***400***	***30,900***	***26,500***	***37,600***	***47,200***	***83,700***	***1,800***	***89,600***	***91,600***	***3,100***	***4,100***	***4,900***	***3,600***	***-***	***4,900***	***96,500***
Central	Brownfield	2,300	2,700	2,700	3,800	1,600	6,700	4,300	6,600	9,400	17,200	42,300	56,400	56,500	-	-	-	-	-	-	**56,500**
Central	Underutilised Urban Land	60	90	100	90	600	600	60	90	100	90	600	600	600	-	-	-	-	-	-	**600**
Central	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central	***Total***	***2,400***	***2,800***	***2,800***	***3,900***	***2,100***	***7,200***	***4,400***	***6,700***	***9,500***	***17,300***	***42,900***	***57,000***	***57,100***	***-***	***-***	***-***	***-***	***-***	***-***	***57,100***
Eastern	Brownfield	4,300	5,200	4,900	6,700	100	9,300	9,400	13,400	16,300	27,200	2,400	31,900	32,500	-	-	-	-	-	-	**32,500**
Eastern	Underutilised Urban Land	1,400	2,100	3,300	2,800	-	3,300	2,600	3,900	6,100	5,300	-	6,200	6,200	-	-	-	-	-	-	**6,200**
Eastern	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	4,400	5,600	6,800	5,100	-	7,000	**7,000**
Eastern	***Total***	***5,700***	***7,200***	***8,200***	***9,600***	***100***	***12,500***	***12,000***	***17,300***	***22,400***	***32,500***	***2,400***	***38,100***	***38,700***	***4,400***	***5,600***	***6,800***	***5,100***	***-***	***7,000***	***45,700***
Total	Brownfield	22,000	26,600	26,200	37,600	2,100	50,200	44,400	63,400	79,800	140,300	47,200	191,800	194,900	-	-	-	-	-	-	194,900
Total	Underutilised Urban Land	2,100	3,200	5,000	4,300	600	5,500	3,800	5,700	8,900	7,700	600	9,500	9,500	-	-	-	-	-	-	9,500
Total	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	7,500	9,700	11,700	8,700	-	11,900	11,900
Total	**Total**	**24,100**	**29,800**	**31,200**	**41,900**	**2,600**	**55,700**	**48,200**	**69,100**	**88,700**	**148,000**	**47,800**	**201,300**	**204,400**	**7,500**	**9,700**	**11,700**	**8,700**	**-**	**11,900**	**216,300**

Source: M.E Rotorua Residential Capacity Model, 2024.

Table 2 - Modelled Plan Enabled Capacity (Net Additional Dwellings) in Rotorua's Urban Environment: Long Term – No Infrastructure Constraints

Reporting Area	Location Type	INFILL CAPACITY						REDEVELOPMENT CAPACITY							GREENFIELD CAPACITY						Total Max Existing Urban + Greenfield
		Detached	Attached/Duplex	Attached/Terraced	Lowrise Apartments	Higher Density Apartments	Max Infill	Detached	Attached/Duplex	Attached/Terraced	Lowrise Apartments	Higher Density Apartments	Max Redevelopment	Max Infill or Redevelopment	Detached	Attached/Duplex	Attached/Terraced	Lowrise Apartments	Higher Density Apartments	Max Greenfield	
Ngongotahā	Brownfield	2,400	2,900	3,000	4,000	1,100	5,800	5,400	7,400	9,300	14,200	4,600	19,400	19,700	-	-	-	-	-	-	**19,700**
Ngongotahā	Underutilised Urban Land	100	200	300	300	-	300	500	800	1,200	1,100	-	1,200	1,200	-	-	-	-	-	-	**1,200**
Ngongotahā	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	5,600	7,500	9,000	6,700	-	9,000	**9,000**
Ngongotahā	***Total***	***2,500***	***3,100***	***3,300***	***4,300***	***1,100***	***6,200***	***5,900***	***8,200***	***10,500***	***15,200***	***4,600***	***20,600***	***20,900***	***5,600***	***7,500***	***9,000***	***6,700***	***-***	***9,000***	***29,900***
Western	Brownfield	13,100	16,100	15,800	23,400	400	29,600	25,800	36,700	45,700	82,400	1,800	88,100	90,100	-	-	-	-	-	-	**90,100**
Western	Underutilised Urban Land	600	800	1,300	1,100	-	1,300	600	1,000	1,500	1,300	-	1,500	1,500	-	-	-	-	-	-	**1,500**
Western	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	5,000	6,700	8,000	5,900	-	8,000	**8,000**
Western	***Total***	***13,700***	***16,900***	***17,100***	***24,500***	***400***	***30,900***	***26,500***	***37,600***	***47,200***	***83,700***	***1,800***	***89,600***	***91,600***	***5,000***	***6,700***	***8,000***	***5,900***	***-***	***8,000***	***99,600***
Central	Brownfield	2,300	2,700	3,100	3,800	2,000	7,100	4,300	6,600	10,100	17,200	54,700	65,100	65,300	-	-	-	-	-	-	**65,300**
Central	Underutilised Urban Land	60	90	100	90	600	600	60	90	100	90	600	600	600	-	-	-	-	-	-	**600**
Central	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
Central	***Total***	***2,400***	***2,800***	***3,200***	***3,900***	***2,600***	***7,700***	***4,400***	***6,700***	***10,200***	***17,300***	***55,300***	***65,700***	***65,900***	***-***	***-***	***-***	***-***	***-***	***-***	***65,900***
Eastern	Brownfield	4,300	5,200	5,400	6,700	2,700	11,500	9,400	13,400	17,300	27,200	26,400	49,700	50,200	-	-	-	-	-	-	**50,200**
Eastern	Underutilised Urban Land	1,700	2,700	3,400	2,800	12,800	13,800	3,500	5,300	7,000	5,800	15,300	19,500	19,500	-	-	-	-	-	-	**19,500**
Eastern	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	9,700	12,700	15,200	11,400	-	15,400	**15,400**
Eastern	***Total***	***6,000***	***7,900***	***8,900***	***9,600***	***15,500***	***25,200***	***12,800***	***18,700***	***24,300***	***33,000***	***41,700***	***69,200***	***69,700***	***9,700***	***12,700***	***15,200***	***11,400***	***-***	***15,400***	***85,100***
Total	Brownfield	22,100	26,800	27,300	37,900	6,200	54,000	44,900	64,100	82,400	141,000	87,500	222,300	225,300	-	-	-	-	-	-	225,300
Total	Underutilised Urban Land	2,400	3,800	5,200	4,300	13,400	16,000	4,700	7,100	9,800	8,200	15,900	22,800	22,800	-	-	-	-	-	-	22,800
Total	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	20,400	26,900	32,200	24,000	-	32,400	32,400
Total	**Total**	**24,500**	**30,600**	**32,500**	**42,200**	**19,600**	**70,000**	**49,500**	**71,200**	**92,200**	**149,300**	**103,400**	**245,200**	**248,100**	**20,400**	**26,900**	**32,200**	**24,000**	**-**	**32,400**	**280,500**

Source: M.E Rotorua Residential Capacity Model, 2024.

Appendix 6 – Updated Residential Commercially Feasible Capacity Modelling Technical Approach

This appendix provides an overview of the key stages of our technical assessment undertaken to model the residential commercially feasible capacity in Rotorua's urban environment.

Technical Assessment Key Stages Overview

This sub-section summarises the key stages undertaken in our technical assessment to commercially feasible capacity. This assessment further extends our Rotorua residential capacity modelling capability initially undertaken during the 2021 HBA, and then further developed to inform the FDS and intensification plan change (PC9). As such, further detailed technical information is also available within these reports.

At a high level, this stage of the assessment models the commercial feasibility of developing each dwelling option enabled under the plan. The commercial feasibility modelling occurs as a component within M.E's Rotorua Residential Capacity Model. It is a detailed model that operates at the property parcel level to test the feasibility of development within each site.

The feasibility model component receives the parcel level outputs from the plan enabled capacity component of the model. These are received as gross dwellings of each typology, and associated average land areas per dwelling, within each parcel enabled under the plan. Based on the average land area and planning provisions, the model then estimates the likely size of each dwelling constructed (which is discussed further below). It then applies the development costs to each potential dwelling option to estimate the total cost of development. This is then compared to a modelled sales price to estimate whether a sufficient margin is likely to be achieved. This is used to determine whether the development option is likely to be commercially feasible for a profit-driven developer.

The commercial feasibility model tests all potential dwelling options and development pathways enabled on each parcel as set out in the structure in Section 5.1. Feasible capacity is calculated at the parcel level and then aggregated to outputs supplied by reporting area, dwelling typology, development pathway and location type in accordance with the NPS-UD.

Updates to Assessment Since 2021 HBA

The current assessment incorporates a number of important substantive updates since the modelling undertaken for the 2021 HBA. These include updates that occurred during the modelling undertaken to inform the PC9 intensification provisions and FDS analysis.

Important changes were made within the model to reflect the significant shifts in enabled development patterns as a result of the intensification provisions. These significantly alter the types and nature of dwellings modelled from that of earlier modelling and correspondingly required changes to the parameters within the model, which are set out below.

The key updates are listed below:

- Application of a conservative density scenarios. A more conservative density scenario[159] was applied within the model in relation to the potential number of dwellings of each type modelled within each parcel. This reduced the potential dwelling yield within typologies modelled on each parcel from that potentially enabled under the Plan.
- Reanalysis of dwelling size and land area relationships. Recent patterns of dwelling development in other urban economies (and within Rotorua, where available) were analysed to estimate the likely dwelling size based on different average land areas per dwelling.
- Expansion to modelled typologies. The range of modelled typologies was further expanded to reflect the changes in enabled development opportunity. Specifically, greater distinction was applied within the apartment dwelling typology to produce outputs for low rise and higher density apartments. Further development was undertaken within the Model to test a range of potential dwelling sizes within each of these apartment dwelling categories.
- Updated cost and price information. The costs and prices applied within the Model were updated in accordance with the most recently available data. Construction costs were updated through triangulation of several data sources including QV Cost Builder, SNZ build cost indices, Corelogic data, building consent data, and analyses of recent construction examples within the market. Updated cost information also reflects the incorporation of additional typologies within the Model.
- Updated sales price analysis. A further component was added within the dwelling sales price part of the model to provide significantly greater differentiation between local areas. Recent sales prices were analysed across each area and then applied within this structure.
- Updated costs for parcels with constraints. The updated constraints information was incorporated within the Model with associated development cost increases applied to these parcels.

Costs and Prices Applied within the Model

The following tables contain the updated cost and price range information applied within the Model. Further detailed technical information on the application of costs and prices is included within the 2021 HBA Technical Report.

Table 1 contains the ranges of dwelling construction costs (excluding GST and finance) that are applied on a per m2 basis to the gross floor area of each dwelling constructed. The construction cost rates (per m2) vary by dwelling size within each typology, with smaller dwellings generally having higher constructions costs within each range.

Further cost increases (in addition to the base rates contained within the table) are applied to dwellings constructed on parcels[160] that experience constraints to reflect the additional construction costs to mitigate the constraint. These include the following constraints:

[159] This updated initially occurred during the PC9 intensification and FDS modelling in response to consultation with MfE/MHUD. It was further applied within the updated HBA and adapted where appropriate to reflect the final updated provisions and current market development patterns.

[160] Maps showing parcels subject to each constraint are contained within the 2021 HBA Technical Report.

- Airport noise contour areas.
- Fault line parcels.
- Landslide risk area parcels.
- Soft ground areas.
- Water body areas and parcels subject to flooding (beyond those excluded from development).

Table 1 - Base Dwelling Construction Cost Ranges per m2

	Lower Quality		Medium Quality		Higher Quality	
Dwelling Typology	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Detached Dwellings	$ 2,200	$ 2,950	$ 2,600	$ 3,450	$ 2,850	$ 6,600
Attached Dwellings	$ 2,200	$ 2,950	$ 2,600	$ 3,450	$ 2,850	$ 6,600
Terraced Dwellings	$ 2,250	$ 3,750	$ 2,650	$ 4,400	$ 2,950	$ 6,800
Lowrise Apartments	$ 3,300	$ 4,800	$ 3,600	$ 5,200	$ 3,600	$ 8,300
Highrise Apartments			$ 4,050	$ 8,200		

A range of other site preparation and other ancillary development costs are applied in the modelling, which include:

- Resource consent fees.
- Building consent fees.
- Council development contributions.
- Utilities connections.
- Professional services associated with the development and sales process.
- Landscaping, site preparation and driveway/parking area costs.

The above costs follow the same calculation structure as described in the 2021 HBA Technical Report. Costs that are calculated as a proportion of construction costs or total dwelling value correspondingly increase on a proportional basis with the increases applied to these components. Development contribution costs have been updated in line with the Rotorua Development Contributions Policy.

Table 2 shows the ranges of combined updated other site preparation and ancillary development costs applied in the modelling (excluding GST and including finance)[161]. These are based on ranges extracted from the short to medium term modelled scenario, and are therefore in 2023 current prices. Part of the higher average per dwelling cost for higher density apartments occurs due to higher costs for car parking spaces.

Table 2 - Other Development Costs Ranges by Dwelling Typology

[161] It is noted that there is also an allowance within the building construction costs for other ancillary costs, which occurs in addition to the costs included within Table 2.

Dwelling Typology	Lower Quartile	Average	Upper Quartile
Detached Dwellings	$ 93,000	$ 103,000	$ 110,000
Attached Dwellings	$ 87,000	$ 98,000	$ 103,000
Terraced Dwellings	$ 68,000	$ 82,000	$ 78,000
Lowrise Apartments	$ 62,000	$ 79,000	$ 78,000
Highrise Apartments	$ 123,000	$ 133,000	$ 143,000

Table 3 contains the modelled dwelling sales price distribution applied in the short to medium term current prices modelling by dwelling typology.

Table 3 - Dwellings by Modelled Sales Price (2023)

	INFILL CAPACITY						REDEVELOPMENT CAPACITY							GREENFIELD CAPACITY						Total
Dwelling Value Band	Detached	Attached /Duplex	Attached /Terraced	Lowrise Apartments	Higher Density Apartments	Max Infill	Detached	Attached /Duplex	Attached /Terraced	Lowrise Apartments	Higher Density Apartments	Max Redevelopment	Max Infill or Redevelopment	Detached	Attached /Duplex	Attached /Terraced	Lowrise Apartments	Higher Density Apartments	Max Greenfield	Max Existing Urban + Greenfie
Up to $200k	1%	1%	1%	51%	0%	20%	0%	0%	0%	58%	0%	41%	41%	0%	0%	0%	11%	0%	11%	**40%**
$200k to $300k	0%	0%	0%	26%	0%	10%	0%	0%	0%	21%	1%	15%	15%	0%	0%	0%	76%	0%	74%	**18%**
$300k to $400k	1%	9%	11%	18%	23%	9%	1%	7%	6%	16%	31%	19%	19%	0%	11%	11%	12%	0%	12%	**18%**
$400k to $500k	6%	4%	12%	1%	4%	5%	5%	5%	15%	0%	16%	5%	5%	0%	0%	0%	0%	0%	0%	**4%**
$500k to $600k	1%	7%	11%	1%	30%	7%	2%	10%	7%	2%	42%	11%	11%	11%	0%	0%	0%	0%	0%	**10%**
$600k to $700k	6%	18%	27%	3%	10%	13%	5%	23%	28%	1%	2%	2%	2%	0%	0%	0%	0%	0%	0%	**2%**
$700k to $800k	12%	27%	10%	0%	33%	9%	14%	23%	10%	0%	7%	3%	3%	1%	76%	76%	0%	0%	1%	**3%**
$800k to $900k	20%	16%	10%	0%	0%	8%	23%	12%	13%	1%	0%	1%	1%	0%	1%	0%	0%	0%	0%	**1%**
$900k to $1m	21%	7%	2%	0%	0%	5%	22%	11%	2%	0%	0%	0%	1%	0%	12%	0%	0%	0%	0%	**1%**
$1m to $1.1m	11%	9%	2%	0%	0%	4%	7%	8%	2%	0%	0%	0%	0%	73%	0%	12%	0%	0%	0%	**0%**
$1.1m to $1.2m	8%	1%	7%	0%	0%	3%	7%	0%	10%	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	**1%**
$1.2m to $1.3m	8%	0%	4%	0%	0%	3%	11%	0%	4%	0%	0%	0%	0%	12%	0%	0%	0%	0%	0%	**0%**
$1.3m to $1.4m	3%	0%	2%	0%	0%	1%	1%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
$1.4m to $1.5m	2%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	1%	**0%**
$1.5m to $1.6m	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
$1.6m to $1.7m	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
$1.7m to $1.8m	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
$1.8m to $1.9m	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
$1.9m to $2m	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
$2m+	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**0%**	**100%**	**100%**

Source: M.E Rotorua Residential Capacity Model, 2024.

Appendix 7 – Detail Commercially Feasible Capacity Outputs

This appendix contains the full commercially feasible capacity output tables that are summarised within the main body of the report. The tables show the net additional dwellings enabled and commercially feasible within each typology, development pathway and location type in each reporting area. The structure of these attributes is set out in Section 5.1.

Table 1 – Modelled Commercially Feasible Capacity (Net Additional Dwellings) in Rotorua's Urban Environment: Short-Medium Term – No Infrastructure Constraints Applied

Reporting Area	Location Type	INFILL CAPACITY						REDEVELOPMENT CAPACITY							GREENFIELD CAPACITY						Total Max Existing Urban + Greenfield
		Detached	Attached/Duplex	Attached/Terraced	Lowrise Apartments	Higher Density Apartments	Max Infill	Detached	Attached/Duplex	Attached/Terraced	Lowrise Apartments	Higher Density Apartments	Max Redevelopment	Max Infill or Redevelopment	Detached	Attached/Duplex	Attached/Terraced	Lowrise Apartments	Higher Density Apartments	Max Greenfield	
Ngongotahā	Brownfield	1,400	1,300	200	60	-	1,800	800	200	100	-	-	900	2,400	-	-	-	-	-	-	**2,400**
Ngongotahā	Underutilised Urban Land	100	100	-	-	-	200	400	30	-	-	-	400	400	-	-	-	-	-	-	**400**
Ngongotahā	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ngongotahā	***Total***	***1,600***	***1,400***	***200***	***60***	***-***	***2,000***	***1,200***	***200***	***100***	***-***	***-***	***1,300***	***2,800***	***-***	***-***	***-***	***-***	***-***	***-***	***2,800***
Western	Brownfield	9,400	7,300	2,900	10	-	12,000	4,300	1,700	900	-	-	5,000	14,700	-	-	-	-	-	-	**14,700**
Western	Underutilised Urban Land	500	700	300	-	-	800	600	300	200	-	-	800	900	-	-	-	-	-	-	**900**
Western	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	2,000	3,100	2,900	-	-	3,800	**3,800**
Western	***Total***	***9,900***	***8,000***	***3,200***	***10***	***-***	***12,800***	***5,000***	***2,000***	***1,100***	***-***	***-***	***5,800***	***15,500***	***2,000***	***3,100***	***2,900***	***-***	***-***	***3,800***	***19,300***
Central	Brownfield	1,500	1,300	1,100	-	-	2,200	700	200	900	-	-	1,500	3,200	-	-	-	-	-	-	**3,200**
Central	Underutilised Urban Land	60	70	100	-	-	100	60	70	100	-	-	100	100	-	-	-	-	-	-	**100**
Central	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central	***Total***	***1,500***	***1,300***	***1,200***	***-***	***-***	***2,400***	***800***	***300***	***1,000***	***-***	***-***	***1,600***	***3,300***	***-***	***-***	***-***	***-***	***-***	***-***	***3,300***
Eastern	Brownfield	2,700	2,100	1,100	-	-	3,500	1,600	500	500	-	-	1,900	4,700	-	-	-	-	-	-	**4,700**
Eastern	Underutilised Urban Land	500	600	100	-	-	700	800	800	-	-	-	1,100	1,100	-	-	-	-	-	-	**1,100**
Eastern	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	2,300	3,400	4,300	-	-	4,500	**4,500**
Eastern	***Total***	***3,100***	***2,700***	***1,200***	***-***	***-***	***4,200***	***2,400***	***1,300***	***500***	***-***	***-***	***2,900***	***5,800***	***2,300***	***3,400***	***4,300***	***-***	***-***	***4,500***	***10,300***
Total	Brownfield	15,000	11,900	5,400	70	-	19,600	7,500	2,600	2,400	-	-	9,200	24,900	-	-	-	-	-	-	24,900
Total	Underutilised Urban Land	1,200	1,500	500	-	-	1,800	1,900	1,100	300	-	-	2,400	2,500	-	-	-	-	-	-	2,500
Total	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	4,400	6,500	7,100	-	-	8,300	8,300
Total	**Total**	**16,200**	**13,400**	**5,900**	**70**	**-**	**21,400**	**9,400**	**3,700**	**2,800**	**-**	**-**	**11,600**	**27,400**	**4,400**	**6,500**	**7,100**	**-**	**-**	**8,300**	**35,700**

Source: M.E Rotorua Residential Capacity Model, 2024.

Table 2 - Modelled Commercially Feasible Capacity (Net Additional Dwellings) in Rotorua's Urban Environment: Long Term (Market Growth Scenario) – No Infrastructure Constraints Applied

Reporting Area	Location Type	INFILL CAPACITY						REDEVELOPMENT CAPACITY							GREENFIELD CAPACITY						Total Max Existing Urban + Greenfield
		Detached	Attached/Duplex	Attached/Terraced	Lowrise Apartments	Higher Density Apartments	Max Infill	Detached	Attached/Duplex	Attached/Terraced	Lowrise Apartments	Higher Density Apartments	Max Redevelopment	Max Infill or Redevelopment	Detached	Attached/Duplex	Attached/Terraced	Lowrise Apartments	Higher Density Apartments	Max Greenfield	
Ngongotahā	Brownfield	1,600	1,600	1,800	200	-	2,600	3,300	4,200	2,800	900	-	5,800	6,100	-	-	-	-	-	-	**6,100**
Ngongotahā	Underutilised Urban Land	100	200	300	-	-	300	400	600	700	-	-	800	800	-	-	-	-	-	-	**800**
Ngongotahā	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	2,700	4,100	5,400	-	-	5,500	**5,500**
Ngongotahā	***Total***	***1,700***	***1,800***	***2,100***	***200***	***-***	***2,800***	***3,700***	***4,800***	***3,500***	***900***	***-***	***6,600***	***6,900***	***2,700***	***4,100***	***5,400***	***-***	***-***	***5,500***	***12,300***
Western	Brownfield	9,600	9,700	8,400	300	-	14,500	17,000	21,900	13,900	700	-	28,500	30,400	-	-	-	-	-	-	**30,400**
Western	Underutilised Urban Land	600	800	1,100	-	-	1,100	600	900	1,200	-	-	1,300	1,300	-	-	-	-	-	-	**1,300**
Western	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	3,300	5,000	6,700	-	-	6,700	**6,700**
Western	***Total***	***10,200***	***10,500***	***9,500***	***300***	***-***	***15,500***	***17,700***	***22,900***	***15,200***	***700***	***-***	***29,700***	***31,600***	***3,300***	***5,000***	***6,700***	***-***	***-***	***6,700***	***38,300***
Central	Brownfield	1,500	1,300	1,300	50	800	3,100	2,700	3,900	6,400	1,000	3,500	11,100	11,200	-	-	-	-	-	-	**11,200**
Central	Underutilised Urban Land	60	70	100	90	-	100	60	70	100	90	-	100	100	-	-	-	-	-	-	**100**
Central	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**-**
Central	***Total***	***1,500***	***1,400***	***1,400***	***100***	***800***	***3,200***	***2,700***	***4,000***	***6,500***	***1,000***	***3,500***	***11,200***	***11,300***	***-***	***-***	***-***	***-***	***-***	***-***	***11,300***
Eastern	Brownfield	2,800	2,500	2,500	100	-	4,200	5,300	6,700	7,100	500	-	10,000	10,700	-	-	-	-	-	-	**10,700**
Eastern	Underutilised Urban Land	500	700	1,100	-	-	1,100	1,100	1,500	2,100	20	-	2,100	2,100	-	-	-	-	-	-	**2,100**
Eastern	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	2,500	3,500	4,600	-	-	4,800	**4,800**
Eastern	***Total***	***3,300***	***3,200***	***3,600***	***100***	***-***	***5,300***	***6,500***	***8,200***	***9,200***	***500***	***-***	***12,200***	***12,800***	***2,500***	***3,500***	***4,600***	***-***	***-***	***4,800***	***17,600***
Total	Brownfield	15,500	15,100	14,000	600	800	24,300	28,300	36,700	30,300	3,100	3,500	55,400	58,300	-	-	-	-	-	-	58,300
Total	Underutilised Urban Land	1,300	1,800	2,500	90	-	2,500	2,200	3,100	4,100	100	-	4,300	4,300	-	-	-	-	-	-	4,300
Total	Greenfield	-	-	-	-	-	-	-	-	-	-	-	-	-	8,500	12,500	16,700	-	-	16,900	16,900
Total	**Total**	**16,700**	**16,900**	**16,500**	**700**	**800**	**26,900**	**30,500**	**39,800**	**34,400**	**3,200**	**3,500**	**59,700**	**62,700**	**8,500**	**12,500**	**16,700**	**-**	**-**	**16,900**	**79,600**

Source: M.E Rotorua Residential Capacity Model, 2024.

Appendix 8 – RER Capacity Modelled Parameters

This appendix contains the ranges applied within the Model to estimate RER capacity across Rotorua's current and future urban environment.

The table below contains the development patterns applied to the vacant lot structure in each zone and reporting area. These ranges are applied to larger UUL and greenfield parcels that are divided up to form multiple vacant lots.

The table shows the shares of initially formed vacant lots that are developed to contain each dwelling typology. Proportions of vacant lots are only allocated to dwelling typologies that are modelled to be feasible within each area. For instance, 10% of vacant lots are allocated to terraced housing in the Central reporting area Medium Density Zone on parcels where this typology is estimated to be feasible.

Each vacant lot is then assumed to develop into a dwelling typology. Vacant lots allocated to detached dwellings are assumed to develop to contain one dwelling per lot, with multiple dwellings constructed on *each lot developed to contain attached dwellings.*

Table 1 – Shares of Vacant Lots Developed into Each Dwelling Typology: UUL and Greenfield Feasible Areas

Zone	Reporting Area	Dwelling Typology				
		Detached	Attached	Terrace	Lowrise	Highrise
Residential 1/Medium Density Zone	Central	64% to 100%	Up to 20%	Up to 10%	Up to 5%	
	Ngongotaha	82% to 100%	Up to 10%	Up to 5%	Up to 2%	
	Western					
	Eastern					
Residential 2/High Density Zone	Central	20% to 100%	Up to 50%	Up to 25%	Up to 10%	Up to 5%
	Western	63% to 100%	Up to 25%	Up to 10%	Up to 5%	Up to 2%
	Ngongotaha	63% to 100%	Up to 20%	Up to 10%	Up to 5%	Up to 2%
	Eastern					

Source: M.E Rotorua Residential Capacity Model, 2024.

Appendix 9 – Demand for Floorspace in Urban Business Zones

The first table below provides the national average floorspace and land ratios per person employed that have been relied on for business demand modelling in this (and the 2021) HBA. The following table and graphs show the results of projected future demand for urban business zones by building/land use typology and category in terms of floorspace (sqm GFA). These should be viewed in conjunction with the land area demand results discussed in Section 12.

Table 1 – Employment to Building / Land Use GFA and Land Conversions

	Floorspace per Person Employed (sqm)			Land per Person Employed (sqm)		
	Min	Max	In Use	Min	Max	In Use
Office---Commercial	13	100	20	13	100	30
Office---Retail	20	100	27	20	100	45
Shops---Commercial	10	100	27	10	100	50
Shops---Food and Beverage	15	100	47	15	200	85
Accommodation	15	200	100	15	400	200
Ware house	100	200	167	100	600	350
Factory	80	200	138	80	500	265
Yard---Commercial	50	150	85	100	350	190
Yard---Industrial	50	150	100	100	350	265
Other Built---Commercial	20	120	60	20	500	120
Other Built---Industrial	20	120	60	20	500	120
Education	30	100	60	50	500	167
Outdoor---Commercial	10	100	20	10	1000	50
Outdoor---Industrial	10	100	20	10	1000	50

Source: M.E (based on data developed/analysed for Auckland)

Persons employed based on modified employee count (MEC) 2016, M.E.

Table 1 is based on national level research carried by M.E, as part of the same study that allocated employment in each industry to land use/building typologies. Diversity of space and land needs on a business-by-business basis result in wide variations between the maximums and minimums in this table. For the most part averages have been used for the modelling (refer 'in use' column). These ratios suggest, for example, that an estimated 20sqm of commercial office building floorspace (measured in GFA) is required for every worker, or conversely, an estimated 30sqm of land (developable not gross). For every worker in the accommodation sector, an estimated 100sqm of GFA is required and an estimated 200sqm of land is needed. The ratios are assumed to apply equally over the whole district, including in urban business zones, and are assumed to hold constant over time.

Table 2 - Projected Floorspace Demand in Urban Business Zones by Land Use Typology and Category 2023-2053 (Without and With Margin) (sqm GFA)

Category	Land Use / Building Type	Gross Floor Area Demand (sqm)					
		Cumulative			Cumulative with Competitiveness Margin		
		2023-2026 Short Term	2023-2033 Medium Term	2023-2053 Long Term	2023-2026 Short Term	2023-2033 Medium Term	2023-2053 Long Term
Retail	Shops-Commercial	9,000	20,900	34,800	10,800	25,100	41,100
	Shops-Food and Beverage	12,600	17,000	22,000	15,100	20,400	26,200
	Total Retail	**21,600**	**37,900**	**56,800**	**25,900**	**45,500**	**67,300**
Commercial	Office-Commercial	-	5,300	20,600	-	6,400	24,000
	Office-Retail	-	300	900	-	400	1,100
	Yard-Commercial	1,100	1,800	1,900	1,300	2,100	2,200
	Other Built-Commercial	16,600	47,200	120,900	19,900	56,600	141,400
	Education	6,100	12,200	23,100	7,300	14,600	27,100
	Outdoor-Commercial	500	1,000	2,000	600	1,200	2,400
	Total Commercial	**24,300**	**67,800**	**169,400**	**29,100**	**81,300**	**198,200**
Accommodation	**Total Accommodation**	**22,400**	**30,200**	**39,100**	**26,900**	**36,300**	**46,500**
Industrial	Warehouse	28,900	49,700	56,700	34,700	59,700	67,800
	Factory	10,400	27,800	70,100	12,500	33,400	82,000
	Yard-Industrial	16,100	23,400	30,700	19,300	28,100	36,500
	Other Built-Industrial	3,500	4,800	3,500	4,200	5,800	4,300
	Outdoor-Industrial	-	-	-	-	-	-
	Total Industrial	**58,900**	**105,700**	**161,000**	**70,700**	**127,000**	**190,600**
Total Urban Business Zone Demand Growth (sqm)		127,200	241,600	426,300	152,600	290,100	502,600

Source: M.E Rotorua Urban Business Land Demand Model (HBA 2024). GFA rounded to nearest hundred. Negative Office Commercial Employment has not been equated with negative demand for land in the short term to avoid this reducing the net total for the Commercial Category (as office land is typically not substitutable for other types of commercial land use). Medium and long term Office Commercial land demand retains a net growth approach.

Projected demand within business enabled zones in defined urban environment only (as defined by SA1 2018)

Figure 1 - Projected Floorspace Demand in Urban Business Zones by Category 2023-2053 (No Margin) (sqm GFA)

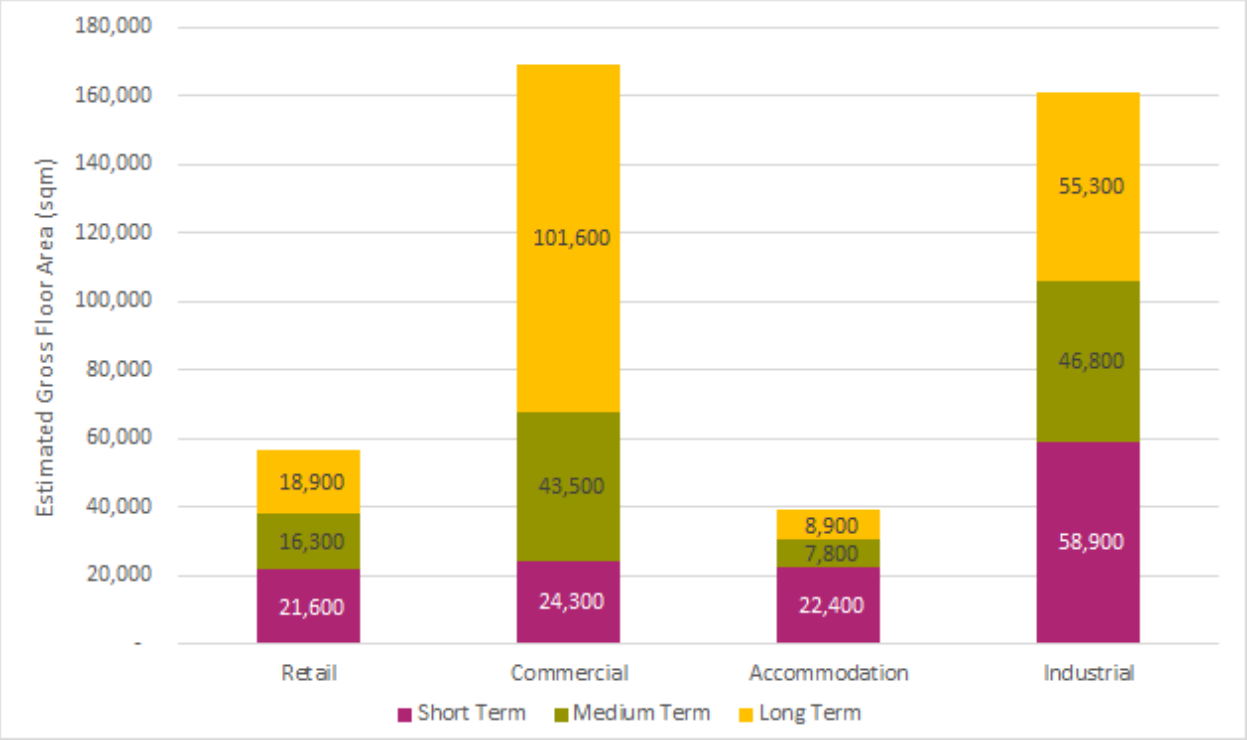
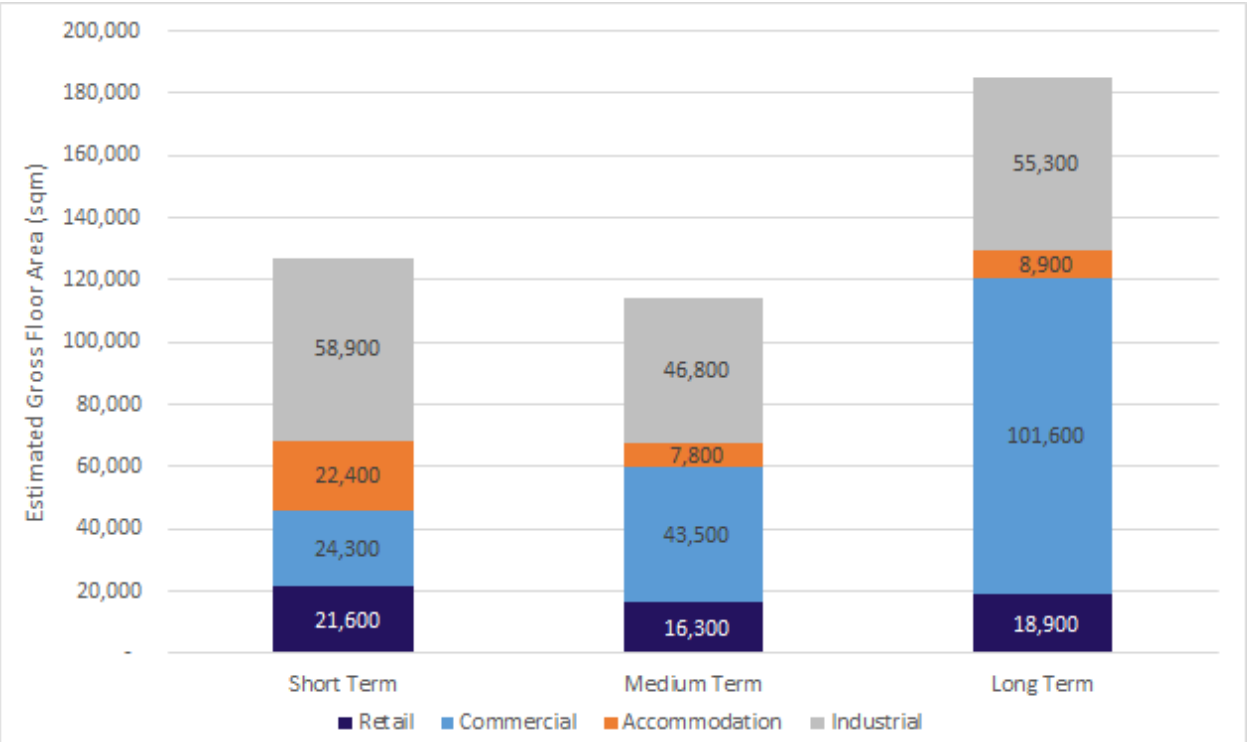


Figure 2 - Projected Floorspace Demand in Urban Business Zones by Period 2023-2053 (No Margin) (sqm GFA)



Appendix 10 – Vacant Land Floorspace Capacity in Urban Business Zones

The following tables show the results of development capacity (on net developable vacant land) in urban business zones by zone and category in terms of floorspace (sqm GFA). These should be viewed in conjunction with the land area capacity results discussed in Section 13.

Table 1 - Short & Medium Term Business Floorspace Capacity by Category and Zone (sqm) – Maximum Capacity Scenario

Business Zone	Zone Description	Developable Floorspace on Vacant Land by Land Use Category (sqm GFA)			
		Commercial	Retail	Industrial	Accommo-dation
City Centre 1 Zone	Mid City	18,300	4,600	-	18,300
City Centre 2 Zone	Southern Edge	-	-	-	-
City Centre 3 Zone	Northern Edge	50,400	16,800	-	50,400
Commercial 1 Zone	Ngongotahā Centre	-	-	-	-
Commercial 2 Zone	Compact Commercial Centres	1,000	500	500	-
Commercial 3 Zone	Neighbourhood Centres	34,500	23,000	-	-
Commercial 4 Zone	City Entranceway Accommodation	-	-	-	73,400
Commercial 5 Zone	City Entranceway Tourism	-	-	-	-
Commercial 6 Zone	Trade Central	-	-	-	-
Industrial 1 Zone	Light Industrial	120,600	68,200	68,200	-
Industrial 1E Zone	City Entranceway Mixed Use	39,900	23,100	23,100	-
Industrial 2 Zone	Heavy Industrial	12,900	8,600	8,600	-
Industrial Transitional Zone **	Future Light Industrial	-	-	-	-
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	86,500	34,600	34,600	-
PC 2 Commercial Precinct	Pukehangi Plan Change	5,600	3,800	-	-
Total Urban Environment		369,700	183,200	135,000	142,100

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only.*

Maximum Capacity Scenario (Includes Overlap of Capacity Between Enabled Categories)

Table 2 - Long Term Business Floorspace Capacity by Category and Zone (sqm) – Maximum Capacity Scenario

Business Zone	Zone Description	Developable Floorspace on Vacant Land by Land Use Category (sqm GFA)			
		Commercial	Retail	Industrial	Accommo-dation
City Centre 1 Zone	Mid City	18,300	4,600	-	18,300
City Centre 2 Zone	Southern Edge	-	-	-	-
City Centre 3 Zone	Northern Edge	50,400	16,800	-	50,400
Commercial 1 Zone	Ngongotahā Centre	-	-	-	-
Commercial 2 Zone	Compact Commercial Centres	1,000	500	500	-
Commercial 3 Zone	Neighbourhood Centres	7,400	5,000	-	-
Commercial 4 Zone	City Entranceway Accommodation	-	-	-	73,400
Commercial 5 Zone	City Entranceway Tourism	62,900	41,900	-	-
Commercial 6 Zone	Trade Central	-	-	-	-
Industrial 1 Zone	Light Industrial	1,164,800	633,100	633,100	-
Industrial 1E Zone	City Entranceway Mixed Use	39,900	23,100	23,100	-
Industrial 2 Zone	Heavy Industrial	12,900	8,600	8,600	-
Industrial Transitional Zone **	Future Light Industrial	9,200	6,100	6,100	-
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	86,500	34,600	34,600	-
PC 2 Commercial Precinct	Pukehangi Plan Change	5,600	3,800	-	-
Total Urban Environment		1,458,900	778,100	706,100	142,100

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only.*
Maximum Capacity Scenario (Includes Overlap of Capacity Between Enabled Categories)

Table 3 - Short & Medium Term Business Floorspace Capacity by Category and Zone (sqm) – Alternative Capacity Scenario

Business Zone	Zone Description	Developable Floorspace on Vacant Land by Land Use Category (sqm GFA)			
		Commercial	Retail	Industrial	Accommo-dation
City Centre 1 Zone	Mid City	11,800	2,200	-	4,400
City Centre 2 Zone	Southern Edge	-	-	-	-
City Centre 3 Zone	Northern Edge	30,200	-	-	20,200
Commercial 1 Zone	Ngongotahā Centre	-	-	-	-
Commercial 2 Zone	Compact Commercial Centres	800	300	-	-
Commercial 3 Zone	Neighbourhood Centres	18,400	16,100	-	-
Commercial 4 Zone	City Entranceway Accommodation	-	-	-	73,400
Commercial 5 Zone	City Entranceway Tourism	-	-	-	-
Commercial 6 Zone	Trade Central	-	-	-	-
Industrial 1 Zone	Light Industrial	17,300	6,800	54,500	-
Industrial 1E Zone	City Entranceway Mixed Use	18,900	7,700	7,700	-
Industrial 2 Zone	Heavy Industrial	-	-	8,600	-
Industrial Transitional Zone **	Future Light Industrial	-	-	-	-
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	31,100	3,500	20,800	-
PC 2 Commercial Precinct	Pukehangi Plan Change	3,000	2,600	-	-
Total Urban Environment		131,500	39,200	91,600	97,900

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only.*
Alternative Capacity Scenario (Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)

Table 4 - Long Term Business Floorspace Capacity by Category and Zone (sqm) – Alternative Capacity Scenario

Business Zone	Zone Description	Developable Floorspace on Vacant Land by Land Use Category (sqm GFA)			
		Commercial	Retail	Industrial	Accommo-dation
City Centre 1 Zone	Mid City	11,800	2,200	-	4,400
City Centre 2 Zone	Southern Edge	-	-	-	-
City Centre 3 Zone	Northern Edge	30,200	-	-	20,200
Commercial 1 Zone	Ngongotahā Centre	-	-	-	-
Commercial 2 Zone	Compact Commercial Centres	800	300	-	-
Commercial 3 Zone	Neighbourhood Centres	4,000	3,500	-	-
Commercial 4 Zone	City Entranceway Accommodation	-	-	-	73,400
Commercial 5 Zone	City Entranceway Tourism	60,800	2,100	-	-
Commercial 6 Zone	Trade Central	-	-	-	-
Industrial 1 Zone	Light Industrial	169,600	63,300	506,500	-
Industrial 1E Zone	City Entranceway Mixed Use	18,900	7,700	7,700	-
Industrial 2 Zone	Heavy Industrial	-	-	8,600	-
Industrial Transitional Zone **	Future Light Industrial	1,200	600	4,900	-
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	31,100	3,500	20,800	-
PC 2 Commercial Precinct	Pukehangi Plan Change	3,000	2,600	-	-
Total Urban Environment		331,400	85,700	548,500	97,900

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only. Alternative Capacity Scenario (Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)*

Table 5 - Short & Medium Term Business Floorspace Capacity by Category and Zone (sqm) – Alternative Conservative Capacity Scenario

Business Zone	Zone Description	Developable Floorspace on Vacant Land by Land Use Category (sqm GFA)			
		Commercial	Retail	Industrial	Accommo-dation
City Centre 1 Zone	Mid City	11,800	2,200	-	4,400
City Centre 2 Zone	Southern Edge	-	-	-	-
City Centre 3 Zone	Northern Edge	18,800	-	-	12,500
Commercial 1 Zone	Ngongotahā Centre	-	-	-	-
Commercial 2 Zone	Compact Commercial Centres	-	-	-	-
Commercial 3 Zone	Neighbourhood Centres	-	-	-	-
Commercial 4 Zone	City Entranceway Accommodation	-	-	-	71,000
Commercial 5 Zone	City Entranceway Tourism	-	-	-	-
Commercial 6 Zone	Trade Central	-	-	-	-
Industrial 1 Zone	Light Industrial	7,800	3,100	25,100	-
Industrial 1E Zone	City Entranceway Mixed Use	1,400	500	500	-
Industrial 2 Zone	Heavy Industrial	-	-	5,900	-
Industrial Transitional Zone **	Future Light Industrial	-	-	-	-
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	31,100	3,500	20,800	-
PC 2 Commercial Precinct	Pukehangi Plan Change	3,000	2,600	-	-
Total Urban Environment		73,900	11,900	52,200	87,900

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only. Alternative Conservative Capacity Scenario (Excludes vacant Maori Land. Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)*

Table 6 - Long Term Business Floorspace Capacity by Category and Zone (sqm) – Alternative Conservative Capacity Scenario

Business Zone	Zone Description	Developable Floorspace on Vacant Land by Land Use Category (sqm GFA)			
		Commercial	Retail	Industrial	Accommo-dation
City Centre 1 Zone	Mid City	11,800	2,200	-	4,400
City Centre 2 Zone	Southern Edge	-	-	-	-
City Centre 3 Zone	Northern Edge	18,800	-	-	12,500
Commercial 1 Zone	Ngongotahā Centre	-	-	-	-
Commercial 2 Zone	Compact Commercial Centres	-	-	-	-
Commercial 3 Zone	Neighbourhood Centres	-	-	-	-
Commercial 4 Zone	City Entranceway Accommodation	-	-	-	71,000
Commercial 5 Zone	City Entranceway Tourism	42,600	1,500	-	-
Commercial 6 Zone	Trade Central	-	-	-	-
Industrial 1 Zone	Light Industrial	130,900	45,300	362,700	-
Industrial 1E Zone	City Entranceway Mixed Use	1,400	500	500	-
Industrial 2 Zone	Heavy Industrial	-	-	5,900	-
Industrial Transitional Zone **	Future Light Industrial	1,200	600	4,900	-
Business and Innovation 1 Zone *	Scion Business Park	-	-	-	-
Business and Innovation 2 Zone *	Waipa Business Park	-	-	-	-
Business and Innovation 3 Zone	Eastgate Business Park	31,100	3,500	20,800	-
PC 2 Commercial Precinct	Pukehangi Plan Change	3,000	2,600	-	-
Total Urban Environment		240,900	56,200	394,700	87,900

Source: M.E Business Capacity Model 2024

** Assumed no vacant capacity for purpose of HBA. ** Long term capacity only. Alternative Conservative Capacity Scenario (Excludes vacant Maori Land. Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)*

Appendix 11 – Business Sufficiency Results Other Scenarios

Table 1 - Maximum Capacity Scenario

Category	Developable Land Demand and Capacity (ha)											
	Demand with Competitiveness Margin			Capacity (Maximum Capacity Scenario)			Sufficiency (n)			Sufficiency		
	2023-2026	2023-2033	2023-2053	2023-2026	2023-2033	2023-2053	2023-2026	2023-2033	2023-2053	2023-2026	2023-2033	2023-2053
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Retail	4.7	8.3	12.3	45.3	45.3	233.4	40.6	37.0	221.1	Sufficient	Sufficient	Sufficient
Commercial	6.5	17.2	40.7	45.3	45.3	233.4	38.9	28.1	192.7	Sufficient	Sufficient	Sufficient
Accommodation	5.4	7.2	9.3	10.4	10.4	10.4	5.0	3.1	1.1	Sufficient	Sufficient	Sufficient
Industrial	15.6	27.5	40.5	36.8	36.8	170.4	21.2	9.3	129.9	Sufficient	Sufficient	Sufficient
Total	32.2	60.3	102.8									

Source: M.E Rotorua Urban Business Land Demand Model (HBA 2024), M.E Business Capacity Model 2024.
Projected demand within business enabled zones in defined urban environment only (as defined by SA1 2018)

Maximum Capacity Scenario (Includes Overlap of Capacity Between Enabled Categories)

Category	Floorspace Demand and Capacity (sqm GFA)											
	Demand with Competitiveness Margin			Capacity (Maximum Capacity Scenario)			Sufficiency (n)			Sufficiency		
	2020-2023	2020-2030	2020-2050	2020-2023	2024-2030	2031-2050	2020-2023	2020-2030	2020-2050	2020-2023	2024-2030	2031-2050
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Retail	25,900	45,500	67,300	183,200	183,200	778,100	157,300	137,700	710,800	Sufficient	Sufficient	Sufficient
Commercial	29,100	81,300	198,200	369,700	369,700	1,458,900	340,600	288,400	1,260,700	Sufficient	Sufficient	Sufficient
Accommodation	26,900	36,300	46,500	142,100	142,100	142,100	115,200	105,800	95,600	Sufficient	Sufficient	Sufficient
Industrial	70,700	127,000	190,600	135,000	135,000	706,100	64,300	8,000	515,500	Sufficient	Sufficient	Sufficient
Total	152,600	290,100	502,600									

Source: M.E Rotorua Urban Business Land Demand Model (HBA 2024), M.E Business Capacity Model 2024.
Projected demand within business enabled zones in defined urban environment only (as defined by SA1 2018)

Maximum Capacity Scenario (Includes Overlap of Capacity Between Enabled Categories)

Table 2 - Alternative Capacity Scenario

Category	Developable Land Demand and Capacity (ha)											
	Demand with Competitiveness Margin			Capacity (Alternative Capacity Scenario)			Sufficiency (n)			Sufficiency		
	2023-2026	2023-2033	2023-2053	2023-2026	2023-2033	2023-2053	2023-2026	2023-2033	2023-2053	2023-2026	2023-2033	2023-2053
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Retail	4.7	8.3	12.3	8.3	8.3	22.1	3.6	-0.01	9.7	Sufficient	Insufficient	Sufficient
Commercial	6.5	17.2	40.7	15.4	15.4	83.2	8.9	-1.9	42.5	Sufficient	Insufficient	Sufficient
Accommodation	5.4	7.2	9.3	8.6	8.6	8.6	3.3	1.4	-0.7	Sufficient	Sufficient	Insufficient
Industrial	15.6	27.5	40.5	27.1	27.1	134.0	11.5	-0.4	93.6	Sufficient	Insufficient	Sufficient
Total	32.2	60.3	102.8									

Source: M.E Rotorua Urban Business Land Demand Model (HBA 2024), M.E Business Capacity Model 2024.
Projected demand within business enabled zones in defined urban environment only (as defined by SA1 2018)

Alternative Capacity Scenario (Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)

Category	Floorspace Demand and Capacity (sqm GFA)											
	Demand with Competitiveness Margin			Capacity (Alternative Capacity Scenario)			Sufficiency (n)			Sufficiency		
	2020-2023	2020-2030	2020-2050	2020-2023	2024-2030	2031-2050	2020-2023	2020-2030	2020-2050	2020-2023	2024-2030	2031-2050
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Retail	25,900	45,500	67,300	39,200	39,200	85,700	13,300	-6,300	18,400	Sufficient	Insufficient	Sufficient
Commercial	29,100	81,300	198,200	131,500	131,500	331,400	102,400	50,200	133,200	Sufficient	Sufficient	Sufficient
Accommodation	26,900	36,300	46,500	97,900	97,900	97,900	71,000	61,600	51,400	Sufficient	Sufficient	Sufficient
Industrial	70,700	127,000	190,600	91,600	91,600	548,500	20,900	-35,400	357,900	Sufficient	Insufficient	Sufficient
Total	152,600	290,100	502,600									

Source: M.E Rotorua Urban Business Land Demand Model (HBA 2024), M.E Business Capacity Model 2024.
Projected demand within business enabled zones in defined urban environment only (as defined by SA1 2018)

Alternative Capacity Scenario (Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)

Table 3 - Alternative Conservative Capacity Scenario

Category	Developable Land Demand and Capacity (ha)											
	Demand with Competitiveness Margin			Capacity (Alternative Capacity Scenario)			Sufficiency (n)			Sufficiency		
	2023-2026	2023-2033	2023-2053	2023-2026	2023-2033	2023-2053	2023-2026	2023-2033	2023-2053	2023-2026	2023-2033	2023-2053
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Retail	4.7	8.3	12.3	2.2	2.2	14.3	-2.5	-6.12	1.9	Insufficient	Insufficient	Sufficient
Commercial	6.5	17.2	40.7	5.1	5.1	55.8	-1.4	-12.2	15.1	Insufficient	Insufficient	Sufficient
Accommodation	5.4	7.2	9.3	8.0	8.0	8.0	2.6	0.7	-1.3	Sufficient	Sufficient	Insufficient
Industrial	15.6	27.5	40.5	15.4	15.4	95.5	-0.2	-12.1	55.1	Insufficient	Insufficient	Sufficient
Total	32.2	60.3	102.8									

Source: M.E Rotorua Urban Business Land Demand Model (HBA 2024), M.E Business Capacity Model 2024.
Projected demand within business enabled zones in defined urban environment only (as defined by SA1 2018)

Alternative Conservative Capacity Scenario (Excludes vacant Maori Land. Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)

Category	Floorspace Demand and Capacity (sqm GFA)											
	Demand with Competitiveness Margin			Capacity (Alternative Capacity Scenario)			Sufficiency (n)			Sufficiency		
	2020-2023	2020-2030	2020-2050	2020-2023	2024-2030	2031-2050	2020-2023	2020-2030	2020-2050	2020-2023	2024-2030	2031-2050
	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term	Short Term	Medium Term	Long Term
Retail	25,900	45,500	67,300	11,900	11,900	56,200	-14,000	-33,600	-11,100	Insufficient	Insufficient	Insufficient
Commercial	29,100	81,300	198,200	73,900	73,900	240,900	44,800	-7,400	42,700	Sufficient	Insufficient	Sufficient
Accommodation	26,900	36,300	46,500	87,900	87,900	87,900	61,000	51,600	41,400	Sufficient	Sufficient	Sufficient
Industrial	70,700	127,000	190,600	52,200	52,200	394,700	-18,500	-74,800	204,100	Insufficient	Insufficient	Sufficient
Total	152,600	290,100	502,600									

Source: M.E Rotorua Urban Business Land Demand Model (HBA 2024), M.E Business Capacity Model 2024.
Projected demand within business enabled zones in defined urban environment only (as defined by SA1 2018)

Alternative Conservative Capacity Scenario (Excludes vacant Maori Land. Excludes floorspace overlap of capacity between enabled categories. Includes some land area overlap in certain zones to account for a change of likely use on upper floors)

Appendix 12 – Audit of HBA 2021 Recommendations

The following provides a summary of the recommendations made to Council in the HBA 2021[162] and the response/actions that Council has taken to address them.

Recommendation	Response/Action
1.Progress the intensification plan change.	PC9 was notified in August 2022 and become operative in March 2024.
2. Pursue options to rezone Fenton Street to a more intensive mixed use zoning.	PC9 has increased the building height of the Commercial 4 zone along Fenton Street and made high density housing more enabling.
3. Ensure that the Spatial Plan growth areas in Ngongotahā are included in three waters network expansion planning.	The FDS now supersedes the Spatial Plan. Long term greenfield urban housing areas in Ngongotahā have been identified in the FDS and infrastructure networks extending to these areas are timed to coincide with that long term phasing.
4. Continue to seek funding that will help alleviate stormwater constraints and allow more development capacity to be realised.	RLC secured $85 million from the Government's Infrastructure Acceleration Fund (IAF) for stormwater enabling works. The stormwater enabling works being funded from the IAF are primarily focused on community storage solutions to enable development across the central and western catchments. Practical completion of these projects is expected in 2028. RLC continue to seek additional funding for further stormwater network upgrades to serve development in Eastside and Ngongotahā in particular.
5. Consider zoning the land identified in Ngongotahā South for City Entranceway Mixed Use (or Light Industrial) so that it can provide for demand in the short-medium term.	The FDS has retained the Tamarahi land as a light industrial/logistics growth area. It has been included in the staging plan as a short-medium term priority for Council's planning and investment decision making.
6. Identify additional feasible (freehold) greenfield land to increase development capacity and help meet medium and long term demand.	The FDS has included greenfield growth areas on general tenure, fee-simple land in a range of locations across the long term urban environment.
7. Continue to support iwi/hapu to develop their residential and business zoned whenua Māori so that existing zoned land is used efficiently.	PC9 introduced more enabling density standards for papakāinga and removal of a requirement for this form of development to occur adjacent to marae. Iwi/hapu also benefit from the full range

[162] Refer Section 15.2 of the HBA 2021 Main Report.

	of PC9 provisions where they apply to zoned Whenua Māori. A number of infrastructure projects have been identified to facilitate growth in the Eastern Corridor and specifically Ngati Whakauwe's land development up Wharenui Rise. Currently underway projects include the Wharenui Road/Te Ngae Road intersections upgrade (NZTA), Porikapa Road service upgrade and shared path (RLC), Wharenui Road service upgrade (sealing) (RLC/Developer). Further upgrades of Wharenui Road have been identified but are not yet funded.
8. Continue to consider/zone Whenua Māori where it provides an appropriate location for future urban expansion.	The FDS has included greenfield growth areas for housing and business development on Whenua Māori in a range of locations across the long term urban environment. These are summarised in Map 11 of the FDS.
9. Improve the attractiveness of the CBD as a place to invest, work, shop and live to help reduce vacancies and improve the feasibility of redevelopment.	In 2021, RLC commissioned DCA Architects Ltd to carry out a review of all inner-city revitalisation initiatives developed between 2006 and 2020. The Regional Land Transport Strategy 2021-2031 includes (as part of the 10 year transport priorities): car parking supply management and charging in Rotorua to manage demand and promote mode choice. A long-term action (unfunded) in the Strategy is: Inner City Revitalisation and Improved Accessibility - Safety and accessibility improvements into and within Rotorua CBD. PC9 has made a number of changes in the CBD to encourage more feasible redevelopment and increase capacity. Council has initiated a number of targeted reports for the CBD focused on retail strategies (Colliers), and housing feasibility (Place Collective). Council's focus on the inner-city is ongoing.

Glossary of Terms

Additional Infrastructure	In accordance with the NPS-UD, additional infrastructure means public open space, community infrastructure, land transport not controlled by local authorities, social infrastructure such as schools and healthcare facilities, telecommunications networks, gas, and electricity networks.
Attached Housing	Where two or more dwellings are joined horizontally with a shared wall (i.e., duplexes or terrace housing) or vertically (i.e., apartments).
Capital Value	The value ($) of land value and improvement value combined. It is the total value of a property, as recorded in the Council's rating database.
Commercially Feasible	Means commercially viable to a developer based on the relationship between costs and revenue (i.e. is profitable)
Commercially Feasible Capacity	The share of plan enabled capacity that would be commercially viable to a developer based on the relationship between costs and revenue.
Competitiveness Margin	A margin of development capacity, over and above the expected demand that tier 1 and 2 local authorities are required to provide, that is required in order to support choice and competitiveness in housing and business land markets. The margins are 20% for the short term, 20% for the medium term and 15% for the long term.
Detached Housing	Means standalone dwelling units, not attached to other dwelling units.
Development Infrastructure	In accordance with the NPS-UD, development infrastructure means network infrastructure for water supply, wastewater, or stormwater and land transport, both of which are controlled by a local authority or council controlled organisation.
Dwelling Estate / Built Estate	Total dwellings in the district (total dwelling stock)
General Land	General land is fee-simple land that can be bought and sold by owners.
Greenfield Capacity	The yield of large, yet to be subdivided parcels of zoned land, once allowance is made for required roading, access, open space, landscaping areas (set at 30% of the gross site area for Rotorua based on feedback from Council). Greenfield capacity is located at the urban-rural boundary.
HBA	Housing and Business Development Capacity Assessment, as set out in the NPS-UD.
Improvement Value	The value ($) of any physical structures or features of a property, including buildings, fencing, landscaping, as recorded in the Council's rating database.
Infill Capacity	Development that can occur in the existing urban area on vacant subdivided lots or within existing developed lots that could be further subdivided to the meet the District

	Plan zone rules, without needing to remove or shift the existing dwelling/buildings. I.e., add one or more dwellings at the rear or front of the existing dwelling.
Infrastructure Ready	Refers to plan enabled capacity for housing or business development that is already serviced by infrastructure in the short term, has the necessary infrastructure planned for (with funding allocated) in the long term plan in the medium term, and has the necessary infrastructure identified in an infrastructure strategy in the long term.
Kāinga Ora	Officially Kāinga Ora – Homes and Communities, is a Crown agency that provides rental housing for New Zealanders in need. It has Crown entity status under the Kāinga Ora–Homes and Communities Act 2019.
Kaumātua Housing	Kaumātua / kōeke housing [147] is specifically for the accommodation of elders and is often part of a papakāinga development. Kaumātua housing has also been built in close proximity to many marae so that kaumātua can support the activities that take place on the marae. See papakāinga housing.
Land Value	The value ($) of the land (section) excluding the value of any improvements or structures on that land, as recorded in the Council's rating database.
Long Term	Between 10 and 30 years.
Medium Term	Between 3 and 10 years.
Non-owner Households	Households that do not already own a residential dwelling and may be renting a dwelling.
NPS-UD	National Policy Statement for Urban Development (2020) – national direction under the Resource Management Act.
Owner Households	Households that already own a residential dwelling (with or without a mortgage).
Papakāinga Housing	The term papakāinga can have different meanings depending on the context. For the purpose of this HBA, a papakāinga refers to a group of houses, of three or more, on whenua Māori as a 'community' which may include broader support and occupant involvement. Forms of papakāinga can include: Affordable rental housing (for rōpū Māori who wish to own and provide affordable rental housing for whānau) or Owner-occupied housing (for whānau who wish to live in a papakāinga where the homes will be owned and occupied by whānau, generally with a Māori Land Court registered Licence to Occupy. Whānau will borrow/finance the house construction themselves).
Plan Enabled Capacity	The maximum count, type, density and location of development that can occur if the District Plan rules were applied. I.e., the yield if all lots were developed at the site minimums and all apartment buildings were developed at the building height maximums etc.
Reasonably expected to be realised (RER)	The amount, type, density, and location of housing that can be expected to be developed based on recent trends and within the bounds of what is plan enabled. This may

	include a tendency to deliver larger sections that the zone minimums, a particular type of dwelling where choices are enabled, a different height of apartment buildings than the maximum building height etc.
Redevelopment Capacity	The net additional yield of a subdivided lot in the existing urban environment if existing dwellings were removed and the site was redeveloped using the site minimums for the zone. Implies further subdivision of the existing lot to smaller lots sizes enabled by the Plan.
Reporting Area	Aggregations of geographic areas across Rotorua's urban environment, used to summarise and report results in this HBA.
Rural Environment	Means the rest of the district, excluding the urban environment.
Short Term	Within the next 3 years.
Sufficiency	In the context of this HBA, refers to the comparison between demand and capacity. Can result in a surplus or a shortfall.
Three Waters Infrastructure	A collective term for water supply, wastewater, and stormwater infrastructure.
Transitional Housing	Temporary accommodation and support for individuals or families who are in urgent need of housing.
Underutilised urban land	Large, yet to be subdivided parcels of land within the existing urban environment which have no dwellings or business buildings (excluding parks and reserves). Underutilised means from a perspective of what would typically be expected for type and intensity of use of land in an urban environment.
Urban Environment	In accordance with the NPS-UD, means any area of land (regardless of size and irrespective of local authority or statistical boundaries) that is, or is intended to be, predominantly urban in character and is, or is intended to be, part of a housing and labour market of at least 10,000 people.
Whenua Māori	Whenua Māori is land administered under the Te Ture Whenua Māori Act 1993 (or Māori Land Act 1993). A feature of Whenua Māori, important in the context of this HBA, is that Whenua Māori cannot be (or is very unlikely to be) sold.