Tairāwhiti Housing and Business Capacity Assessment

m.e consulting

Prepared for

Gisborne District Council

Final Report

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Executive Summary

Tier 3 Councils are not required, but 'strongly encouraged', to complete a Housing Business Assessment (HBA) under the National Policy Statement for Urban Development 2020 (NPS-UD). Market Economics (M.E) has been commissioned to assist the Gisborne District Council (GDC) in addressing the requirements associated with Part 2 and Part 3 of the NPS-UD. It is our understanding the HBA will inform a Future Development Strategy (FDS), which will form the initial phase of the Tairāwhiti Resource Management Plan (TRMP) review.

The report consists of two parts, i.e., the **Housing Market Assessment** and **Business Capacity Assessment**. Part 1 (housing assessment) followed a pathway with three streams, covering the demand component, the capacity (supply) aspects and the sufficiency assessment. A range of assumptions underpin the modelling, which include assumptions about household size, population growth rates, development costs, land and building values, and so forth. These assumptions were informed by various sources, including engaging with local developers to sense check early assumptions and to gauge issues that are impacting the local residential development landscape.

Part 2 (business land assessment) followed a similar multi-stream approach, covering estimated demand for business land, supply of business land (zoned) and a high-level overview of the relationship between these. The demand component is based on economic modelling showing the growth outlook which considers population growth scenarios as well as exports and capital formation. The employment projections are then used to estimate business land requirements. The spatial and temporal aspects are included in the modelling.

HOUSING MARKET ASSESSMENT

Population projections provided by GDC (as prepared by Thomas Consulting), form the basis for household estimates. The information is then translated into housing demand by different segments, e.g., household typology (Couple households, Parents with children, etc.), household income levels and ethnicity.

The demand, by different segments, is examined according to dwelling tenure (owned and not owned) and by type of dwelling (detached and attached). The table summarises the growth outlook and presents a selection of ratios.

Gisborne Growth Demand Outlook – Key parameters (Medium-High growth)

	Current 2020	Short Term 2023	Medium Term 2030	Long Term 2050
Population	50,700	52,080	54,420	59,460
Households	17,250	17,930	19,580	22,270
Change in Households (from 2020)	-	+680	+2,330	+5,020
Empty dwellings*	4%	-	-	-
Non-private dwellings*	1%	-	-	-
Ownership				
Detached owned (include trusts)	58%	58%	57%	56%
Attached owned (include trusts)	4%	4%	5%	6%
Detached: not owned	33%	33%	31%	29%
Attached: not owned	6%	6%	8%	9%

Comments:

- Ownership is concentrated in the higher income bands
- Pacific, Māori and Asian households have the lowest ownership rates and are overrepresented as households who rent their dwelling.
- *Based on Census

Looking forward, **an ongoing shift towards attached dwellings is anticipated.** The relativity of attached-to-detached dwellings is expected to move from 1 attached dwelling demanded for every 9 detached dwellings, to 1 attached dwelling for every 5.7 detached, over the long term.

While it is important to take a district-wide view of population and household growth, the NPS-UD is associated with urban areas. Therefore, the urban component of demand is identified and reported on separately. Clause 3.22 of the NPS-UD requires that a competitiveness margin be added to projected demand. The purpose of the margin is to support choice and competitiveness in housing and business land markets. These margins are +20% over the short and medium term, and 15% over the long term. The following table shows dwelling demand, and the competitiveness margin is added.

Spatial split of future demand

	Dwelling Demand				Net Change in Dwelling Demand		
AREA	2020	2023	2030	2050	Short-Term: 2020-2023	Medium-Term: 2020-2030	Long-Term: 2020-2050
Gisborne Urban Zones Area	12,840	13,280	14,350	16,780	440	1,510	3,940
Gisborne District	18,870	19,470	21,080	23,820	600	2,210	4,950
Urban Area (with margin)	12,840	13,370	14,650	17,450	530	1,810	4,610
Urban Area (with margin + latent)	12,840	14,120	15,410	18,200	1,280	2,570	5,360

Source: M.E and GDC.

The margin adds to the demand, effectively lifting demand levels[1] by:

- Short term 2020-2023 +530 to +1,280,
- Medium term 2020-2030 +1,810 to +2,570, and
- Long term 2020-2050 +4,610 to +5,360.

The final row in the table includes existing (estimated) latent demand across the district. This has been included on a preliminary basis from the Public Housing Register[2]. We have assumed that there is a latent demand for 753 dwellings, and that this would all occur within the Gisborne Urban Zones Area.

The current dwelling estate forms an important part of the supply side of the Housing Assessment, as it makes up a large share of the future estate. The assessment of the current estate relies on a range of sources, including CoreLogic, Gisborne District Council Ratings Database information, central government indicators; and applies assumptions about improvement and land value trends. The main points regarding the current housing estate are (June 2020):

- According to Council's rating data there are around 12,610 residential properties within the urban area, which broadly aligns with the 2020 household estimate of 12,840 households in this area. District-wide it is estimated there are around 18,820 dwellings.
- Over four fifths (81%) of dwellings are standalone homes, with smaller shares of the dwelling stock as apartments (9%), town houses/flats (8%), retirement dwellings (2%) and lifestyle dwellings (1%).
- Gisborne's urban estate is valued at around $6.1bn, made up of:
    - Land Value $2.9bn (47%), and
    - Value of Improvements $3.2bn (53%).
- Mean values for land, improvements and capital value across the urban portfolio are estimated as follows (excluding the lifestyle properties):
    - Land value $226,000,
    - Value of Improvement $250,000, and
    - Capital Value $476,000.

[1] The range represents the demand for housing in the urban area with margin and with margin + latent demand.
[2] Sourced from Ministry of Social Development Public Housing Register, current as at end of September 2021.

Comparing the value of Gisborne's current estate (urban area) with New Zealand as a whole, highlights that housing in Gisborne is less expensive than the rest of NZ. Nevertheless, over the past twenty years, in both nominal and real (inflations adjusted) terms the data suggests faster long-term growth in Gisborne than nationally. Nominal prices in Gisborne have increased four-fold (440%, nominal) and three-fold (301%) in real terms (accounting for inflation) since 2001. This suggests average annual growth of 8% and 6%, respectively.

This underlines the relative attractiveness of the local markets, as well as the low base from which the growth occurred (i.e., the properties are comparatively cheaper). Consent data reveals the effects of the price shifts:

- Over the last five years, consents have been recovering from low levels of consents between 2014 and 2016 and is back to levels similar to the late 90s, but not yet back to levels seen in the mid-2000s.
- The data shows a (slow) shift towards higher density typologies, specifically retirement units between 2009 and 2017.
- The weighted average size of consents is tracking down slightly, influenced by higher density developments.

Housing affordability

Household affordability is evaluated by comparing the values of the housing estate against affordability levels, which is informed by household incomes and assumptions about mortgage lending. This assessment focuses on the non-owner segment because households that own their dwellings (by definition) can afford them. The relationship is illustrated by showing what share of properties households in different income bands could afford. As expected, there are very few houses (<3%) would be affordable to low-income households. The data suggest households with an income below $30,000 can theoretically afford a dwelling valued around $150,000-$200,000. According to Council's rating data there are 990 of these in the current stock, representing approximately 11% of the current stock. However, at present, there are around 1,660 households with an income below $30,000 annually. The 'shortfall' in affordable dwellings have implications for the housing market and highlights the role of community housing providers (such as Kāinga Ora).

The analysis also drew from information published by MHUD regarding sales and rental prices. There has been growth in the value of dwellings through time, and more recently, dwelling prices in Gisborne have expanded faster than national averages. Importantly, the currently (early 2022) macro environment is uncertain with rising interest rates, and inflation. These forces are likely to combine over the short term to have a negative impact on affordability. The local impacts need to be monitored.

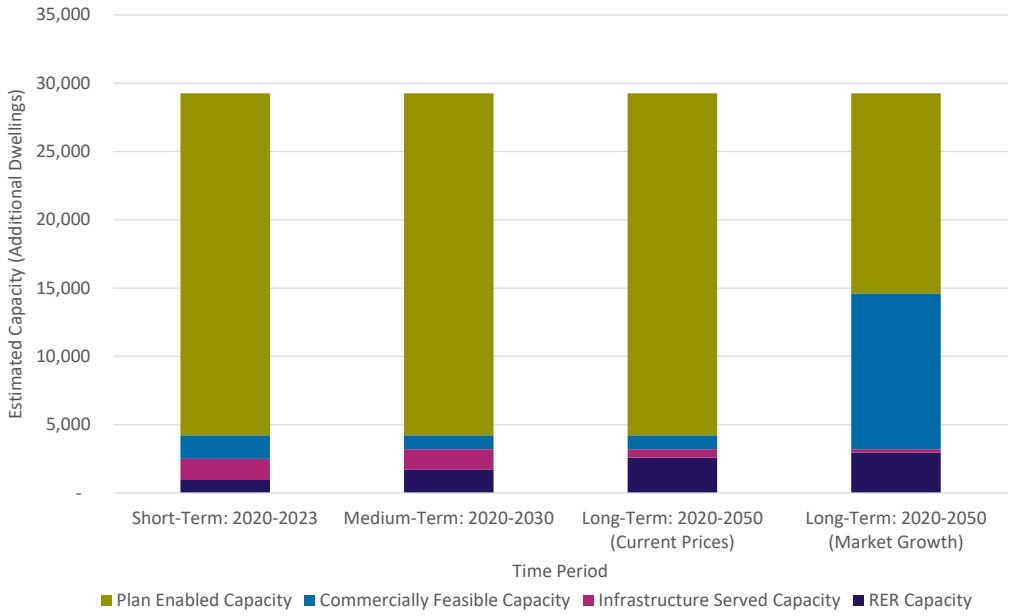
CAPACITY ASSESSMENT

According to Policy 2 of the NPS-UD, local authorities are to 'provide at least sufficient development capacity to meet expected demand for housing and for business land over the short term, medium term and long term.' Capacity is calculated across Gisborne's urban environment both within the existing urban areas (intensification) as well as within greenfield areas, reflecting current planning rules (Operative District Plan). The assessment considers redevelopment, infill, vacant and greenfield potential. Detailed modelling is used to estimate plan enabled capacity (PEC), commercially feasible[3], and reasonably expected to be realised (RER) capacity[4].

[3] The commercially feasible capacity assessment is consistent with the MBIE approach and the relevant developers' margins have been applied.
[4] Taking into account the infrastructure constraints.

The capacity calculated at each stage of the assessment is summarised in the following bar chart, covering the short, medium and long-term. Each bar shows the plan enabled capacity, commercially feasible capacity served by infrastructure and RER capacity. Long-term capacity is shown for both the Current Prices and Market Growth scenarios. Capacity within moderate to high slope hazard locations has been excluded.

Summary of Gisborne Urban Area Capacity by Type (Topographic Constraints Applied)



Source: M.E Gisborne Residential Capacity Model, 2021 and Gisborne District Council.

The analysis shows that plan enabled capacity is consistent across all three time periods, at an additional 29,300 dwellings. There is no change to the plan enabled capacity during this timeframe as the planning provisions have remained consistent and no additional areas included within the assessment.

The figure shows that 14% of the plan enabled capacity (4,300 additional dwellings) is estimated to represent currently feasible development options for a commercial developer. Under the Current Prices Scenario, this remains constant across all three time periods. The share of plan enabled capacity that is estimated to be commercially feasible increases to 50% (14,600 additional dwellings) in the long-term under the Market Growth Scenario with gradual market growth through time.

The modelling estimates that there is capacity for an additional 2,500 dwellings within the infrastructure networks within the short-term, increasing to around 3,200 additional dwellings in the medium and long-term. This amounts to 9% to 11% of the plan-enabled capacity.

Finally, the RER capacity is a sub-set of the infrastructure-served, commercially feasible plan enabled capacity. It increases from 3% (950 additional dwellings) of the plan enabled capacity in the short-term, to 9%-10% of the plan enabled capacity in the long-term (2,600 to 3,000 additional dwellings). In the short-term, this equates to around 23% of the feasible capacity, increasing to over half (61%) of the long-term feasible capacity under the Current Prices Scenario. Under the Market Growth Scenario, the long-term share remains at 20% with the increase of share plan enabled capacity that becomes feasible through time.

It is important to note that the Gisborne capacity assessment does not include any further capacity in addition to that which is currently provided under the Operative District Plan, including the additional infrastructure

coverage within the Taruheru Block. It is likely that there will be further planning provision for capacity in the future once growth areas have been identified and assessed. GDC is currently undergoing the development of a Future Development Strategy (FDS), which will (we understand) immediately lead into substantial change to the Tairāwhiti Resource Management Plan (TRMP), with a view to respond to the demand projections by including further growth areas. This process was still in the initial stages and therefore the housing capacity assessment did not include the additional areas. Including additional areas will alter the sufficiency assessment presented in this report.

RECONCILING SUPPLY AND DEMAND

To assess the sufficiency of capacity to meet future housing needs across the district's urban environment, RER capacity is compared to household demand (growth). That is, the net additional demand (using the medium-high outlook growth scenario), including a margin, for dwellings within the urban environment. The following table presents the result of the sufficiency assessment.

Sufficiency of RER Dwelling Capacity – Gisborne Urban Area

	Short-Term: 2020-2023			Medium-Term: 2020-2030			Long-Term: 2020-2050 (Current Prices)			Long-Term: 2020-2050 (Market Growth)		
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total
DEMAND												
Demand	400	40	**400**	1,300	190	**1,500**	3,300	600	**3,900**	3,300	600	**3,900**
Demand + Margin	500	50	**500**	1,600	200	**1,800**	3,900	700	**4,600**	3,900	700	**4,600**
Demand + Margin + Latent	1,200	130	**1,300**	2,200	300	**2,600**	4,500	800	**5,400**	4,500	800	**5,400**
CAPACITY												
Existing Base	11,600	1,200	**12,800**	11,600	1,200	**12,800**	11,600	1,200	**12,800**	11,600	1,200	**12,800**
RER	600	300	**1,000**	1,100	600	**1,700**	1,600	1,000	**2,600**	1,800	1,100	**3,000**
Current + Potential Future	12,300	1,500	**13,800**	12,800	1,800	**14,600**	13,300	2,200	**15,400**	13,500	2,300	**15,800**
SUFFICIENCY	Current and Potential Future Capacity (RER) vs. Demand (Incl. Margin + Latent Demand)											
Net	-500	180	**-300**	-1,100	300	**-800**	-2,900	140	**-2,800**	-2,700	300	**-2,400**
Percentage	96%	114%	**98%**	92%	117%	**95%**	82%	107%	**85%**	83%	115%	**87%**

Source: M.E Gisborne Residential Capacity Model, 2021 and M.E Gisborne Residential Demand Model, 2021.

The sufficiency assessment has indicated there are likely to be shortfalls in residential dwelling capacity within Gisborne's main urban area across all three time periods. The estimated shortfalls are predominantly due to limitations in the supply of infrastructure-served greenfield land, with infrastructure constraints also likely to occur in the long-term. Further, including latent demand also increases overall demand levels. The shortfalls are projected to increase through time and are slightly smaller under the long-term Market Growth Scenario in comparison to the long-term Current Prices Scenario.

It is unlikely that capacity within the existing urban area would form a substitution for greenfield capacity on any substantial scale. The estimated shortfalls already capture this effect where the modelling has already allowed for a higher share of growth into the existing urban area.

The assessment does indicate small surpluses of attached dwelling capacity across all three time periods. These are offset by larger shortfalls in the detached dwelling typology, resulting in overall shortfalls. The attached dwelling surpluses occur due to the estimated feasibility of this development option, which is larger than the limited projected demand for this typology.

Other considerations

The RER capacity used in the sufficiency assessment represent commercially feasible development options delivered by private developers for acceptable profit. While the private sector is an important, and typically dominant, part of the market, it is likely to represent a sub-set of the future dwelling capacity delivered within Gisborne's urban area. There are other sections of the market that are also likely to deliver minor, albeit important, shares of dwellings. Examples of other parts of the wider market include social and community housing providers and Iwi. The known potential additional stock that may be provided by the non-commercial sector in Gisborne District amounts to nearly 500 additional dwellings. This equals 4% of Gisborne's main urban total existing dwelling stock. If supplied, this dwelling stock would represent sizeable supply. It equates to around two-thirds of the existing latent demand and would be likely to correspond to this part of the market. However, the inclusion of additional dwelling supply within the capacity assessment is unlikely to remove the estimate medium and long-term shortfalls as these occur through limitations in greenfield land supply and infrastructure.

BUSINESS CAPACITY

The economic outlook prepared for this assessment considers population, exports, and capital formation as drivers of growth. The future economic outlook is translated into employment numbers, and in turn, these are used to estimate the business land requirements (demand). Land use densities are estimated using the current land use patterns and recent development trends in Gisborne, key ratios are estimated. These ratios are compared with NZ-wide ratios and adjusted to reflect the broad development intensities (and to remove outliers). The existing zones were reviewed, and the development capacity was estimated i.e., reflecting the ability to accommodate employment growth. The demand and supply are reconciled to test for sufficiency over the short, medium and long term.

Unsurprisingly, the Rural General zone covers most (94%) of the district (778,000ha), followed by Rural Production zone (1.4%). At the urban (and town areas) level, the business-related zones have around 46ha of vacant land. This equates to 20% of the total business land. A portion of growth will be accommodated on vacant land. The difference between Total Area and Developed Land represents the vacant land.

In terms of developed land, the areas correspond with the main business locations (as expected). The data suggest large portions of the total (zoned) land have been developed. However, it is key to note that developed land (area developed with a building on it) is only one measure of development. It is necessary to consider development intensity, and this can be done using employment density (sqm/employee).

Current capacity was explored in terms of the plan enabled capacity[5] and revealed development capacity[6]. Analysis of the plan enabled capacity suggests there is significant scope for up-development in all industrial and commercial zones in Gisborne. It appears that the large commercial areas are currently developed to levels which provides a margin between the current building floor areas and plan enabled capacity.

However, it is not anticipated that a developer will always develop 'up to' the implied maximum. If this was the case, then the current development intensity (e.g., floor area relative to site area) would be close to the enabled capacity levels.

[5] The total capacity of the areas if the entire parcel (per zone) is developed to the maximum, as permitted by the current planning rules.

[6] The difference between the current 'floor area to site area' ratio (FAR) and the 80th percentile of this ratio across all properties in the same zone.

The revealed development capacity across the region consists of two parts – the vacant capacity and the redevelopment capacity. The vacant capacity reflects all the properties that have been identified as vacant (based on information from the rating database) and the potential scale of the activity that can be undertaken on those parcels.

A summary of the potential employment capacity is presented below. In short, based on the current zoning, and assuming that development will take place up to the 80th percentile (of FAR), then there is capacity in Gisborne to accommodate 5,030 additional employees in the main business zones.

Zone	Land Area Ha	Potential Building Floor Area Sqm	Implied Employment Capacity
Amenity Commercial	2	27,100	170
Fringe Commercial	8	57,000	970
Industrial	25	97,500	840
Inner Commercial	2	31,700	620
Outer Commercial	11	54,600	360
Suburban Commercial	3	10,000	250
TOTAL	**50**	**277,900**	**3,210**
Rural Commercial	243	183,750	1,710
Rural Industrial	10	25,900	110
TOTAL	**253**	**209,650**	**1,820**

Spatially, the capacity is distributed unevenly throughout the district, concentrated as follow:

- Industrial
  - Gisborne Airport – Awapuni 94% (795 jobs),
  - Makaraka – Matokitoki 4% (36 jobs).
- Rural industrial
  - Tiniroto–Patutahi–Manutuke 74% (1,262 jobs),
  - Gisborne Airport–Awapuni 23% (388 jobs),
  - Makaraka–Matokitoki 3% (59 jobs).
- Outer commercial
  - Gisborne Central 51% (181 jobs),
  - Gisborne Airport-Awapuni 49% (175 jobs).
- Inner commercial
  - Gisborne Central 100% (621 jobs).
- Fringe commercial
  - Gisborne Central 100% (966 jobs).

Across the business zones associated with the rural economy, 1,820 employees can be accommodated in the rural commercial and rural industrial zones. The split between rural commercial and rural industrial is 6% rural commercial and 94% rural industrial. The Tiniroto-Patutahi-Manutuke area has large vacant area which are skewing the results and suggesting that there is a lot of available capacity, however, this capacity should be viewed with caution. In the urban area, a large portion of the capacity is associated with redeveloping sites to

a higher density in most business zones, except for amenity and suburban commercial zones, where 90% and 72% of capacity associated with vacant sites.

Sufficiency

Overall, there is sufficient capacity across all the zones over the short, medium, and long term. This is the case for all the business zones. The scale of the land resources (zoned land), and the low growth (future demand) translates into a large, zoned area available for development. Importantly, a large portion of the district's employment is located outside the business zones, and it is assumed that this relative distribution would continue.

The redevelopment capacity and vacant capacity both contribute to the ability to accommodate growth. The capacity analysis does not differentiate between the two types. If it is assumed that no redevelopment capacity will be taken up and all growth will be accommodated on vacant parcels, then there is still enough capacity to accommodate the growth. Under this approach, Gisborne Central will still have around on average 67%[7] of currently vacant area, available.

The business land capacity assessment revealed that the district has sufficient supply of zoned business land. Some of the smaller, neighbourhood areas (suburban commercial) will potentially experience some pressure as (and if) the suburbs see intensification.

The scale of the supply, in terms of vacant and redevelopment capacity, compared to the growth outlook (and demand for space) shows that there is a large surplus of land. Looking forward and considering the potential economic cost of sub-optimal use of the land resource would suggest that the city needs to consider its options regarding land use. The areas around the central city (inner, outer commercial zones) will see a gradual intensification of land use with the area around the CBD capturing a larger share of total activity. This is a positive outcome, but it is necessary to explore ways of achieving good outcomes that contribute to a well-functioning urban environment.

Like many of New Zealand's coastal communities, Gisborne is facing the climate change risks. Flooding and sea level rise will have a marked impact on the city's growth by reducing available development capacity.

OTHER MATTERS

IMPACT OF PLANNING AND INFRASTRUCTURE

Considering the wider range of factors impacting residential developments, household affordability and the ability of Councils (planning) to influence the timing and scale of development, it would be unrealistic to expect planning decisions and infrastructure provisions to be the sole determinants of efficiency and affordability.

We have drawn on the Randerson guidance to identify the two arms of assessment of competitive urban land markets. The first arm, whether there is "*…ample supply of alternative opportunities for development...*" is informed by the sufficiency assessment. That shows that Gisborne does not have adequate feasible capacity (based on the zoned capacity included within the assessment), with the Competitiveness Margin and the RER included. On that basis, we conclude the first arm is not satisfied.

The second arm is evidence to show *"…the price of land is not artificially inflated through scarcity."* The analysis shows that in Gisborne there is not sufficient capacity. While there is capacity in a range of locations, offering

[7] Average remaining capacity for the main zones (inner, fringe, outer commercial and industrial zones).

some choices as to location and to dwelling type and to dwelling value, at the aggregate level the assessment indicates that the Gisborne housing market may see the price of land inflated through scarcity which is at least in part attributable to council planning and infrastructure. On that basis, we conclude that the second arm is not satisfied.

However, GDC is currently undergoing the development of a Future Development Strategy (FDS), which should lead into changes to the Tairāwhiti Resource Management Plan (TRMP). The supply of additional zoned areas through this process is likely to increase development capacity and provide alternative opportunities for development. This will correspondingly reduce the effect of land prices being artificially inflated through scarcity and therefore this effect of planning on decreasing affordability.

HOUSING BOTTOM LINES

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. Importantly, these requirements do not apply to tier 3 councils (like Gisborne). Regardless, the following Housing Bottom Lines have been calculated for Gisborne for the short, medium and long term. They are based on an estimated current (2020) estate, as informed by CoreLogic and the Council's rating data.

Suggested housing bottom lines

	Housing Bottom lines*
Short term (2020-2023)	530
Medium term (2020-2030)	1,810
Long term (2020-2050)	4,610

* Demand plus Competitiveness margin. The demand shows the growth outlook but excludes an allowance for housing deficits.

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1 Introduction

Gisborne District covers 8,355km^2, with an estimated resident population of 49,500 people in 2018.[8] Gisborne City is the main urban area, accounting for approximately three quarters (75%) of the district's population. Other small settlements in the district include Tolaga Bay, Tokomaru Bay and Ruatoria.

The Gisborne area is identified as a Tier 3 Council under the National Policy Statement for Urban Development 2020 (NPS-UD), and therefore not required to complete a Housing Business Assessment (HBA). However, Tier 3 councils are 'strongly encouraged' to use the follow the process associated with the NPS-UD. Therefore, Gisborne District Council (GDC) is working to fulfil the obligations outlined under Part 2 and Part 3 of the NPs-UD. Market Economics (M.E) has been commissioned to assist the Council by updating, and refining, the 2019 HBA that was completed for Council in 2019. This update shifts from the 2019 study to align with the NPS-UD requirements. The re-alignment focused on the housing component. It is our understanding that the HBA will inform a Future Development Strategy (FDS), which will form the initial phase of the Tairāwhiti Resource Management Plan (TRMP) review.

Historically, Gisborne area has shown moderate growth, with the population increasing by 2% and 5% between 2006 - 2013 and 2013 - 2018, respectively. Migration has been an important part of population growth. However, due to restricted immigration and closed borders over 2020 and 2021, there has been fewer residents leaving or entering the district. As New Zealand eases border restrictions, growth from net migration may rebound back to levels seen previously. This adds uncertainty to the population and household growth estimates.

This report is the Housing and Business Development Capacity Assessment 2022 (HBA) for Gisborne District. The report is in fulfilment of the overall Housing and Business Development Capacity Assessment (HBA). Housing demand, demand for (housing) land in the urban environments, and the development capacity are assessed. This is then evaluated in terms of the relationship between the demand and capacity (supply) for Gisborne District. The demand is considered across the short, medium, and long term. The report also presents the business assessment.

1.1 Project aim and objectives

The objectives of this report[9] are to:

- Review the residential development patterns in Gisborne with a view to inform the housing assessment.
- Provide an overview of the household patterns and the expected shifts over time and associating these shifts with the implications for housing.
- Assess the local, residential real estate market in terms of the redevelopment, infill, and vacant capacity by considering the provisions in the District Plans. That is, estimate the plan enabled capacity.

[8] Resident population estimate 2018, Statistics New Zealand.
[9] As set out in clause 3.20 of the NPS-UD.

- Develop and apply a framework to estimate the commercial feasibility of the plan enabled capacity, and how it changes over time.
- To compare the overall housing demand and capacity (over time) to form a view regarding the overall sufficiency and ability to meet the expected demand for housing over the short, medium, and long term.
- Provide information and an evidence base to inform the housing bottom lines, RMA planning documents, future development strategies (FDSs) and long-term plans (LTPs),
- To prepare forward looking employment outlooks for the economy, and to translate these into business land requirements.
- To reconcile the business land requirements with the available business land (in terms of capacity), and
- To review the business land capacity in terms of sufficiency.

1.2 Approach

The assessment followed a pathway with three streams, covering the demand component, the capacity (supply) aspects as well as engagements with Council staff and a selection of local developers.

The demand component uses M.E's Housing Demand Model (2021).[10] The model provides detail on housing demand in Gisborne District. The current and projected size (quantum) and breakdown across different attributes are presented as outputs. The following attributes are reported:

- household types,
- dwelling types,
- dwelling tenure, and
- household incomes (as one important determinant of housing affordability).

A general assumption applied in the analysis is to equate one resident household to one dwelling. The future demand for housing is based on population growth and household numbers (to reflect demographic shifts) and these are then linked back to the Housing Demand Model to estimate the breakdown of demand for housing, among different segments in the community. The headline (total) estimates are disaggregated to different socio-demographic segments (household type, size, age, and income), and then with a further breakdown according to ethnicity. The demand profiles, as revealed be several data sources, inform and underpin the future demand patterns. The spatial patterns associated with the demand profiles are also considered when assessing housing affordability.

The demand assessment's primary focus is on usually resident households, and those who occupy different dwellings in the District. Resident households account for a large share of private dwelling demand. However, the visitor market is another share of the overall housing market, and this is also considered. Similarly, seasonal workers impact on accommodation demand, locally and across Gisborne. These segments, from non-resident households are part of overall demand for dwellings and are estimated separately.

[10] The Housing Demand Model is a proprietary model developed by Market Economics and it is used to identify and assess the current and projected size and the structure of demand for housing.

The capacity (supply) component assesses the current and future residential estate. The housing supply situation is considered and identifies the size and nature of the current and future dwelling estates, including dwelling typology and values, and provides the supply-side platform for the Housing Affordability assessment.

The development trends and development capacity are both used as inputs into the process. A detailed, parcel level analysis is used to estimate the plan enabled capacity and commercially feasible capacity. In turn, these results inform the infrastructure ready evaluation. The capacity assessment results are reported using different dimensions, including:

- Distribution of properties across different value bands,
- Growth and additions to the residential stock (new buildings) and the associated values,
- The growth potential, including infill, redevelopment and greenfield development based on available capacity (at a parcel level), again at a value band level as well as a location level (e.g., by stormwater catchment).

Engagement with Council staff and local developers formed a key part of the process. In-person meetings, telephone calls and teleconference calls formed the basis of the engagements. The engagements were used to verify and test the input parameters (e.g., costs) and to explore issues that are impacting the local residential development landscape.

Further details about the technical approaches (and the approach to business land assessment) and the underlying assumptions are provided throughout the report.

1.3 Information and Data

A range of sources was used in undertaking this assessment, and the main ones include:

- Several StatsNZ datasets. M.E made extensive use of the StatsNZ data resource. Most parts are available for download from sources like Infoshare and Stat.NZ. But some key parts were obtained by way of customised data requests. Examples of the datasets used include:
    - Census datasets (2006, 2013 and 2018),
    - Several projection series, including the population and household projections series.
    - Business Demography Survey and Linked Employee Employer Datasets.
- Population and household projections series (Thomas Consulting) from the Council,
- Rating dataset from the Council,
- District Plan,
- Custom data purchased from CoreLogic,
- Information from Land and Information New Zealand, and
- In-house (M.E) economic and demographic models and datasets.

1.4 Caveats and Limitations

Like all modelling, several limitations and caveats affect the work, including:

- The assessment is structured in a way that will support GDC to use parts of it to comply with elements of the wider requirements of the NPS-UD.

- The assessment provides an indication of future affordability and overall demand levels. These are based on known trends, relative size of different household segments (and types), and household estimates. It does not model or project macro-economic conditions, like interest rates and exchange rates, or the effects and implications of wider issues, like climate change and how the Council might respond.
- The input data are constantly being updated and revised as new official data is released. Some of these inputs were updated during this analysis, and this is specifically relevant for the 'current' (2020) data point. This means that there could be small differences between the numbers reported (in this report) in and those associated with subsequent releases. This applies to all sources, including Council data.
- The work is limited by information gaps in some areas. This includes elements like Māori households and the detailed aspects associated with this segment. The available data does not offer a spatial breakdown of attributes, but instead covers the entire territorial areas. This introduced some challenges, and these topics are considered using available information.
- The Councils information and data (e.g., rating information) were not reviewed or audited, and we have assumed that they are accurate. In addition, the assessment relied on some information pieces and sources with their own set of limitations and caveats. Consequently, the limitations and caveats associated with the datasets apply in the HBA.
- The infrastructure readiness assessment is based on currently available information (from Council) and is based on engagements with Council's infrastructure team. The infrastructure capacity, especially the long term (30 year) capacity is an area that will require ongoing refinement and updates.
- We note that the different datasets do not triangulate across all metrics. For example, the share of the dwellings that are un-occupied (i.e., holiday homes) vary depending on the source that is consulted.
- The modelling is based on the population and household projections prepared by a third party. We did not peer review or re-assess the population projections or refined it with the StatsNZ data. A full household projection exercise was beyond the scope of M.E's assessment.
- The analysis draws on forward-looking data and forecasts about the macro-economic conditions for NZ and the economy in general. While important, the analysis does not look at the potential sensitivity of the local residential market, or the local economy, to the macro conditions. Further, macro level risks and shifts are not explicitly reflected (e.g., climate change). However, hazards, like flooding are reported separately.
- Some of the datasets show anomalous movements that are likely associated with short term volatility. The analysis looks past these movements to reflect a conservative position. It does however mean that the implications of some high movements over the short term are understated.
- The demand across different ethnic groups is estimated using available information and datasets. These datasets have some limitations, impacting the ability to triangulate the results across multiple tables and dimensions. Therefore, these results should be seen as indicative and used with caution.
- The potential effects of the post-COVID landscape on the short- and medium-term growth patterns are unknown and uncertain.

- The analysis is based on the recent data releases, but the property market is moving at considerable speed and therefore the data might be somewhat behind the market. This is especially the case for property prices and construction costs.
- Commercial areas are often reserved for exclusive business use. However, some higher density residential activities are enabled in commercial areas, but the commercial activity takes precedent, and the residential activity is ancillary. This means that the capacity and feasibility of the residential activity can only be considered if the commercial component is viable. The feasible capacity analysis did not consider the feasibility of the commercial component. In zones where residential activity is only permitted above ground level, it is assumed that the commercial activity on the ground floor is commercially viable.
- In terms of plan enabled capacity, infill capacity above existing commercial buildings was not considered due to high level of uncertainty about engineering costs to realise the infill capacity. The infill capacity in the commercial zones were limited to the vacant part of parcels (subject to the planning provisions).
- The analysis considers the population projections from Thomas Consulting and use these as the core input regarding future growth. However, during the project process, the Councils pointed to a desire to include historic housing backlog and shortfall issues in the housing assessment. A portion of the housing backlog and shortfalls are covered by social housing (and these are reported based on Kainga Ora data). While the assessment draws on Census data, which explains household, and housing information, the recent shifts in the social housing needs suggests that the official data might understate the true need.
- We note that a large portion of employment is located in non-business locations. For example, the Council building and the hospital are in residential zones. This complicates the capacity assessment because the link between business activities and business zones is diluted. A flow on effect is also that it reduced the ability to consider the suitability of the available capacity (because demand could be located across a wide range of alternatives). This is an important issue that would need to be considered and reflected in further analysis (e.g., the Future Development Strategy).

1.5 Coverage

The HBA is an assessment of housing demand and development within the urban environment. However, the assessment was completed for the entire spatial extent of the Gisborne District Council area. This district wide coverage ensures that a portion of future growth is allocated across the relevant areas, including rural locations (earmarked for future development as well as the smaller, coastal areas). Similarly, the identified greenfield development areas are included even if these areas are located outside the current urban areas.

The assessment occurs at a parcel level and the results are then aggregated into broad areas to enable succinct reporting, while at the same time illustrating core spatial patterns and relativities. The spatial structuring considered the urban economies of Gisborne, as well as the smaller urban locations throughout the area. The analysis considers the relevant zones, and the zones are used to identify irrelevant parcels (e.g., parks, schools and community amenities). Large parts of Gisborne are excluded because of the rural

nature (and the associated zoning provisions). With reference to the residential capacity, if a zone enables residential development, within that parcel, then it is included. The following broad structure applies:

- Some non-urban areas are excluded from the capacity analysis. This includes agriculture and horticultural areas (mainly associated with rural production zones). This is because it is assumed that future growth will be accommodated in suitable locations, away from rural production locations. A small portion of growth could however still occur in rural production locations.
- Some rural areas (like coastal areas and small settlements) are treated as part of the rural areas and are still included in the reported figures. However, the focus is on the urban-area as required by the NPS-UD.
- Non-residential areas, like industrial zones, recreation areas, education and community facility-areas are excluded from the residential capacity assessment.

Current and future urban areas (i.e., greenfields) are both included as are the commercial areas where residential development could be delivered. The plan enabled, commercially feasible and infrastructure ready (serviced) capacity is estimated for potential residential developments, regardless of location using a set of assumptions that are based on observed trends.

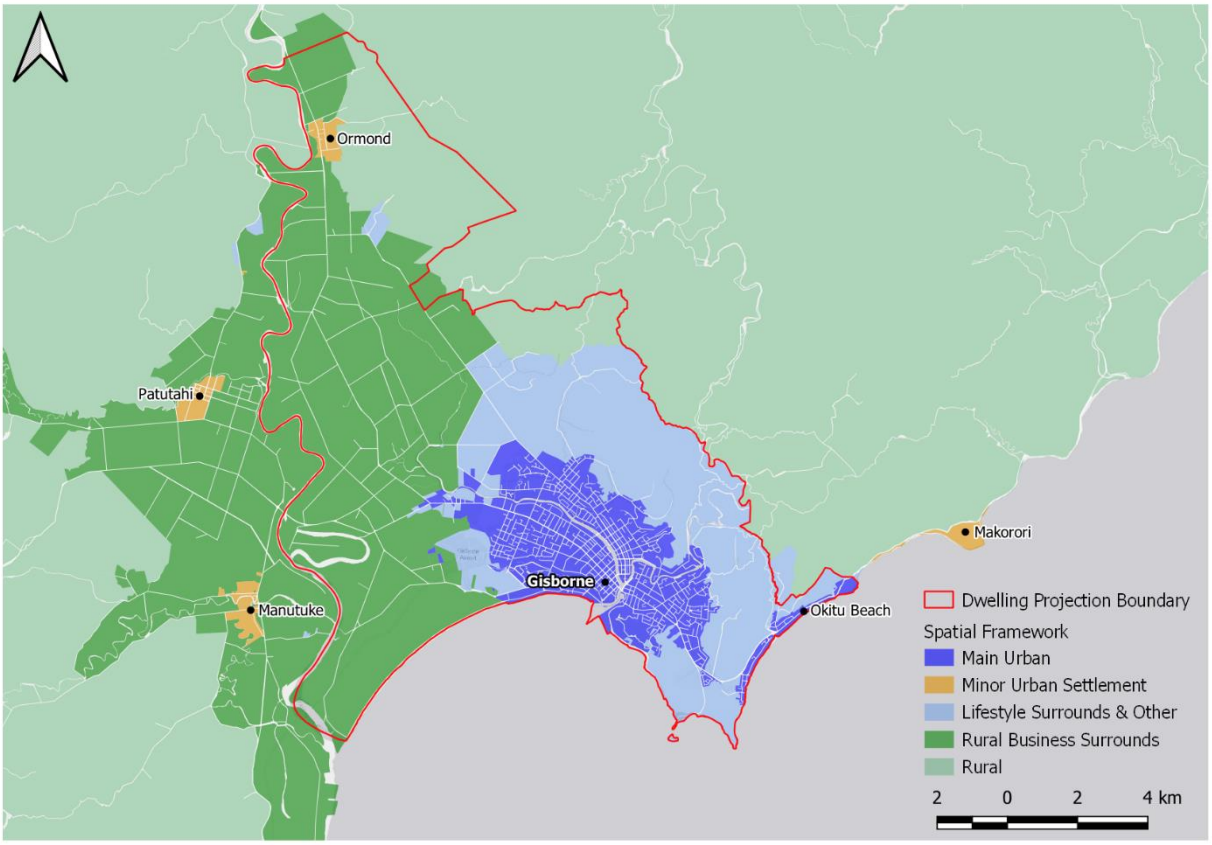
We note that the NPS-UD's scope is on the urban areas and therefore smaller settlements are outside of this scope. However, we have included some smaller (coastal) areas in the assessment to show a wider picture of the development landscape. The district level projections refer to the entire district. The Gisborne Urban Area (GUA) projections are defined at the Statistics Area 2 (SA2) level and include the main Gisborne centre area. This includes the urban zoned area as well as dwellings within the surrounding residential lifestyle zoned and rural zoned areas, and dwellings within the smaller urban settlement (Ormond) to the northwest of the Gisborne city area.

The NPS-UD requires the assessment of urban capacity, therefore the HBA sufficiency assessment (in a latter section of the report) compares the calculated urban capacity with the demand for urban dwellings. This includes the urban zoned area of Gisborne city. The surrounding residential lifestyle and rural zoned areas do not form urban capacity, and, within the assessment, are unable to meet demand for an urban location.

M.E have calculated the urban share of the GUA projections, which we refer to as the Gisborne Urban Zones Area demand. This is consistent with the GDC wider district level and GUA projections and forms a subset of this projected demand. Our approach is set out below.

The map (Figure 1-1) below shows the differences between the GDC GUA dwelling projection area and the M.E urban dwellings area contained in the capacity assessment. The dark blue line shows the GUA area and is defined at the SA2 level. The red area shows the urban zoned area within the GUA area and forms the area of the projected urban dwelling demand referred to as the Gisborne Urban Zones Area. The balance of the GUA is made up of residential lifestyle zoned area (yellow areas on the map), minor urban settlement (brown), rural productive/industrial zones (light blue) and rural zones (green).

Figure 1-1: GUA and Gisborne Urban Zones Area



M.E have analysed the GDC Ratings Database to obtain an estimate of existing dwellings as at 2020/2021. This has been undertaken at a parcel level and covers the district overall. A parcel level analysis enables dwellings to be identified by zone and geography (in relation to M.E's Spatial Framework and the SA2 boundaries). M.E have undertaken further analysis in relation to the 2018 SNZ dwelling counts (occupied and unoccupied) and the SNZ building consent data by SA2[11]. These analyses have enabled us to produce the final base year (2020) existing dwelling stock estimates.

M.E have analysed the base year dwelling estimates in relation to the GDC projection series. There is a high level of alignment between the estimated base year dwellings at the district level and at the GUA level. The Gisborne Urban Zones dwelling estimates are also aligned with the GDC Reticulated Services Boundary area (also provided by GDC).

The M.E Gisborne Urban Zones Area dwelling base year estimates have been expressed as a percentage of the GDC GUA dwelling projections. This percentage has been applied to the GUA projections to produce a Gisborne Urban Zones Area projection that is consistent with the GDC projection series.

[11] In summary, the Census dwelling count and 2018-2021 building consent information was used to estimate the existing dwellings outside of the GUA. Ratings information provided less reliable dwellings estimates within these areas as dwellings were often instead captured under non-residential uses. The Ratings Database was found to produce reliable dwellings estimates within the existing urban area.

The remainder of the demand assessment then applies the required NPS-UD demand margins to the Gisborne Urban Zones Area projections as well as the inclusion of existing latent demand[12].

1.6 Report Structure

The report is organised into three parts, with sections in each part. The structure is as follows:

Part 1 presents the Housing Market Assessment with the following sections:

- Section 2: Describes the household demand profile for Gisborne District. The section outlines household patterns in terms of household types, income levels, age profile and tenure. It shows the anticipated housing demand looking forward.
- Section 3 describes the housing supply situation, recent development trends (consents) and recent shifts in dwelling values.
- Section 4 deals with housing affordability, covering the current and future outlooks of this important metric.

Part 2 covers the Housing Capacity Assessment.

- Section 5 outlines the approach taken, and the results of the plan enabled capacity assessment, as well as the feasible development capacity assessment. The section then progresses to the results of the infrastructure ready (and supported) considerations.
- Section 6 extends the analysis by reconciling the development capacity from a reasonable expected to be realised perspective. The second part of this section describes the sufficiency of capacity. The relationships between the enabled capacity and the household growth patterns are considered.

Part 3 deals with the Business Capacity Assessment.

- Section 7 describes the current land use patterns and translates these into the plan enabled capacity (for business land). The section then outlines the feasible development capacity and reconciles business land capacity and demand.

Part 4 Concludes the report.

- Section 8 discusses the impacts of planning and infrastructure on the residential landscape and provides suggestions regarding the housing bottom lines. The section also provides commentary on the outlook for housing affordability (but in the context of the impact of planning). The section provides concluding remarks around the business capacity.

Supporting data and technical information are presented in the appendices.

[12] The current public housing register is used as a proxy for latent demand, as it represents the number of applicants assessed by Ministry of Social Development as eligible for social housing, who are ready to be matched to a suitable property. As at June 2021.

PART 1: HOUSING MARKET ASSESSMENT

2 Housing Demand

The section sets the scene for the housing assessment and outlines the housing demand for Gisborne District. It starts by presenting the population outlook based on the Thomas Consulting projections for Council. These population projections were then translated into household estimates and the socio-demographic attributes were linked to the estimates. This approach provides an ability to account for the expected growth in household numbers while also capturing the dynamic effects of population change, like ageing. Total and additional demand for housing is identified.

The demand assessment uses the household projections as a starting point for the household base and outlook. It examines the current attributes of households before using the growth projections and applying the household attributes (spatially) to provide a breakdown of demand by location. The demand is also considered using different segments, including dwelling tenure and type of dwelling. The breakdown ensures that the reporting complies with the NPS-UD requirements to consider 'different groups in the community'.

The analysis is based on the M.E *Housing Demand Model 2021.* The Model details current, and projected housing demand in Gisborne District. The Model identifies the size and structure of demand for housing[13]. The size of demand is presented in terms of numbers of households, while the structure of demand is examined in terms of household types, dwelling types, dwelling tenure, and household income. These elements form the basis for determining housing affordability.

Demand is identified in terms of resident households, allowing for one dwelling per household[14]. Projected future demand for housing is based on projected future resident households, which is underpinned by Thomas Consulting's population projection data. However, housing demand varies across community segments. This means that housing demand shifts as the population size and structure changes. To accommodate these shifts, the modelling considers the shifts within each socio-demographic segment (household type, size, age, and income), and is further analysed according to ethnicity. This is underpinned by analysis of district level data from the 2018 Census and projections of households in each segment.

The demand from each segment is examined according to dwelling tenure (owned and not-owned) and by type of dwelling (detached and attached).

The section starts by considering:

- The population and household base and the outlook for households
- The current housing demand in terms of household types, incomes, and ethnicities.
- The projected demand for housing allowing for demographic changes.

[13] This consistent with Policy 1, also 3.2(1), 3.10, HBA 3.19, 3.23(3).
[14] As per NPS-UD 3.34(4).

2.1 Base population and population outlook

The population outlook forms the basis for household estimates. The population projections provided by GDC, sit between StatsNZ's medium and high long-term projection series. These 'medium-high' population projections, prepared by Thomas Consulting[15], form the basis of the analysis.

The outlooks are presented in tables covering three periods:

- Short term 2020-2023,
- Medium term 2020-2030, and
- Long term 2020-2050.

2.1.1 Population

The population growth outlook for Gisborne is presented in Table 2-1. Under the medium-high outlook, the **population is currently estimated at 50,700.** Based on Thomas Consulting data the population is projected to increase by 8,760 people to reach 59,460 by 2050. Table 2-1 also shows the official medium and high growth projections to illustrate where the preferred projection sits in relation to those produced by StatsNZ.

Table 2-1: Gisborne District Population Growth Outlook – Short, Medium and Long Term

Projection	Current	Short Term			Medium Term			Long Term		
	2020	2023	2020-23	2020-23 %	2030	2020-30	2020-30 %	2050	2020-50	2020-50 %
Thomas Consulting Medium High Projections										
Medium-High	50,700	52,080	1,380	3%	54,420	3,720	7%	59,460	8,760	17%
High (StatsNZ)	50,900	53,200	2,300	5%	56,700	5,800	11%	65,100	14,200	28%
Medium (StatsNZ)	50,400	51,900	1,500	3%	53,500	3,100	6%	55,300	4,900	10%

Source: ME Housing Demand Model 2021; Thomas Consulting 2020

Under the medium-high outlook, the population is projected to increase by 1,380 over the next 3 years. Between 2023 and 2030, the population is expected to increase by another 2,340 residents to reach 54,420.

Under all the projection sets the growth rate (compound annual growth) slows over the extended term. For the medium-high projections, the population is expected to grow at 0.9% p.a. between 2020 and 2023, before slowing to 0.6% p.a. between 2023 and 2030. Between 2030 and 2050 the growth rate slows even further, dropping to 0.4% p.a. For the medium and high growth projection series, slowing annual growth is also expected over the three time periods. These are estimated at 1.0%, 0.4% and 0.2% p.a. for the medium series, and 1.5%, 0.9% and 0.7% p.a. for the high projections. **The long-term medium-high outlook is for the population to continue to grow.**

Under the medium-high projection set, **the number of additional people living in Gisborne will increase by 460/year over short term, 370/y over the medium term and 290/y over the long term.** For the medium series, the number of additional people living in Gisborne will increase by 500/year over the short term, 310/year over the medium term and 160/year over the long term. The high projection set returns

[15] Thomas Consulting prepared population projections for GDC.

considerably higher annual movements, coming in at 770/year over the short term, 580/year over the medium term, before reducing to 470/year.

2.2 Socio-demography profiles

Household composition, and structure, are important drivers of housing demand. By linking socio-demographic attributes to household types, the current profile of Gisborne households is revealed and how this profile changes is then used to inform future demand. The following attributes are considered:

- Income levels,
- Age distribution, and
- Ethnicity.

In the next sections, the discussion uses households as the main metric and is based on the medium-high projections. Using these projections also ensures consistency with the LTP is maintained.

2.2.1 Household Type and Income

The distribution of household types by income levels is discussed below. The available information suggests that there is a wide spread of household incomes with a noticeable concentration of households in the low(er) income cohort. Table 2-2 summarises the distribution of households along two dimensions:

- Household types (rows down the left), and
- Household income bands (headings across the top).

Table 2-2: Households by Type and Income Band – Gisborne District, 2020

Household Type	<$30,000	$30-	$50-70,000	$70-	$100-	$120-	$150,000+	Total
One Person household	2,760	940	500	300	50	10	40	4,600
Couple household	310	940	820	870	480	440	490	4,350
2 Parents 1-2 children	100	250	440	730	410	450	520	2,900
2 Parents 3+ children	50	90	210	270	160	150	190	1,120
1 Parent Family	1,190	870	590	410	130	40	40	3,270
Multi-family household	20	40	70	90	80	90	180	570
Non-family household	70	110	110	80	40	20	20	450
Total Households	4,500	3,240	2,740	2,750	1,350	1,200	1,480	17,260
One Person household	16.0%	5.4%	2.9%	1.7%	0.3%	0.1%	0.2%	26.7%
Couple household	1.8%	5.4%	4.8%	5.0%	2.8%	2.5%	2.8%	25.2%
2 Parents 1-2 children	0.6%	1.4%	2.5%	4.2%	2.4%	2.6%	3.0%	16.8%
2 Parents 3+ children	0.3%	0.5%	1.2%	1.6%	0.9%	0.9%	1.1%	6.5%
1 Parent Family	6.9%	5.0%	3.4%	2.4%	0.8%	0.2%	0.2%	18.9%
Multi-family household	0.1%	0.2%	0.4%	0.5%	0.5%	0.5%	1.0%	3.3%
Non-family household	0.4%	0.6%	0.6%	0.5%	0.2%	0.1%	0.1%	2.6%
Total Households	26.1%	18.8%	15.9%	15.9%	7.8%	7.0%	8.6%	100%
Relative Concentration								
One Person household	**2.30**	**1.09**	0.68	0.41	0.14	0.03	0.10	
Couple household	0.27	**1.15**	**1.19**	**1.26**	**1.41**	**1.45**	**1.31**	
2 Parents 1-2 children	0.13	0.46	0.96	**1.58**	**1.81**	**2.23**	**2.09**	
2 Parents 3+ children	0.17	0.43	**1.18**	**1.51**	**1.83**	**1.93**	**1.98**	
1 Parent Family	**1.40**	**1.42**	**1.14**	0.79	0.51	0.18	0.14	
Multi-family household	0.13	0.37	0.77	**0.99**	**1.79**	**2.27**	**3.68**	
Non-family household	0.60	**1.30**	**1.54**	**1.12**	**1.14**	0.64	0.52	

Source: ME Housing Demand Model 2021

In Gisborne District there are approximately 17,250 households with different attributes in terms of the type of households (size and composition) and their income levels. In terms of overall numbers, the largest group is 'Parent(s) with children' households[16] (7,290), followed by:

- One-person households 4,600,
- Couple households 4,350,
- Multi-family 570 and
- Non-family 450.

Parent(s) with children household types represent a combined 42%, one person households makeup 27% and couple households account for 25% of all households. The balance is made up of multi- and non-family households, 3.3% and 2.6% of households respectively. Overall, the household structure is dominated by smaller household types (one person and couples) and parent(s) with children household types, 52% and 42% respectively.

Note: The bottom third of the table (with the blue shading) shows the relative concentration of a household type-income band combination benchmarked against the Gisborne District situation. If a combination is greater than 1 (shaded blue), then the combination is over-represented. A figure less than one (<1) simply means that the combination is underrepresented compared to the benchmark (i.e., the overall income/household type combination).

The modelling suggests that just over a quarter (26%, or 4,500) households have incomes of $30,000 or less. Another 19% (3,240) have an income of between $30,000 and $50,000. Combined this represents 45% of total households which have incomes of less than $50,000. The national benchmark is 34% which highlights the relatively high share of low-income levels present within the district.

Middle income households ($50,000-100,000) make up 32% of total households. The balance of households (23%) falls into higher income cohorts. There are an estimated 2,550 (15%) households that have incomes between $100,000 and $150,000, with another 1,480 (9%) households with incomes of $150,000 or greater. Within Gisborne District, a higher share of households falls into the lower income cohorts compared to the middle and upper cohorts.

The data suggests that 'one person' and '1 parent family' households are disproportionately concentrated towards the lowest income bands. This is often the case, as one person households are supported by a single income earner, as are one parent families. As such, one person households with an income less than $30,000 are the largest individual group by type and income, at 60% of all one person households or 61% of all households with an income less than $30,000. A similar pattern is seen for 1 parent families with an income less than $30,000. Couples, 2 parent family and multi-family households are over-represented towards higher income bands. This is expected as these household types usually have (and need) more than one income earner. The data confirms the observation that smaller households tend to have lower income levels relative to larger households. However, it is worth noting that a larger household, with more income earners, does not necessarily imply that a household is wealthy as multiple incomes are used to support more household members.

[16] Includes 2 Parents 1-2 children, 2 Parents 3+ children and 1 Parent Family.

When compared against the NZ average, the Gisborne District is characterised by relatively low-income levels. This will have implications for housing affordability as well as other social metrics.

2.2.2 Household Type and Age

The second socio-demographic metric that is considered is age. However, there are limitations to reporting a household's age. For example, if a household has multiple individuals (members), then which member's age is used? This analysis relies on Census and StatsNZ data, and consequently, the age of the reference person is used as a proxy for household age.

Table 2-3 shows the age distribution of household types for Gisborne District in 2020.

Table 2-3: Count of Households by Type and Age – Gisborne District, 2020

Household Type	15-29	30-39	40-49	50-64	65-74	75+	Total
One Person household	230	260	410	1,360	1,230	1,110	4,600
Couple household	350	190	300	1,690	1,170	640	4,340
2 Parents 1-2 children	420	670	810	820	140	30	2,890
2 Parents 3+ children	100	510	390	110	-	-	1,110
1 Parent Family	510	820	840	800	190	130	3,290
Multi-family household	80	70	120	240	60	10	580
Non-family household	100	60	50	150	60	30	450
Total Households	1,790	2,580	2,920	5,170	2,850	1,950	17,260
One Person household	1.3%	1.5%	2.4%	7.9%	7.1%	6.4%	26.7%
Couple household	2.0%	1.1%	1.7%	9.8%	6.8%	3.7%	25.1%
2 Parents 1-2 children	2.4%	3.9%	4.7%	4.8%	0.8%	0.2%	16.7%
2 Parents 3+ children	0.6%	3.0%	2.3%	0.6%	0.0%	0.0%	6.4%
1 Parent Family	3.0%	4.8%	4.9%	4.6%	1.1%	0.8%	19.1%
Multi-family household	0.5%	0.4%	0.7%	1.4%	0.3%	0.1%	3.4%
Non-family household	0.6%	0.3%	0.3%	0.9%	0.3%	0.2%	2.6%
Total Households	10.4%	14.9%	16.9%	30.0%	16.5%	11.3%	100.0%
Relative Concentration							
One Person household	0.48	0.38	0.53	**0.99**	**1.62**	**2.14**	
Couple household	0.78	0.29	0.41	**1.30**	**1.63**	**1.31**	
2 Parents 1-2 children	**1.40**	**1.55**	**1.66**	0.95	0.29	0.09	
2 Parents 3+ children	0.87	**3.07**	**2.08**	0.33	-	-	
1 Parent Family	**1.49**	**1.67**	**1.51**	0.81	0.35	0.35	
Multi-family household	**1.33**	0.81	**1.22**	**1.38**	0.63	0.15	
Non-family household	**2.14**	0.89	0.66	**1.11**	0.81	0.59	

Source: ME Housing Demand Model 2021

According to the data, 58% of households are 50 years or older. The largest age cohort is 50-64 which accounts for 30% of all households. The smallest age cohorts are 15-29 and 75+, representing 10% and 11% of all households, respectively.

The data shows that smaller households, one person and couples, are over-represented in the higher age cohorts especially the +65-year cohorts. Around half (51%) of one person and 41% of couple households are +65 years. Viewed another way, smaller households aged +65 account for 86% of the +65 cohort. This data highlights the link between smaller households, aging households and lower incomes.

There is a concentration of parent(s) with children households associated with the 30-49 age bands. Around 23% of all households are classified as parent(s) with children households aged 30-49. **This segment is an important driver of larger dwelling types.** Non-family households are significantly over-represented in the 15-29 age band. This could relate to flatting situations which usually consists of students or young professionals sharing a house to save money.

These patterns align well with pivotal life-stages. Once leaving home, young adults enter house flatting situations to save money. As individuals age, they gain knowledge and experience, translating to a higher level of income over time. Most go on to create a family and have children, while some couples choose to not have children or stay single entirely. Over time, families with children transition to 'empty nesters' as the children leave home and the parents become 'couple-households' and then singles later in life.

Affordability often becomes progressively more important for non-owner households in the middle and later years, as remaining lifetime earning potential reduces, and ability to access housing finance also reduces.

2.2.3 Household Type and Ethnicity

Ethnicity is the third attribute that is discussed[17]. This attribute provides useful insights into the mix of households and the general size of different ethnic groupings in the district. Table 2-4 provides the base information for Gisborne regarding the ethnic mix of households. Households identifying as European account for the highest share, some 58% of all households. Māori households are the next largest group (36%), followed by Asian (3%) and Pacific (3%) households.

The data suggests that parent(s) with children family households are concentrated in households identifying as Māori, Pacific, and Asian. These households account for 20% of all households in the district. Notably, households identifying as Māori make up 17% of these household types. Households identifying as European are over-represented in smaller households and make up one third (33%) of total households.

Non-European households are typically larger (i.e., more people living in one household) and are often inter-generational. The data confirms multi-family households are concentrated within Māori and Pacific households. Lower-income levels can lead to overcrowding in houses.

European households represent the largest share (58%) of total households in Gisborne. However, Māori households represent a sizable share and this group, along with other minority ethnic households, will be important for dwelling demand and the types and size of housing required in the future. These household groups typically have larger families, intergenerational considerations, and overcrowding issues.

[17] The discussions on ethnicity use slightly different approaches and the datasets do not triangulate perfectly. Therefore, there are slight variances between the different tables as reported here.

Table 2-4: Counts of Households grouped by Type and Ethnicity – Gisborne District, 2020

Household Type	European	Māori	Pacific	Asian	Total
One Person household	2,950	1,470	90	100	4,610
Couple household	2,680	1,470	100	100	4,350
2 Parents 1-2 children	1,520	1,170	90	100	2,880
2 Parents 3+ children	560	460	40	40	1,100
1 Parent Family	1,740	1,320	110	110	3,280
Multi-family household	320	230	20	10	580
Non-family household	250	170	10	10	440
Total Households	10,020	6,290	460	470	17,240
One Person household	17.1%	8.5%	0.5%	0.6%	26.7%
Couple household	15.5%	8.5%	0.6%	0.6%	25.2%
2 Parents 1-2 children	8.8%	6.8%	0.5%	0.6%	16.7%
2 Parents 3+ children	3.2%	2.7%	0.2%	0.2%	6.4%
1 Parent Family	10.1%	7.7%	0.6%	0.6%	19.0%
Multi-family household	1.9%	1.3%	0.1%	0.1%	3.4%
Non-family household	1.5%	1.0%	0.1%	0.1%	2.6%
Total Households	58.1%	36.5%	2.7%	2.7%	100.0%
Relative Concentration					
One Person household	**1.10**	0.87	0.73	0.80	
Couple household	**1.06**	0.93	0.86	0.84	
2 Parents 1-2 children	0.91	**1.11**	**1.17**	**1.27**	
2 Parents 3+ children	0.88	**1.15**	**1.36**	**1.33**	
1 Parent Family	0.91	**1.10**	**1.26**	**1.23**	
Multi-family household	0.95	**1.09**	**1.29**	0.63	
Non-family household	0.98	**1.06**	0.85	0.83	

Source: ME Housing Demand Model 2021 *(note European includes other ethnicities)*

2.3 Household growth –Outlook (Medium-high)

The outlook for household numbers is based on the projections prepared by Thomas Consulting which reflect a medium-high outlook in relation to the StatsNZ projection sets. The medium-high projections were selected because they represent the set that the Council is using to inform its planning work and it aligns with recently observed patterns and relationship seen in StatsNZ estimates (and fall between the medium and the high scenarios).

The base outlook is described in terms of the anticipated shift in household numbers as well as the implied changes in the demographic structures.

2.3.1 Household growth outlook

In Gisborne District it is estimated that there are currently (2020) 17,250 households. Based on Thomas Consulting projections, households are expected to continue to grow over the next thirty years and reach 22,270 by 2050 (see Table 2-5).

Table 2-5: Household Growth Outlook Medium-High Future – Gisborne District

Future	2020	2023	2028	2030	2033	2038	2043	2048	2050
Medium-High Projection	17,250	17,930	19,170	19,580	20,070	20,770	21,420	22,010	22,270
Change		680	1,920	2,330	2,820	3,520	4,170	4,760	5,020
Change %		4%	11%	14%	16%	20%	24%	28%	29%
Change %pa		1.3%	1.3%	1.3%	1.2%	1.0%	0.9%	0.9%	0.9%

Over the next thirty years, the compounded growth rate is estimated at 0.9% p.a. However, the rate of growth is expected to vary over time, accelerating slighting over the short and medium term, and then declining over the long term. Under the medium-high scenario, households will grow as follows:

- 2020 17,250,
- 2023 17,930 (+680),
- 2030 19,580 (+1,650 vs 2023),
- 2050 22,270 (+2,690 vs 2030).

By 2050, the number of households in Gisborne District is projected to be in the order of 22,270 – an increase of 29% or 5,020 households from current levels. The annual rate of change is expected to slow over the long term. Over the short term, the annual growth in households is expected to be around 225/year. For the period between 2023-2030, the annual change is estimated at 235/year. The annual change then drops further to 135/year between 2030-2050.

2.3.2 Demography and income shifts

Changes in demographic attributes and patterns is driven by internal forces, like the ageing population, as well as wider dynamics, like New Zealand's migration policies. As such over time, these demographic attributes and patterns will change. The preceding section presented the overall change and this section supplements that by presenting the anticipated demographic shifts as well as the associated changes in income levels (by households). Using the available projections and datasets from Thomas Consulting and StatsNZs.

Household types

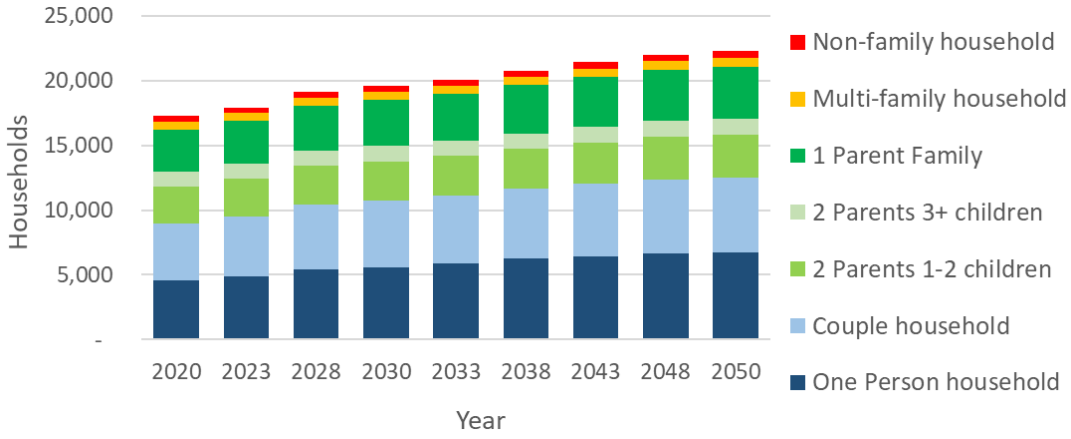
The change in the households (by type) is shown in Table 2-6 and Figure 2-1. This table shows the shifts over different time periods.

Table 2-6: Growth Outlook by Household Type – Gisborne District

Household Type	Current	Short Term			Medium Term			Long Term		
	2020	2023	2020-23	2020-23 %	2030	2020-30	2020-30 %	2050	2020-50	2020-50 %
One Person household	4,600	4,920	320	7%	5,610	1,010	22%	6,700	2,100	46%
Couple household	4,340	4,600	260	6%	5,120	780	18%	5,810	1,470	34%
2 Parents 1-2 children	2,890	2,940	50	2%	3,040	150	5%	3,330	440	15%
2 Parents 3+ children	1,110	1,130	20	2%	1,180	70	6%	1,250	140	13%
1 Parent Family	3,280	3,300	20	1%	3,530	250	8%	3,990	710	22%
Multi-family household	580	590	10	2%	620	40	7%	680	100	17%
Non-family household	450	450	-	0%	480	30	7%	510	60	13%
Total	17,250	17,930	680	4%	19,580	2,330	14%	22,270	5,020	29%

Source: ME Housing Demand Model 2021 *Totals rounded to nearest 10*

Figure 2-1: Projected Households – Gisborne District (Medium-high)



Between 2020 and 2023, the number of households are expected to grow by around 680. A large portion of this growth is expected in one-person and couple households. Over the medium term, expected growth in household is 2,330 with smaller households retaining a significant share of the growth.

In absolute terms, the shift in smaller households over the next thirty years is estimated at:

- 2,100 for one person households, and
- 1,470 couple households.

Over the long term under a medium-high growth future, the data indicates a shift in the mix of households towards smaller households. Smaller households maintain their dominance over the long run, accounting for 71% of total growth over this time. One person households are expected to grow by 46% while couple households increase by 34% Parents(s) with children households make up 26% of the growth over the next 30 years. Of this growth, 14% is within one parent families, by 2050 this household type increases by 22%, an additional 710 households.

Clearly, this points to a shift in the housing market, and the typologies that would be required to accommodate residents. **The link to the ageing population is underlined by the above analysis.** The ageing population and the shift to smaller households is expected to filter through into the demand for dwellings, especially the housing typology.

Shift in household types by income bands

As discussed in section 2.2.1, the households have different income levels i.e., they can be grouped into different income bands. Table 2-7 shows the modelled change in relation to households by income bands for the district between 2020 and 2050.

The analysis suggests that most of the growth over the next 30 years will be concentrated across the lower income bands. Growth in households with an income less than $30,000 accounts for 39% of total growth, while households in the next lowest income band make up 24% of total growth. Combined, these two income household bands account for over 63% of total growth from 2020 to 2050. This growth is equal to an additional 1,950 (<$30,000) and 1,200 ($30,000-50,0000) households over the next 30 years. These two bands increase by 43% and 37% respectively.

Table 2-7: Household Growth Outlook by Income – Gisborne District

Household Income Band	Current	Short Term			Medium Term			Long Term		
	2020	2023	2020-23	2020-23 %	2030	2020-30	2020-30 %	2050	2020-50	2020-50 %
Under $30,000	4,510	4,760	250	6%	5,420	910	20%	6,460	1,950	43%
$30-50,000	3,230	3,380	150	5%	3,790	560	17%	4,430	1,200	37%
$50-70,000	2,740	2,840	100	4%	3,060	320	12%	3,410	670	24%
$70-100,000	2,750	2,830	80	3%	3,000	250	9%	3,290	540	20%
$100-120,000	1,350	1,380	30	2%	1,450	100	7%	1,570	220	16%
$120-150,000	1,200	1,220	20	2%	1,270	70	6%	1,390	190	16%
$150,000+	1,470	1,500	30	2%	1,560	90	6%	1,720	250	17%
Total	17,250	17,910	660	4%	19,550	2,300	13%	22,270	5,020	29%

Source: ME Housing Demand Model 2021 *Totals rounded to nearest 10*

Other observations include:

- Middle income households ($50,000-100,000) account for 24% of total growth over the next 30 years, an additional 1,210 households.
- There is an estimated additional 660 households across the upper income household bands (>$100,000), equivalent to 13% of total growth.
- Long term growth is skewed towards lower income bands.

2.4 Revealed household-dwelling patterns

Revealed housing demand patterns provide a useful foundation for estimating future dwelling demand and patterns. The links between tenure, household types, income levels and ethnicity can be used to inform future demand patterns. That is, by assuming that the relationships between these elements hold constant, and then applying the relationships to projected (future) households, provides a way to estimate future dwelling demand.

2.4.1 Dwelling Patterns 2018

Dwelling occupancy data from the 2018 Census provides useful information which is summarised in Table 2-8. According to StatsNZ definitions of occupancy status, unoccupied baches or holiday homes are also defined as empty dwellings.

According to the data there are 18,684 dwellings within Gisborne District at the 2018 Census. The majority (89%) of these were recorded as occupied on census night, with 7% recorded as residents being temporarily absent and around 4%, empty. Occupancy statistics (occupied dwellings) for Gisborne District align with the national average (89%). Similarly, unoccupied dwellings in Gisborne District are not a cause for concern (11% in Gisborne versus 10% in NZ). The presence of non-private dwellings is very small, approximately 1%.

Table 2-8: Housing Supply Situation at Census 2018 – Gisborne District

Census 2018	Private Dwellings	Private Dwellings %	*NZ Average*	Non-Private Dwellings	Non-Private Dwellings %	*NZ Average*	Total Dwellings	Total Dwellings %	*NZ Average*
Private Dwellings[1]	18,477	100%		210	100%		18,684	100%	
Occupied	16,509	89%	*89%*	105	50%	*66%*	16,614	89%	*89%*
Unoccupied	1,929	10%	*10%*	105	50%	*33%*	2,034	11%	*10%*
Owners Away	1,170	6%	*5%*	54	26%	*8%*	1,224	7%	*5%*
Empty Dwelling	756	4%	*5%*	54	26%	*25%*	810	4%	*5%*
Usually Occupied	17,679	96%	*94%*	159	76%	*74%*	17,838	95%	*94%*
Usually Unoccupied	756	4%	*6%*	54	26%	*26%*	810	4%	*6%*
Under Construction	36	0%	*1%*	-	0%	*1%*	36	0%	*1%*
Compare Resident Households (2018)							16,740		
Difference (n)							- 1,098		
Difference %							-6.2%		

Source: Census 2018; 1 includes under construction

2.4.2 Household Type and Tenure 2020

Table 2-9 shows dwelling ownership and dwelling type by household type for Gisborne District in 2020. The data suggests that the majority (61%) of households own their dwellings, and 39% do not, implying they are renters. Of total dwellings (owned and not owned), dwelling type is significantly skewed towards detached dwellings at 90%, with attached dwellings around 9% of total dwellings. As expected, detached dwellings are the dominant type of housing in Gisborne District. Typically attached dwellings are more prevalent in larger more populated cities (i.e., Auckland, Wellington, Christchurch), however, this type of housing may become important for Gisborne's urban area in the future as the population increases, ages and the mix of households shifts towards smaller households.

Table 2-9: Household Types and Dwelling Tenure – Gisborne District, 2020

Household Type 2020	Owned or Trust			Not Owned[1]			Total		
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total
One Person household	2,380	300	2,680	1,290	560	1,850	3,670	860	4,530
Couple household	3,320	170	3,490	740	130	870	4,060	300	4,360
2 Parents 1-2 children	1,900	80	1,980	850	80	930	2,750	160	2,910
2 Parents 3+ children	610	20	630	460	20	480	1,070	40	1,110
1 Parent Family	1,260	30	1,290	1,800	210	2,010	3,060	240	3,300
Multi-family household	320	20	340	230	20	250	550	40	590
Non-family household	190	-	190	260	-	260	450	-	450
Total Households	9,980	620	10,600	5,630	1,020	6,650	15,610	1,640	17,250
One Person household	14%	2%	16%	7%	3%	11%	21%	5%	26%
Couple household	19%	1%	20%	4%	1%	5%	24%	2%	25%
2 Parents 1-2 children	11%	0%	11%	5%	0%	5%	16%	1%	17%
2 Parents 3+ children	4%	0%	4%	3%	0%	3%	6%	0%	6%
1 Parent Family	7%	0%	7%	10%	1%	12%	18%	1%	19%
Multi-family household	2%	0%	2%	1%	0%	1%	3%	0%	3%
Non-family household	1%	0%	1%	2%	0%	2%	3%	0%	3%
Total Households	58%	4%	61%	33%	6%	39%	90%	10%	100%
Relative Concentration									
One Person household	0.91	**1.84**	0.96	0.87	**2.09**	**1.06**	0.90	**2.00**	
Couple household	**1.32**	**1.08**	**1.30**	0.52	0.50	0.52	**1.03**	0.72	
2 Parents 1-2 children	**1.13**	0.76	**1.11**	0.89	0.46	0.83	**1.04**	0.58	
2 Parents 3+ children	0.95	0.50	0.92	**1.27**	0.30	**1.12**	**1.07**	0.38	
1 Parent Family	0.66	0.25	0.64	**1.67**	**1.08**	**1.58**	**1.02**	0.76	
Multi-family household	0.94	0.94	0.94	**1.19**	0.57	**1.10**	**1.03**	0.71	
Non-family household	0.73	-	0.69	**1.77**	-	**1.50**	**1.11**	-	

Source: ME Housing Demand Model 2021 [1] *Not Owned includes NEI* *Note - includes rounding*

***Note**: The table shows the relative concentration i.e., a value >1 means the area has a relatively high concentration in that category. Using the row and heading combinations e.g., couple households owning detached dwellings (1.32 value) means that relative to other household types and tenure combinations across the area, this combination is relatively over-represented. The size of the value is not important in this instance, the threshold is >1.*

It is important to look at the ownership rates of detached verses attached dwellings. For detached dwellings, the ownership rate is 64%, meanwhile, attached dwellings have a significantly lower proportion of household ownership at 38%. The ownership rate for detached dwellings (64%) is greater than the overall ownership rate (61%).

The data suggests that one-person households are over-represented in attached dwellings (compared to other households), at 5% of all households or 19% of one person household and 52% of all households living in attached dwellings. This is expected as the size of a dwelling is largely dependent on the number of people in the household. In other words, as household size decreases, so does the households space requirements. Attached dwellings are often more compact and more suited towards smaller households.

In terms of ownership, couple and 2 parents with 1-2 children households have the highest ownership rates at 80% and 68%, respectively. On the other hand, 1 parent families and non-family households have the lowest ownership rates of 39% and 42%, respectively. Larger family households with 3 or more children, one parent families and multi- and non-family households are over-represented in dwellings which are not owned.

2.4.3 Household Income and Tenure 2020

Table 2-10 presents the distribution of households by income bands and dwelling tenure for Gisborne District in 2020.

Table 2-10: Household Income and Dwelling Tenure – Gisborne District, 2020

Household Income	Owned or Trust			Not Owned[1]			Total		
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total
Under $30,000	1,800	230	2,030	1,880	550	2,430	3,680	780	4,460
$30-50,000	1,740	120	1,860	1,180	200	1,380	2,920	320	3,240
$50-70,000	1,580	70	1,650	1,000	110	1,110	2,580	180	2,760
$70-100,000	1,850	50	1,900	810	60	870	2,660	110	2,770
$100-120,000	980	50	1,030	290	40	330	1,270	90	1,360
$120-150,000	880	50	930	240	40	280	1,120	90	1,210
$150,000+	1,160	40	1,200	230	40	270	1,390	80	1,470
Total Households	9,990	610	10,600	5,630	1,040	6,670	15,620	1,650	17,270
Under $30,000	10%	1%	12%	11%	3%	14%	21%	5%	26%
$30-50,000	10%	1%	11%	7%	1%	8%	17%	2%	19%
$50-70,000	9%	0%	10%	6%	1%	6%	15%	1%	16%
$70-100,000	11%	0%	11%	5%	0%	5%	15%	1%	16%
$100-120,000	6%	0%	6%	2%	0%	2%	7%	1%	8%
$120-150,000	5%	0%	5%	1%	0%	2%	6%	1%	7%
$150,000+	7%	0%	7%	1%	0%	2%	8%	0%	9%
Total Households	58%	4%	61%	33%	6%	39%	90%	10%	100%
Relative Concentration									
Under $30,000	0.70	**1.46**	0.74	**1.29**	**2.05**	**1.41**	0.91	**1.83**	
$30-50,000	0.93	**1.05**	0.94	**1.12**	**1.03**	**1.10**	**1.00**	**1.03**	
$50-70,000	**0.99**	0.72	0.97	**1.11**	0.66	**1.04**	**1.03**	0.68	
$70-100,000	**1.15**	0.51	**1.12**	0.90	0.36	0.81	**1.06**	0.42	
$100-120,000	**1.25**	**1.04**	**1.23**	0.65	0.49	0.63	**1.03**	0.69	
$120-150,000	**1.26**	**1.17**	**1.25**	0.61	0.55	0.60	**1.02**	0.78	
$150,000+	**1.36**	0.77	**1.33**	0.48	0.45	0.48	**1.05**	0.57	

Source: ME Housing Demand Model 2021 *1 Not Owned includes NEI* *Note - includes rounding*

A positive relationship exists between household income band and dwelling ownership. As such the lowest income bands, households with incomes under $30,000, have the lowest ownership rate – 46%. Conversely the highest ownership rate is seen in the highest income band (>$150,000) at 82%. As household incomes increase, the ownership proportion also increases. It is clear from Table 2-10 that the bottom three income bands (<$70,000) are over-represented in dwellings which are not owned. Ownership rates for the following income bands are:

- Lower household income cohorts (<$50,000) 51%
- Middle household income cohorts ($50,000-100,000) 64%
- Upper household income cohorts (>$100,000) 78%

The data reflect a higher concentration of lower income households in attached dwellings. The share of households living in attached dwellings decreases as household income increases. Forty-six per cent (46%) of households with an income under $30,000 live in an attached dwelling, while the proportion for households with incomes over $150,000 is only 5%.

Attached dwellings are increasingly being built as a way to improve affordability, and in response to shifting preferences. Higher intensity housing typically uses land more efficiently, making these types of houses more affordable.

2.4.4 Tenure and Dwelling Type by Ethnicity 2020

The link between tenure and dwelling types by ethnicity is presented below in Table 2-11. There are several limitations around the data used to estimate the ethnicity attributes. For example, an individual can identify as multiple ethnicities, this means that the percentage ratios calculated from the data does not sum to 100%. Therefore, M.E rebalanced the totals and applied the estimated ratios across datasets. This means that the ratios and percentages show a small difference with other totals reported elsewhere. The rebalancing is also the reason for the slight variation with the ethnicity breakdowns as presented in Section 2.2.3. The proportional structure as revealed in the available data is used in assessing the forward looking patterns (in section 2.5). There are small differences in the overall totals, but these are within acceptable levels.

Table 2-11 shows the distribution of household ethnicity by dwelling tenure. European households have the highest ownership rate at 73% and is higher than the Gisborne average of 61%. The remaining ethnicities have lower than average ownership rates. Pacific households have the lowest ownership rate of 40%, while Māori (46%) and Asian (52%) have slightly higher rates of ownership. Regardless, these three ethnicities are over-represented as households in dwellings which are not owned (rented).

The dwelling type split for European and Māori households is 90% detached and 10% attached, the same as the Gisborne average. Asian households have a slightly higher detached share of 93% and are less concentrated in attached dwellings compared to other ethnicities. Based on the data, all households identifying as Pacific (470) live in detached dwelling, there are none living in attached dwellings. Detached dwellings are usually preferred by Pacific (and Māori) households as they tend to be larger and often intergenerational which can sometimes lead to overcrowding.

Table 2-11: Household Ethnicity and Dwelling Tenure – Gisborne District, 2020

Household Ethnicity	Owned or Trust			Not Owned[1]			Total		
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total
European	6,790	530	7,320	2,270	460	2,730	9,060	990	10,050
Māori	2,780	80	2,860	2,890	530	3,420	5,670	610	6,280
Pacific	190	-	190	280	-	280	470	-	470
Asian	240	-	240	190	30	220	430	30	460
Total	10,000	610	10,610	5,630	1,020	6,650	15,630	1,630	17,260
European	39%	3%	42%	13%	3%	16%	52%	6%	58%
Māori	16%	0%	17%	17%	3%	20%	33%	4%	36%
Pacific	1%	0%	1%	2%	0%	2%	3%	0%	3%
Asian	1%	0%	1%	1%	0%	1%	2%	0%	3%
Total	58%	4%	61%	33%	6%	39%	91%	9%	100%
Relative Concentration									
European	**1.17**	**1.49**	**1.18**	0.69	0.77	0.71	**1.00**	**1.04**	
Māori	0.76	0.36	0.74	**1.41**	**1.43**	**1.41**	**1.00**	**1.03**	
Pacific	0.70	-	0.66	**1.83**	-	**1.55**	**1.10**	-	
Asian	0.90	-	0.85	**1.27**	**1.10**	**1.24**	**1.03**	0.69	

Source: ME Housing Demand Model 2021 *1 Not Owned includes NEI* *Note: includes rounding to 10*

2.4.5 Other demand segments (social and emergency housing)

A portion of housing demand arises from households that are facing challenges to find suitable accommodation in the market. This includes short term, and long-term challenges. Kāinga Ora is the agency responsible for managing a share of NZ (public) rental estate. It also engages in the local development market, delivering new housing stock. Kāinga Ora is not the sole provider or manager of social housing, it collaborates with other agencies, local government, and iwi, as well as private partners, to deliver the Government's housing priorities.

The level of social housing that is provided illustrates the mismatch between affordability and the mainstream housing stock. Kāinga Ora (31 March 2021) shows the level of social housing accommodation in Gisborne District is some 1,256 properties[18].

The Ministry of Social Development provide information on the number of people on the Public Housing Register[19]. The Public Housing Register is comprised of a Housing Register and a Transfer Register. The Housing Register is prioritised by need and consists of public housing applicants who have been assessed as being eligible, while the Transfer Register is made up of people already in public housing, but who have requested and are eligible for a transfer to another property. As at September 2021, the number of people on the housing register in Gisborne District was 549. Ninety-three households are on the transfer register. Seventy-seven per cent of these housing register applicants require 1- and 2-bedroom houses, which suggests smaller households are the most at need for social housing.

The number of public tenancies (not houses[20]) is reported as 1,523.

[18] https://kaingaora.govt.nz/assets/Publications/Managed-stock/Managed-Stock-TLA-March-2021.pdf
[19] https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/statistics/housing/archive/index.html
[20] The tenancies include community provider tenanted properties that are either subsidised through Income-Related Rent Subsidy or the tenant is paying market rent.

The Gisborne Housing Strategy, commissioned in late 2019 by Manakai Tairāwhiti and Trust Tairāwhiti, aims to address the developing housing crisis in Gisborne.

Kāinga Ora has signalled the construction intentions under the 'Building Momentum' programme (14 May 2021). The following summary shows the anticipated development pathways for Kāinga Ora properties in Gisborne City.

Gisborne City		
Stage in process	In Planning	220
	Consenting and procurement	20
	Under Construction	30
Construction Starting	2021	100
	2022	60
	2023	40
	2024	40
Total		240
Source: Kāinga Ora. Building Momentum presentation		

The status of these developments is unknown.

Note: Considering the uncertainty, and how the modelling runs at a parcel level (and then aggregates the results), the potential additions associated with the Kāinga Ora developments are not added (on top of) our capacity assessment. That is, the plan enabled capacity as calculated is used without further adjustments for KO's development intentions because the details around the sites, timing and development densities are unknown. Further, the assessment considers the commercial feasibility (with a developer's margin, as required by the NPS-UD).

2.5 Future Housing Demand

The population is dynamic, expected to grow in absolute terms and change in the relative composition. However, these shifts in size and mix are not linear over time and will affect the level, and type, of demand over the short, medium, and long term. The shifts in household numbers and types inform the future demand for housing.

This section describes the future demand for housing in Gisborne District based on the medium-high projections (prepared by Thomas Consulting). Future demand is estimated by assuming that the revealed patterns at a household level remain constant into the future (while considering the shift in demographic age structures). That is, the change in the number of household types is expected to change over time, but the types of housing (dwellings) associated with the (new) households are kept constant. This means that we have allowed for changes in the mix of households to flow through to the demand estimates. Demand and income levels, by household segment, are assumed to persist for the assessment period. This provides a basis for assessing future affordability based on the assumed medium-high growth pathway. The future demand outlook does not model macro-economic matters, like interest rates, exchange rates, migration

policy, and so forth, beyond the established trends in household income levels. This is considered further in relation to housing affordability (see section 4).

As the future housing demand is based on the medium-high scenario and the current housing preferences, the existing financial capabilities of different household segments are assumed to continue into the medium to long term. This means that dwelling ownership patterns, across different income cohorts are expected to remain broadly constant with current levels. This assumes that the decision to enter (or remain in) the housing market, made by households in different income bands, will remain stable. Gisborne is a relatively stable economy with patterns having emerged over long periods and which are an appropriate departure point.

The section concludes with a discussion of the demand with a competitiveness margin included.

2.5.1 District-wide Demand outlook

The medium-high growth outlook forms the basis for the future demand assessment. The outlook is presented using several different dimensions to provide a detailed picture of demand looking forward. Table 2-12 presents the results and shows future housing demand by dwelling type across:

- Dwelling tenure,
- Household type,
- Income levels, and
- Ethnicity.

Gisborne District is expected to see growth over the short, medium, and long terms. Households are expected to increase by 5,020 over the next three decades, with the growth expected to occur as follows:

- 2020 – 2023 660,
- 2023 – 2030 1,640, and
- 2030 – 2050 2,720.

Dwelling types (detached vs attached)

Over the long term the relative mix of dwelling types (detached vs attached) is expected to shift slightly away from detached towards attached dwellings. Over the short term, 90% of the expected dwelling demand is for detached dwellings, shifting down to 87% in the medium term and 85% over the long term. A larger share of attached dwellings will be demanded which is associated with higher intensity typologies. That being said, demand for detached dwellings remains significant.

Over time, the relativity of demand for detached-attached dwellings is expected to change as follows:

- 2020-2023 0.11 attached dwelling demanded for every 1 detached dwelling demanded,
- 2023-2030 0.14 attached dwelling demanded for every 1 detached dwelling demanded, and
- 2030-2050 0.18 attached dwelling demanded for every 1 detached dwelling demanded.

Table 2-12: Summary of Medium-High Future – Gisborne District

Medium-High Future	Current			Short Term			Medium Term			Long Term		
	2020			2023			2030			2050		
Dwelling Tenure	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total
Owned with mortgage	4,180	170	4,350	4,330	180	4,510	4,470	240	4,710	4,830	330	5,160
Owned without mortgage	4,200	350	4,550	4,360	390	4,750	4,820	590	5,410	5,560	890	6,450
Owned by Trust	1,610	90	1,700	1,670	100	1,770	1,790	130	1,920	2,010	210	2,220
Total Owned or in Trust	9,990	610	10,600	10,360	670	11,030	11,080	960	12,040	12,400	1,430	13,830
Not Owned	5,630	1,000	6,660	5,780	1,110	6,890	6,040	1,480	7,520	6,500	1,980	8,480
TOTAL	**15,620**	**1,610**	**17,260**	**16,100**	**1,800**	**17,900**	**17,100**	**2,400**	**19,600**	**18,900**	**3,400**	**22,300**
Household Type												
One Person Hhld	3,670	860	4,530	3,950	960	4,910	4,280	1,340	5,620	4,830	1,870	6,700
Couple Hhld	4,060	300	4,360	4,230	330	4,560	4,600	470	5,070	5,110	680	5,790
2 Parents 1-2chn	2,750	160	2,910	2,790	160	2,950	2,840	190	3,030	3,070	280	3,350
2 Parents 3+chn	1,070	40	1,110	1,090	50	1,140	1,110	50	1,160	1,180	80	1,260
1 Parent Family	3,060	240	3,300	3,050	250	3,300	3,200	330	3,530	3,560	430	3,990
Multi-Family Hhld	550	40	590	540	40	580	570	40	610	620	60	680
Non-Family Hhld	450	-	450	450	10	460	470	10	480	510	10	520
TOTAL	**15,610**	**1,640**	**17,250**	**16,100**	**1,800**	**17,900**	**17,100**	**2,400**	**19,500**	**18,900**	**3,400**	**22,300**
Household Income												
Under $30,000	3,680	780	4,460	3,880	880	4,760	4,200	1,230	5,430	4,740	1,730	6,470
$30-50,000	2,920	320	3,240	3,040	340	3,380	3,320	480	3,800	3,760	670	4,430
$50-70,000	2,580	180	2,760	2,650	190	2,840	2,790	260	3,050	3,050	360	3,410
$70-100,000	2,660	110	2,770	2,710	110	2,820	2,850	150	3,000	3,090	200	3,290
$100-120,000	1,270	90	1,360	1,290	100	1,390	1,330	120	1,450	1,410	160	1,570
$120-150,000	1,120	90	1,210	1,140	90	1,230	1,160	120	1,280	1,240	160	1,400
$150,000+	1,390	80	1,470	1,430	60	1,490	1,470	80	1,550	1,610	130	1,740
TOTAL	**15,620**	**1,650**	**17,270**	**16,100**	**1,800**	**17,900**	**17,100**	**2,400**	**19,600**	**18,900**	**3,400**	**22,300**
Ethnicity												
European	9,060	990	10,050	9,690	1,130	10,820	10,320	1,590	11,910	11,440	2,280	13,720
Maori	5,670	610	6,280	5,750	620	6,370	6,040	850	6,890	6,570	1,140	7,710
Pacific	470	-	470	370	-	370	390	-	390	420	-	420
Asian	430	30	460	320	30	350	340	50	390	370	50	420
TOTAL	**15,600**	**1,600**	**17,300**	**16,100**	**1,800**	**17,900**	**17,100**	**2,500**	**19,600**	**18,800**	**3,500**	**22,300**
Share %												
Owned with mortgage	24%	1%	25%	24%	1%	25%	23%	1%	24%	22%	1%	23%
Owned without mortgage	24%	2%	26%	24%	2%	27%	25%	3%	28%	25%	4%	29%
Owned by Trust	9%	1%	10%	9%	1%	10%	9%	1%	10%	9%	1%	10%
Total Owned or in Trust	58%	4%	61%	58%	4%	62%	57%	5%	61%	56%	6%	62%
Not Owned	33%	6%	39%	32%	6%	38%	31%	8%	38%	29%	9%	38%
TOTAL	90%	9%	100%	90%	10%	100%	87%	12%	100%	85%	15%	100%
One Person Hhld	21%	5%	26%	22%	5%	27%	22%	7%	29%	22%	8%	30%
Couple Hhld	24%	2%	25%	24%	2%	25%	24%	2%	26%	23%	3%	26%
2 Parents 1-2chn	16%	1%	17%	16%	1%	16%	15%	1%	16%	14%	1%	15%
2 Parents 3+chn	6%	0%	6%	6%	0%	6%	6%	0%	6%	5%	0%	6%
1 Parent Family	18%	1%	19%	17%	1%	18%	16%	2%	18%	16%	2%	18%
Multi-Family Hhld	3%	0%	3%	3%	0%	3%	3%	0%	3%	3%	0%	3%
Non-Family Hhld	3%	0%	3%	3%	0%	3%	2%	0%	2%	2%	0%	2%
TOTAL	90%	10%	100%	90%	10%	100%	88%	12%	100%	85%	15%	100%
Under $30,000	21%	5%	26%	22%	5%	27%	21%	6%	28%	21%	8%	29%
$30-50,000	17%	2%	19%	17%	2%	19%	17%	2%	19%	17%	3%	20%
$50-70,000	15%	1%	16%	15%	1%	16%	14%	1%	16%	14%	2%	15%
$70-100,000	15%	1%	16%	15%	1%	16%	15%	1%	15%	14%	1%	15%
$100-120,000	7%	1%	8%	7%	1%	8%	7%	1%	7%	6%	1%	7%
$120-150,000	6%	1%	7%	6%	1%	7%	6%	1%	7%	6%	1%	6%
$150,000+	8%	0%	9%	8%	0%	8%	8%	0%	8%	7%	1%	8%
TOTAL	90%	10%	100%	90%	10%	100%	87%	12%	100%	85%	15%	100%
European	52%	6%	58%	54%	6%	60%	53%	8%	61%	51%	10%	62%
Maori	33%	4%	36%	32%	3%	36%	31%	4%	35%	29%	5%	35%
Pacific	3%	0%	3%	2%	0%	2%	2%	0%	2%	2%	0%	2%
Asian	2%	0%	3%	2%	0%	2%	2%	0%	2%	2%	0%	2%
TOTAL	90%	9%	100%	90%	10%	100%	87%	13%	100%	84%	16%	100%

Change between periods	2020 - 2023			2023 - 2030			2030 - 2050		
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total
Owned with mortgage	150	10	160	140	60	200	360	90	450
Owned without mortgage	160	40	200	460	200	660	740	300	1,040
Owned by Trust	60	10	70	120	30	150	220	80	300
Total Owned or in Trust	370	60	430	720	290	1,010	1,320	470	1,790
Not Owned	150	110	230	260	370	630	460	500	960
TOTAL	480	190	640	1,000	600	1,700	1,800	1,000	2,700
One Person Hhld	280	100	380	330	380	710	550	530	1,080
Couple Hhld	170	30	200	370	140	510	510	210	720
2 Parents 1-2chn	40	-	40	50	30	80	230	90	320
2 Parents 3+chn	20	10	30	20	-	20	70	30	100
1 Parent Family	- 10	10	-	150	80	230	360	100	460
Multi-Family Hhld	- 10	-	- 10	30	-	30	50	20	70
Non-Family Hhld	-	10	10	20	-	20	40	-	40
TOTAL	490	160	650	1,000	600	1,600	1,800	1,000	2,800
Under $30,000	200	100	300	320	350	670	540	500	1,040
$30-50,000	120	20	140	280	140	420	440	190	630
$50-70,000	70	10	80	140	70	210	260	100	360
$70-100,000	50	-	50	140	40	180	240	50	290
$100-120,000	20	10	30	40	20	60	80	40	120
$120-150,000	20	-	20	20	30	50	80	40	120
$150,000+	40 -	20	20	40	20	60	140	50	190
TOTAL	480	150	630	1,000	600	1,700	1,800	1,000	2,700
European	630	140	770	630	460	1,090	1,120	690	1,810
Maori	80	10	90	290	230	520	530	290	820
Pacific	- 100	-	- 100	20	-	20	30	-	30
Asian	- 110	-	- 110	20	20	40	30	-	30
TOTAL	500	200	600	1,000	700	1,700	1,700	1,000	2,700

The ratio of attached to detached dwellings increases, continuing to shift to a higher ratio over time. This is a slow but steady shift. Looking towards the long term, the slight shift towards attached dwellings aligns with the overall demand profile with changing household types, however, detached dwellings remain the principal typology.

- Conversely the share of dwellings owned with a mortgage, declines slightly from one quarter (25%) in 2020 to 23% by 2050. While the share of dwellings with a mortgage reduces, the quantity increases (+810). Detached dwellings owned with a mortgage shifts downwards from 24% of dwellings to 22% by 2050. The share of attached dwellings that are owned with a mortgage remains constant around 1%, an additional 160 dwelling over time.
- The overall share of dwellings owned by trusts is expected to remain stable, around 10% over the short, medium and long term.
- The share of dwellings not owned is also relatively stable sitting around the 38-39% mark. However, the mix of not-owned dwellings will shift towards attached dwellings. Currently properties which are not owned and detached make up 33% while attached and not owned dwellings account for 6% of total dwellings. Over time these shares are estimated to change with a larger share (9%) of not owned attached dwellings and a smaller share (29%) of not owned detached dwellings.

The increase in dwellings owned without a mortgage is matched by a corresponding decrease in the proportion who own with a mortgage. Although the owned with a mortgage group increases by 810 households over the long term, the share falls from 25% in 2020, to 23% in 2050.

By 2050, there will be an additional 1,900 households who own dwellings without a mortgage. It is assumed this ownership group represents households who have previously held a mortgage which they have since paid off over the course of their prime earning years. The increase in the share of households owning dwellings without a mortgage reflects the long-term expectations for more households to be in the older age cohorts, towards retirement age. As the population/households age, they transition to smaller households (one person and couples). The increase in smaller household types over the long term is supported by the shift towards attached dwellings. Attached dwellings, which are generally smaller, better reflect older age cohorts and smaller household-combinations as their needs change in the later stages of life.

In terms of the proportion of dwellings owned by trusts and dwellings not owned, these are projected to remain relatively stable over time. However, the change in growth terms is an additional 520 and 1,820 households respectively. The data suggests a larger proportion of the rental stock is anticipated in attached dwellings, indicating a shift in the overall rental stock over time. The interplay between household growth and the rental market is reflected by the anticipated changing rental stock typology over time.

The dwelling tenure by dwelling type proportions indicate that households who own without a mortgage or do not own are expected to slowly shift towards attached dwellings. It must be noted that detached dwellings remain the dominant housing typology in the district, however, an initial observation is that the small increase in the share of attached dwellings could be in response to the shifting demands (due to demographic trends).

Household types

In terms of the household types, the demand patterns align with standard demographic shifts. These key shifts include:

- The share of smaller households, specifically one person and couple households, increases from 52% currently to 56% by 2050. Within these households there is a greater share living in attached

types over time, signalling a change in typology preferences. Importantly, these household types include both young and aged individuals. Households are more likely to adjust their housing choices based on need and life stage. The current percentage split for these two household types of detached vs attached is 87:13, gradually shifting to 80:20 in the long term.

- The second largest household type which dominates the demand profile is parent(s) with children households. Currently these households make up 42% of household types. This share decreases over time to reach 39% by 2050, however, in absolute terms this group will increase by an additional 1,280 households. The split between detached and attached dwellings for this group leans slightly towards attached dwellings over time. However, the bulk of this shift in attached dwelling is anticipated within one parent families, an increase of 190 households from 240 in 2020 to 430 by 2050. Detached dwellings remain the preferred typology for two parent families with children.
- The share of multi-family households over time remains constant (3%), with a minor increase of 90 households by 2050. Within this household type, the detached vs attached percentage split is relatively consistent, with detached dwellings as the dominant household type.
- Non-family households share also remains relatively constant over time, around the 2-3% mark with an increase of 70 households by 2050. Demand for additional attached dwellings is minimal and the bulk of demand within this group continues to be in detached dwellings.

There is a continued preference for detached housing over time for both multi- and non-family households which likely reflects the preference for large(r) dwellings to accommodate more household members.

A key observation is that smaller households and one parent household types show a slow, but distinct, shift in preference to attached dwellings over time. Attached dwellings tend better to these households' needs, of which life stage plays an important part. The preference shift relates to an ongoing move in dwelling demand towards higher density typologies. This pattern is being observed across NZ's cities.

Income bands

The dwelling demand outlook is also broken down into demand by income levels and is an important determinant of housing affordability. There are seven different income cohorts used to illustrate the outlook across income levels. Below are some key observed shifts in income levels over time:

- The largest shift is anticipated within the lowest income cohort (<$30,000) which is expected to increase from 26% (currently) to 29% by 2050. This cohort will increase by an additional 2,010 households by 2050 which is equivalent to 40% of total demand growth. Demand for attached households is expected to increase by 950 or 47% of total demand growth within the lowest income cohort. The share of attached households with income less than $30,000 increases from 5% to 8% by 2050. The detached equivalent share remains constant (~21%) with an additional 1,060 households or 53% of total demand growth within the lowest income cohort.
- Households with incomes between $30,000-50,000 are expected to grow also. These households will see the second highest growth, with an additional 1,910 households by 2050. The share of this income cohort remains relatively constant around the 19% to 20% mark over time. Nearly a quarter (24%) of total demand growth is within this income cohort.
- The share of middle-income earners ($50,000-100,000) is currently 32% or around 5,530 households. By 2050 this is expected to decline slightly to 30% or 6,700 households but increase by 1,170 over time.

- At the upper end of the spectrum ($100,000+), the share is expected to decline slightly from 23% currently to 21% by 2050. However, these upper income cohorts still manage to increase by around 590 households.

The reduction in shares of middle- and upper-income households over time is offset by the increase in household shares of lower income cohorts. By 2050, just under half (49%) of households will have incomes of less than $50,000. These projections do not necessarily mean that households are poorer, but it points to a relative shift in income levels. A portion of these households in the older age cohorts are at the end of their prime lifetime earnings potential and although their incomes have decreased, some of these low(er)-income households are 'asset rich' (i.e., homeowners). Therefore, care is needed when interpreting the shift in households in the low-income cohorts. Apart from the social implications of low-income levels, the outlook points to household affordability pressures increasing.

The different income cohorts have varying demand for detached and attached dwellings. The demand split is influenced by other socio-demographic attributes such as age, ethnicity and household size. The demand for detached and attached dwellings is expected to shift towards attached dwellings, with the growth associated with the following income cohorts:

- Currently the demand split for households with incomes less than $30,000 is 83% (detached) and 17% (attached). By 2050, this shifts to 73% (detached) and 27% (attached).
- A similar pattern is observed in the next lowest income band ($30,000-50,000), the detached share shifts downwards from 90% to 85%, while the attached share increases from 10% to 15%.

Over time the lowest income cohorts shift further towards attached housing, meanwhile, current and future demand typology splits for middle- and upper-income households continue to be skewed towards detached dwellings.

Ethnic groups

Acknowledging the constraints of the available data regarding ethnicity, the outlook for dwelling demand from different ethnic groups is discussed below. Key demand shifts by ethnic groups include:

- The largest demand shift is anticipated within households identifying as European. Currently these households make up 58% of households and this is projected to increase to 62% by 2050. In terms of growth, this group increases by an additional 3,670 households and represents the largest growth among the reported ethnic groups.
- The second largest growth is within Māori households. By 2050 this group increases by 1,430 households, however, over time the share remains relatively stable siting around the 35-36% mark.
- Shares for the remaining ethnic groups continue to be stable over time, hovering around 2-3% for both Pacific and Asian households. Negative growth is anticipated in these ethnic groups out to 2050, -50 and -40 households respectively.

The ethnic groups have different demand for detached and attached dwellings. The demand split is influenced by other socio-demographic attributes, like income levels, age, and household size. The demand for detached and attached dwellings is expected to shift towards attached dwellings with the growth associated with the following ethnicities:

- European households will see the biggest shift in demand towards attached dwellings. The demand for attached dwelling over the next 30 years from European households accounts for 26% of total demand growth and 68% of attached demand growth. The share of attached dwelling for these household increases from 6% currently to 10% by 2050, an increase of 1,290 attached dwellings. Demand for detached dwelling represents 48% of total demand growth and continues to be the dominant dwelling typology. An additional 2,380 detached dwellings will be demanded by 2050 from European households.
- The remaining households' shares of the demand growth is comparatively small, some 27% and demand from Māori households' make up the bulk of this. Households identifying as Māori demand an additional 530 attached and 900 detached dwellings by 2050. In terms of total demand growth, this is the equivalent of 11% attached and 18% detached. The share of detached dwellings declines from 33% currently to 29% by 2050 while the share of attached dwellings is relatively stable (4-5%) over time.
- Pacific and Asian households see negative growth in demand for dwellings over time, specifically detached dwellings. By 2050, 20 additional attached dwellings are demanded while there is a reduction (-110) in detached dwellings.

By 2050 it is projected that Pacific and Asian households will decline by 50 and 40 households respectively.

Overall, the demand patterns align with the identified demographic shifts. The demand shifts are evident over all the different household types and income bands. These shifts align with observed patterns as dictated by affordability, where households make trade-offs between dwelling type and ability to service a mortgage (i.e., affordability considerations) when looking to enter and stay in the property market.

2.5.2 Urban Demand Outlook (incl. competitiveness margin)

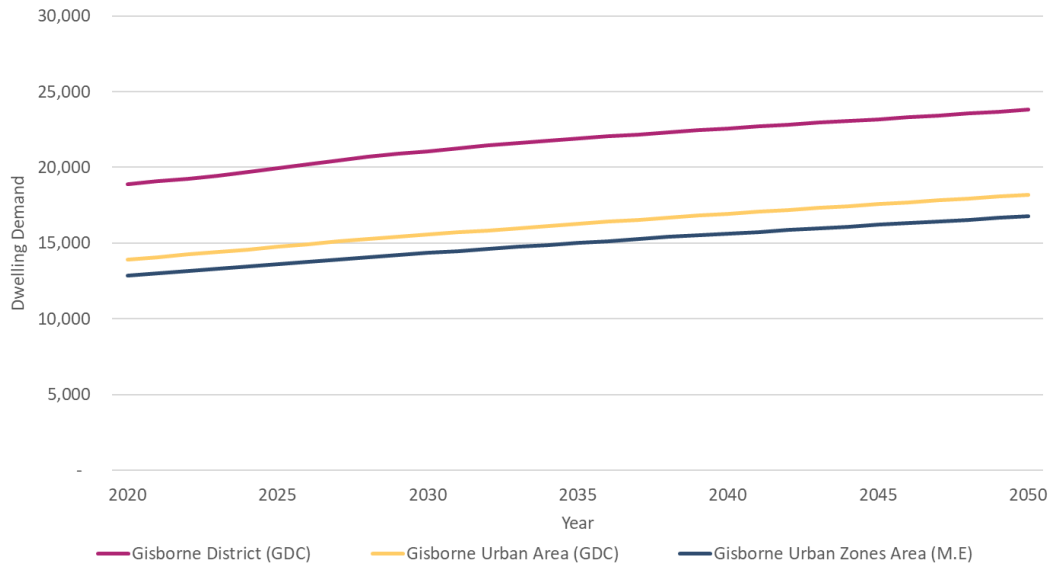
The preceding discussions focus on the district wide picture. However, the demand assessment is associated with the urban area. Therefore, the urban component of demand is split out. Figure 2-2 shows the projected dwelling demand at the district (total), Gisborne Urban Area (GUA) and Gisborne Urban Zones Area levels. The Urban Zones Area projected demand has been calculated from applying the base year share to the GDC GUA projection. Table 2-13 shows the calculated profile change in urban dwelling demand across the Gisborne Urban Zones Area (and Gisborne District total for context) required for the HBA assessment. The net increases in dwelling demand have been calculated for the short-term (2020-2023), medium-term (2020-2030) and long-term (2020-2050). *Demand includes unoccupied dwellings, so will be higher than the count of households.*

In the short-term, there is a projected increase in demand for an additional 440 dwellings within the Gisborne Urban Zones Area. This amounts to an increase of 3% of the existing dwelling base. There is a projected increase of 12% (+1,510 dwellings) over the medium-term, with the dwelling demand projected to continue to grow at the same rate (1.1% p.a.). Growth in the long-term is projected to slow slightly, with a projected net increase of 3,940 dwellings, amounting to 31% of the existing dwelling base.

The table shows the increase in demand with the required NPS-UD sufficiency assessment demand margins. These are an additional 20% to the short and medium-term, and 15% on the net increase projected to occur within the long-term. When a margin is applied, the short-term net increase in demand

becomes 530 dwellings, with the medium and long-term net increases amount to 1,810 dwellings and 4,610 dwellings respectively.

Figure 2-2: Projected Dwelling Demand



Source: GDC - Updated Dwelling Projections (June 2021) and M.E Urban Zones Area Projections as a share of GDC projections (November 2021).

Table 2-13: Spatial split of future demand

	Dwelling Demand				Net Change in Dwelling Demand		
AREA	2020	2023	2030	2050	Short-Term: 2020-2023	Medium-Term: 2020-2030	Long-Term: 2020-2050
Gisborne Urban Zones Area	12,840	13,280	14,350	16,780	440	1,510	3,940
Gisborne District	18,870	19,470	21,080	23,820	600	2,210	4,950
Urban Area (with margin)	12,840	13,370	14,650	17,450	530	1,810	4,610
Urban Area (with margin + latent)	12,840	14,120	15,410	18,200	1,280	2,570	5,360

Source: M.E and GDC.

The final row in the table includes an existing estimated latent demand across the district. This has been included on a preliminary basis from the Public Housing Register[21]. We have assumed that there is a latent demand for 753 dwellings, and that this would all occur within the Gisborne Urban Zones Area.

When latent demand estimates are included together with the demand margin, the short-term required dwelling capacity within the Gisborne Urban Zones Area amounts to 1,280 dwellings. In the medium-term, the requirement is for an additional 2,570 dwellings (from the 2020 existing base); and in the long-term, an additional 5,360 dwellings (from the 2020 existing base).

We note that 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. The purpose of the margin is to support choice and competitiveness in housing and business land markets by ensuring that Council enables at least 15-20% more capacity than required to meet demand.

[21] Sourced from Ministry of Social Development Public Housing Register, current as at end of September 2021.

It is important to differentiate between providing for housing capacity, which is done by ensuring sufficient plan-enabled and infrastructure-serviced land supply for anticipated needs and building that housing capacity.

This means the competitiveness margin applies to land capacity, and not to the housing which can be expected to take up that land. Since the supply of new dwellings is predominantly a private sector activity, where developers and builders take up land and build dwellings in expectation of uptake – often an expectation which has the security of contractual arrangements – it is unlikely that the private sector would look to provide for and actually build capacity to be ready 2-4 years before an expected sale.

Accordingly, development of housing can be expected to generally be in line with or slightly ahead of the uptake of new dwellings by households. The competitiveness margin applies to the land capacity, which is provided for through zoning and infrastructure, rather than the land development itself, and especially the built development.

It is important to recognise that the assessment of future housing demand is based largely on a "Business as Usual" or BAU base case, in which the current housing preferences and capabilities for each socio-demographic group are assumed to continue into the medium and long term. That means that dwelling ownership levels for each household segment will be more or less the same in 10- and 30-years, for the segments which are around then. The BAU future assumes that households with those characteristics in 10- or 30-years' time will have the same ownership patterns. In relatively stable economies and communities, like Gisborne, where current patterns have developed over a long period, the BAU assumption is generally the appropriate starting point.

It provides a basis for assessing future affordability. However, the BAU demand future does not seek to model macro-economic matters, beyond the established trends in household income levels. This is considered further in relation to housing affordability.

2.6 Concluding remarks

The first part of the report covered the demand outlook for Gisborne. The analysis has shown that the growth outlook is positive. Factors like the ageing population and ongoing growth are expected to change the nature of demand for dwellings looking forward. The anticipated change is showing a reasonably large spread between the low and high scenarios (from the StatsNZ data). Importantly, while not all the scenarios are reported here, the medium-high (reported) shows the preferred option. The other scenarios illustrate the spread (and deals with uncertainty). The Council will need to monitor how the development patterns and growth aligns with expected patterns.

An immediate implication of using the new population projections and using the high(er) projection series is that the projected growth is considerably higher than those used by the Council for earlier analysis and assessments, including the work for the National Policy Statement on Urban Development Capacity as well as early draft work for the Long Term Plans. The timing of StatsNZ's population projection release means that the NPS-UD response is some of the first work to consider the higher growth pathways. We understand that the Council is continuously reviewing its internal datasets to reconcile and assimilate the new projections with the other workstreams, like the asset management plans and processes.

3 Housing Supply

This section presents the current dwelling estate in terms of composition and property values in the Gisborne urban area. This forms an important part of the supply side of the Housing Assessment, as it makes up a large share of the future estate (discussed in a later section under future housing affordability, See section 8.1). As the current estate ages over time, improvement and land values change. This affects feasibility of redevelopment as well as affordability in the future. This section relies on information from a range of sources, including data purchased from CoreLogic, Gisborne District Council Ratings Database information, central government indicators; and applies assumptions about improvement and land value trends. The data reflects property attributes like typology, size, sales value, and location as a way to segment the estate.

This section provides an overview of the current dwelling estate and the historic consent patterns.

3.1 Current Dwelling Estate

In this section the core structure and value profile of the existing housing estate in Gisborne's urban area is presented in terms of:

- Numbers of dwellings,
- Value band profile, and
- By typology (as classified by CoreLogic and the Ratings Database).

3.1.1 Gisborne District – Current Estate

Table 3-1 summarises the structure of the Gisborne urban area current dwelling estate, as at June 2020. It shows the number of dwellings by type and their distribution of value by land and improvement value. The key observations are included below.

Table 3-1: Residential Property Estate (2020)

Residential Property Parameters 2020: Gisborne Main Urban Area

Property Category	Count	Land Value ($m)	Improved Value ($m)	Capital Value ($m)	Mean LV ($000)	Mean IV ($000)	Mean CV ($000)	LV as % CV
House	10,160	$ 2,571	$ 2,661	$ 5,233	$ 253	$ 262	$ 515	49%
Retirement Units	210	$ 12	$ 101	$ 113	$ 57	$ 486	$ 543	10%
Apartment	1,170	$ 170	$ 247	$ 417	$ 145	$ 211	$ 356	41%
Townhouse/Flat	960	$ 74	$ 113	$ 187	$ 77	$ 118	$ 195	39%
Sub-Total Residential	**12,500**	**$ 2,827**	**$ 3,123**	**$ 5,950**	**$ 226**	**$ 250**	**$ 476**	**48%**
Lifestyle Property	120	$ 51	$ 59	$ 109	$ 432	$ 502	$ 934	46%
Total	**12,610**	**$ 2,877**	**$ 3,182**	**$ 6,059**	**$ 228**	**$ 252**	**$ 480**	**47%**

Source: M.E 2021; GDC Ratings Database.

The main points are:

- According to this data there are around 12,610 residential properties within the urban area, which broadly aligns with the 2020 household estimate of 12,840 households in this area (Table 2-13). District-wide it is estimated there are around 18,820 dwellings.
- Over four fifths (81%) of dwellings are standalone homes, with smaller shares of the dwelling stock as apartments (9%), town houses/flats (8%), retirement dwellings (2%) and lifestyle dwellings (1%).
- Gisborne's urban estate is valued at around $6.1bn, made up of
    - Land Value $2.9bn (47%), and
    - Value of Improvements $3.2bn (53%).

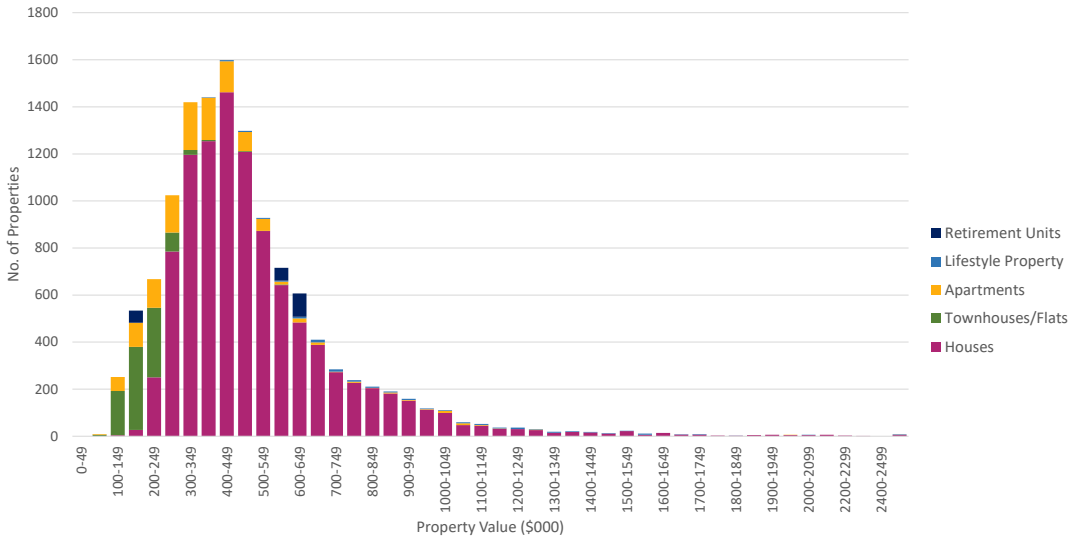
Mean values for land, improvements and capital value across the urban portfolio (shown in the above table) are estimated as follows (excluding the lifestyle properties):

- Land value $226,000,
- Value of Improvement $250,000, and
- Capital Value $476,000.

It is clear the mean values of lifestyle properties are significantly higher than other residential type properties. The higher LV can generally be ascribed to the larger size of these properties, but because these are within the urban area, it is likely that the LV per sqm is much higher than a lifestyle property further out of town. The higher value of improvements (VoI) is reflected not only the dwelling on the property, but also other building and improvements usually found on lifestyle properties. Therefore, it is pragmatic to treat lifestyle properties separately because these are a separate sub-market and are unlikely to meet general demand for urban dwellings.

Figure 3-1 shows the distribution of the residential estate across value bands, for the main dwelling types. The value profile is based on analysis of the GDC Ratings Database. The figure is followed by a summary of key observations.

Figure 3-1: Residential Property Estate – by type and value band (2020) for Gisborne Urban Area



Source: M.E Ltd, 2021; GDC Ratings Database.

- Gisborne's dwelling stock is characterised by a relatively high share of lower value dwellings. Around two-thirds (65%) of the urban dwelling stock are valued in value bands of $500,000 or

lower. This is due to a combination of cheaper land values within the area, as well as a high share of lower improvement values. Many of the houses are older dwelling stock that are smaller, with over half (56%) of dwellings smaller than 120m^2.

- Standalone dwellings are concentrated in the $300,000-$500,000 value bands (58% of standalone dwellings, and 41% of all dwellings). There is a considerable share of homes (35% of standalone dwellings) valued between $500,000 and $1million, with 4% of standalone dwellings value over the $1million mark.
- Apartments, which make up the second largest share of dwellings, is concentrated in value bands between $250,000 and $450,000, which likely reflects the quality and age of these apartments, while at the same time reflecting the size aspects and the small portion of land (low LV component).
- The majority of homes valued below $250,000, are townhouses/flats, with a few apartments and retirement units making up the remainder.
- Lifestyle properties have a very broad spread with values ranging from $350,000 up to $2million. These account for only a small share (120 properties) of the Gisborne main urban area's current dwelling estate. There are a significant, and increasing, number of lifestyle properties in the semi-rural area surrounding Gisborne's main urban area. However, these are located on rural lifestyle zones and are outside of the scope of this assessment on urban dwelling capacity and demand.

Appendix 1 shows a comparison of the value of Gisborne's current estate (urban area) compared with New Zealand as a whole. This highlights the underlying pattern that housing in Gisborne is relatively less expensive than the rest of NZ.

The current dwelling estate is projected to continue to increase in value through time as a function of general market growth across the Gisborne housing market. The future dwelling prices are a combination of the underlying growth in land values as well as the market prices for dwellings. The land value component will typically grow faster within a growing urban economy, making up an increasing share of the total property value through time. This is an important driver of future intensification and redevelopment within the existing dwelling stock.

The projected future dwelling value profile of the current dwelling estate is shown in Table 3-2. It shows the gradual upward shift in the value profile through time. Currently, nearly all (86%) of the dwelling stock is in value bands below $700k, with the remaining 14% in value bands $700k or greater. The proportion of the current estate dwellings in value bands above $700k is project to increase to 17% in the short-term, and to over half (57%) in the long-term.

3.1.2 Dwelling Value Trends

The growth in New Zealand's house prices is well documented. Since 2000 residential property values across New Zealand have increased significantly, only easing up slightly after the GFC (2007-2010), before heading upwards again. The growth appears to be a long process and has been driven by several factors:

- The ease of accessing finance,
- high consumer confidence (especially in the lead-up to the GFC),
- constraints on construction capacity,
- strong inward migration,
- overseas investment in New Zealand's housing market (until 2018),
- interest rates (currently very low, however this is rising off a low base) and
- the tax policy and environment.

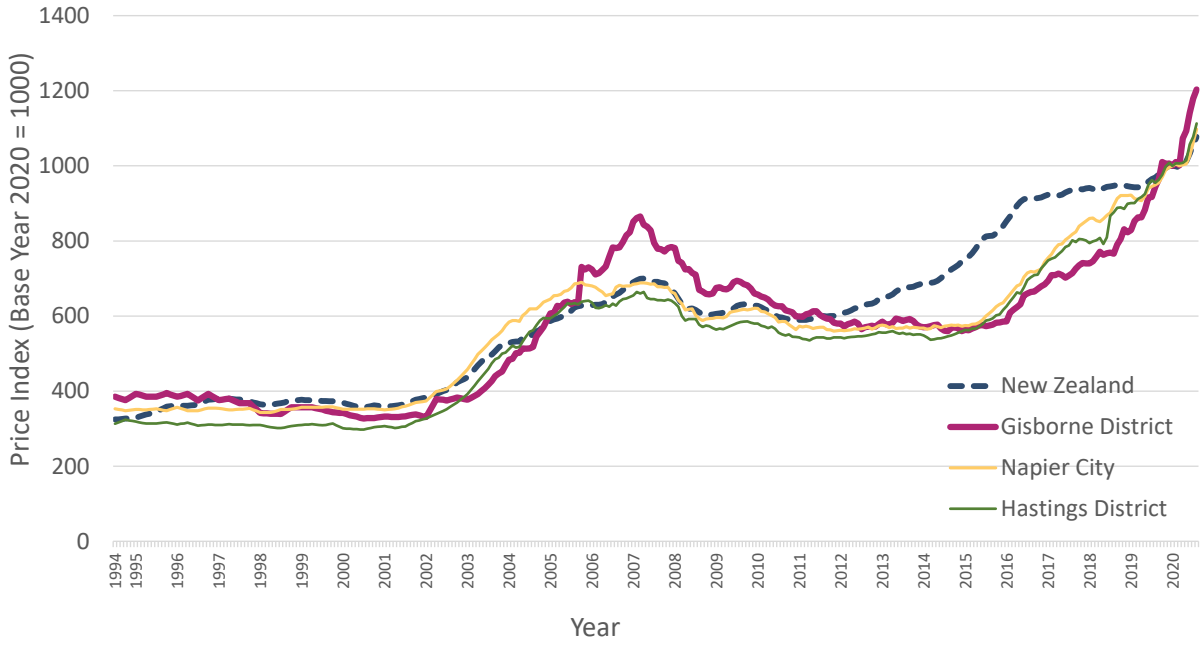
Figure 3-2 shows the longer-term trend (from 1994) by presenting the Residential property index[22] published by CoreLogic for Gisborne compared with New Zealand, Napier City and Hastings District[23]. While strong residential value growth has been witnessed across all New Zealand, the scale of the shifts has varied.

Table 3-2: Current Dwelling Estate in the Future

	Total Current Estate				Net Change		
	2020	2023	2030	2050	2020-2023	2023-2030	2030-2050
Under $400K	5,550	4,850	3,510	1,330	- 700	- 1,340	- 2,180
$400-699K	5,560	5,790	6,210	4,260	230	420	- 1,950
$700-999K	1,210	1,470	2,030	3,820	260	560	1,790
$1-1.3M	330	450	640	1,750	120	190	1,110
$1.3-1.6M	110	140	240	920	30	100	680
$1.6M+	90	140	230	770	50	90	540
SUM	12,850	12,850	12,850	12,850	-	-	-
	Proportion						
Under $400K	43%	38%	27%	10%			
$400-699K	43%	45%	48%	33%			
$700-999K	9%	11%	16%	30%			
$1-1.3M	3%	4%	5%	14%			
$1.3-1.6M	1%	1%	2%	7%			
$1.6M+	1%	1%	2%	6%			

Source: ME Housing Demand Model 2021
LV Trend: 3.3%; IV Trend: 0.9%; Construction Cost Trend: 0.9%

Figure 3-2: Residential Property Value Index (1994-2020)



[22] The index offers monthly data across 125 locations.
[23] These districts are added for comparison.

Some key points include:

- Gisborne's growth between 2006 and 2007 outstripped the national growth by some margin, but post-GFC prices remained suppressed for longer, suggesting the region took longer to recover from the economic shock.
- Between 2012 and 2016 very strong national growth is observed, which is primarily driven by strong growth in the Auckland market. During this period Gisborne prices remained stable.
- Between 2016 and 2019 national prices stabilised somewhat, while smaller regions such as Gisborne experienced strong growth again. It was suggested at the time, this was because of households exiting the Auckland market and moving into regions where prices were lower.

According to REINZ data, as at December 2021, the median house price in Gisborne was $695,000.[24] This is up from $225,000 10 years earlier. That means that the median Gisborne property increased in value by 11.94% each year, or $47,000 on average.

The key changes over the past two decades or so are summarised in Table 3-3. The table shows mean values in both nominal (dollars of the day) and real terms (CPI-adjusted showing values in $2020).

Table 3-3: Residential Property Value Trends (2001-2020)

		Mean Property Value ($000)							Value Change since:				
Location	Indicator	June 2001	June 2008	June 2012	June 2015	June 2018	June 2019	June 2020	2001-20 (%)	2001-20 (%) pa	Last 5 Yrs (%)	Last 2 Yrs (%)	Last Year (%)
Gisborne District	Nominal Value	98	278	228	227	309	353	431	440%	8.1%	90%	39%	22%
	Real (CPI adj)	143	337	250	243	319	358	431	301%	6.0%	77%	35%	20%
New Zealand	Nominal Value	181	402	408	518	674	687	738	408%	7.7%	42%	9%	7%
	Real (CPI adj)	265	487	448	554	695	697	738	278%	5.5%	33%	6%	6%
Napier City	Nominal Value	147	335	314	330	512	558	614	418%	7.8%	86%	20%	10%
	Real (CPI adj)	215	406	345	353	529	566	614	286%	5.7%	74%	16%	8%
Hastings District	Nominal Value	123	308	291	310	452	522	588	478%	8.6%	90%	30%	13%
	Real (CPI adj)	181	373	319	331	467	530	588	325%	6.4%	78%	26%	11%

Source: Corelogic all Residential Index 2021; Values in $000

Some key points include:

- Over the past 20 years, nominal prices in Gisborne have increased four-fold (440%) and three-fold (301%) in real terms (accounting for inflation). This suggests average annual growth of 8% and 6%, respectively.
- In both nominal and real term this suggests faster long-term growth in Gisborne than nationally.
- Between 2015 and 2020, the gap between Gisborne and New Zealand growth had widened, with property values nearly doubling (90% increase in nominal value) in Gisborne and increasing by 72% (nominal) across the country.
- Over the past two years (2019-2020) Gisborne's rapid price growth, i.e., a 39% increase in nominal terms, outpaced national growth (9%) by some way.

[24] https://www.opespartners.co.nz/property-markets/gisborne

3.1.3 Land Value as share of Total Price

This indicator shows the share of house values that are accounted for by land prices at each valuation period. A higher ratio indicates that land is more valuable relative to the buildings that occupy it. The long run evidence in New Zealand points to land value (LV) generally increasing at a faster rate than the Value of Improvements (VoI)[25] of individual sites during times of economic expansion. That is, the LV as a share of Capital Value (CV)[26] increases. The relationship between land values and total price (Capital Value) serves as an indicator of how local planning activity interacts with the market, over time. It also provides a way to consider the cost changes over time.

A core way in which this measure can be affected by local planning parameters is through the densities enabled under the Plan. This includes the higher density dwelling typologies and level of intensification enabled within the existing urban area as well as densities across new areas of greenfield expansion. These range from minimum lot sizes for standalone dwellings up to the height limits for vertical apartment buildings.

Growth in the share of land value is generally expected through time for cities both in aggregate as well as at the individual property level. This is expected to occur in markets that are both constrained and unconstrained by any local planning provisions. When a dwelling is constructed on a lot, the land value continues to rise through time as the economy expands, and as relative positioning of the property within the overall market continues to gradually improve as it is relatively more central, and the overall population demand base continues to expand relative to the geographic size of the city. This is an important driver of urban redevelopment processes where it becomes feasible in the future to redevelop parcels to a higher intensity.

This trend is expected to occur for any growing city where the measure is conducted across the entire housing stock in aggregate, in the way the data is provided on the Urban Development Dashboard. In any year, the addition of new dwelling stock to an urban economy is only a small share relative to the existing base. Therefore, the trend in this measure is influenced by the large relative impact of the existing housing stock base.

Over a longer time period, if significant proportions of the existing dwelling stock have been redeveloped or intensified (at significantly higher densities), then the land value share may decrease slightly. However, as new dwellings are constructed, the existing estate continues to age, and the size of the economy increases. Both effects act to push up the land value as a share of total value. While shifts may be observed at a highly localised level - for instance, a high amenity/accessible area historically developed at lower densities may see a change following intensification. However, the process is driven by the rate of growth in the economy, and absent major disasters, the housing estate is added to usually at a rate of less than 1.5% pa. This means the passage of time can generally be expected to offset much of any change at the margin.

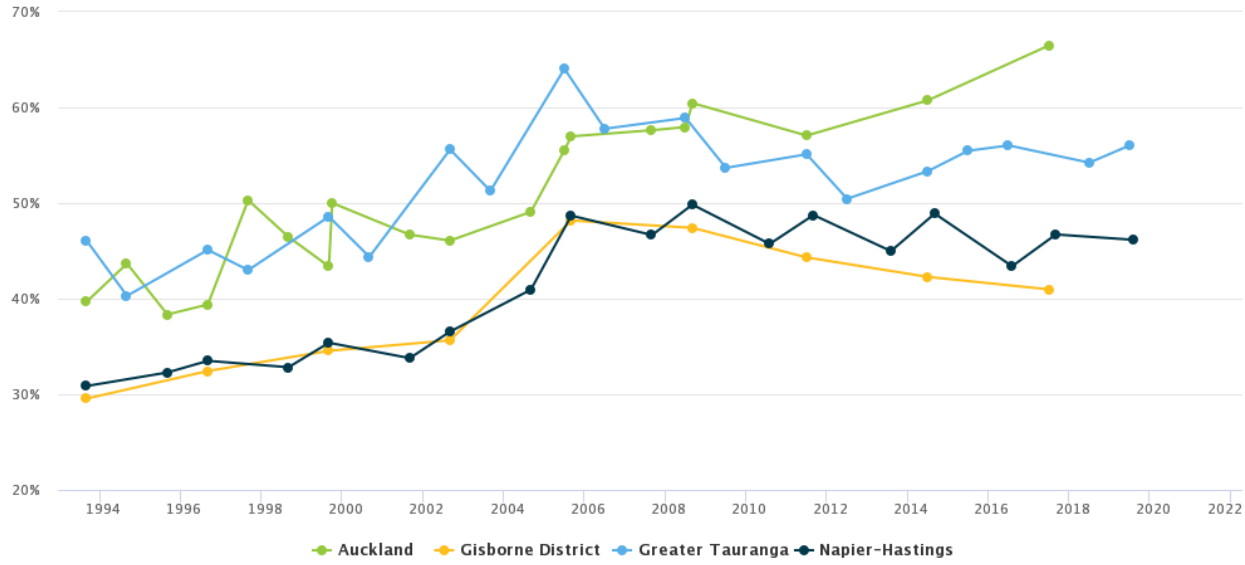
Accordingly, the land value share is of some relevance in relation to additions to the dwelling estate - newly constructed dwellings – as an indicator of the effect of local planning conditions. That may be assessed in

[25] the value of everything else permanently built on or attached to the land
[26] Referred to as Total Price.

relation to the maximum densities and mix of dwelling typologies enabled in the Plan. It is generally not appropriate as a method for assessing the total estate[27].

Figure 3-3 shows land value as a share of capital value (as an average) across selected urban economies.

Figure 3-3: Land value as percentage of capital value (Selected Urban Areas)



The above figure shows that the LV as share of the property values has been trending up over the long period, even if the short-term trend is downwards. This recent down shift could reflect a range of local factors, such as re-investments in property and the redevelopment of parcels to higher specifications. The reasonably slow growth in the local economy in the post-GFC environment could also be a factor. Nevertheless, the long-term trend is upward.

This next section reports on the historical consent trends in Gisborne, with the future estate discussed further in section 8.1.

3.2 Additions to the estate (consents)

The second part of this section highlights the insights from analysing the construction patterns. Consents issued provide valuable information about the scale, value and typology of the local construction activity, i.e., new additions to the current estate. It is acknowledged that not all building consents are realised, but the vast majority are and result in new dwellings within 12 to 24 months of the consent being issued.

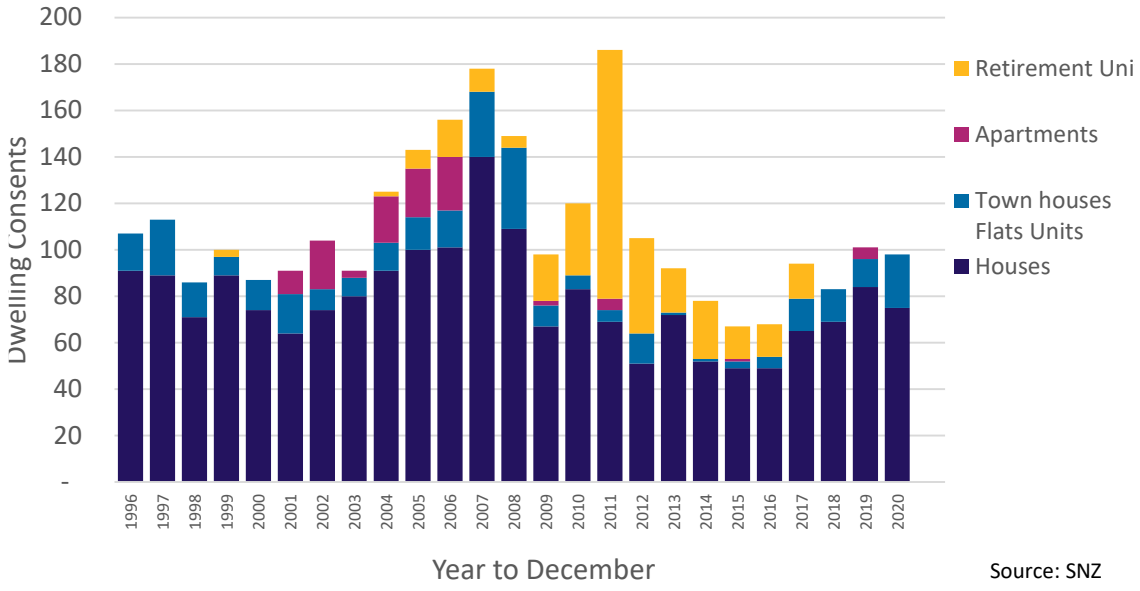
[27] There are limitations to this PCR method, including its core assumption of some 'ideal' land value share, but more fundamentally from its built-in assumptions that the current dwelling accounts for all of the value of land, and therefore that the current dwelling must represent the maximum development intensity possible on the land (otherwise there would be other factors, including potential for intensification which would influence land value. The consequent assumption that every residential lot in a city is already developed to its maximum potential causes substantial distortions, especially in relation to a city's growth potential if all growth must be greenfield. The research experience in New Zealand including for HBA work shows instead that well over 80% of already developed sites have potential for intensification.

While the number and value of consents provide good information about the value of the improvements on the land, it is important to consider the land value component as part of the total value of a property (capital value). To estimate the land value component of new dwellings, we drew on past analysis of the observed relationships between VoI and LV for some 23,000 new residential properties in regional cities and districts for the years between 2013 to 2017[28].

The observations from this section inform the assumptions about when projecting new dwellings, in terms of the likely distribution by type and value, based on the premise that recent trends in consents are a strong indicator of what is currently feasible in the market. Appendix 2 provides additional detail about the process that was followed and offers additional figures to illustrate key points as well as more detailed information about historical consents in Gisborne.

Figure 3-4 summarises the consent information (by type).

Figure 3-4: Consents by Type (1996-2020)



Source: SNZ

Figure 3-4 shows the number of consents issued between 1996 and 2020 by typology as defined by Statistics NZ. Some key observations include:

- Strong growth in the number of annual consents prior to the GFC, with a considerable number of consents for apartments between 2001 and 2006.
- Post GFC (2009 onwards) there is a notable decline in the number of consents issued, which could be expected in an economic downturn. However, 2011 appears to be an anomaly with a relatively large number of retirement units consented. Upon closer inspection, the data suggests this relates to a single consent for 60 retirement village units recorded (by Stats NZ) as being smaller than 1sqm each. It is unlikely that this is the actual size of each unit. However, attempts to track down information about the actual size of the units have been unsuccessful. The rest of the analysis 'looks through' these issues.

[28] This analysis of CoreLogic datasets covered Hamilton City, Tauranga City, and New Plymouth, Whangarei, Western Bay of Plenty, Waikato, Waipa, Queenstown Lakes, Waimakariri and Selwyn districts.

- Over the past five years, consents have been recovering, and is back to levels similar to the late 90s, but not yet back to levels seen in the mid-2000s.
- The consents issued is dominated by standalone homes (Houses) which is not unexpected or uncommon in regional New Zealand. However, there is a slow shift happening as affordability considerations start to push households towards trade-offs.
- In terms of higher density typologies, the number of consents for townhouses/flats/units remained relatively stable before peaking in 2007 and 2008. Post GFC consents for these dwellings have remained low, only picking up again over the past four years.

Table 3-4 provides aggregate data covering the 2016-2020 period (note the data has been aggregated). The standalone homes (House) accounts for the largest share (85%) of the value of overall consent activity, followed by Town Houses and Flats/Units. The total value of the investment in standalone homes over the past five year is $139m and the total floor area consented is estimated at over 63,000m^2. The total floor area consented for all dwellings is over 75,000m^2. The average size of the dwellings (total) over the time was 169m^2, but houses had a slightly larger footprint (185m^2). Importantly some typologies have only a small number of entries (so a small sample that skews the average size for some years).

Table 3-4: Consent Parameters (2016-2020)

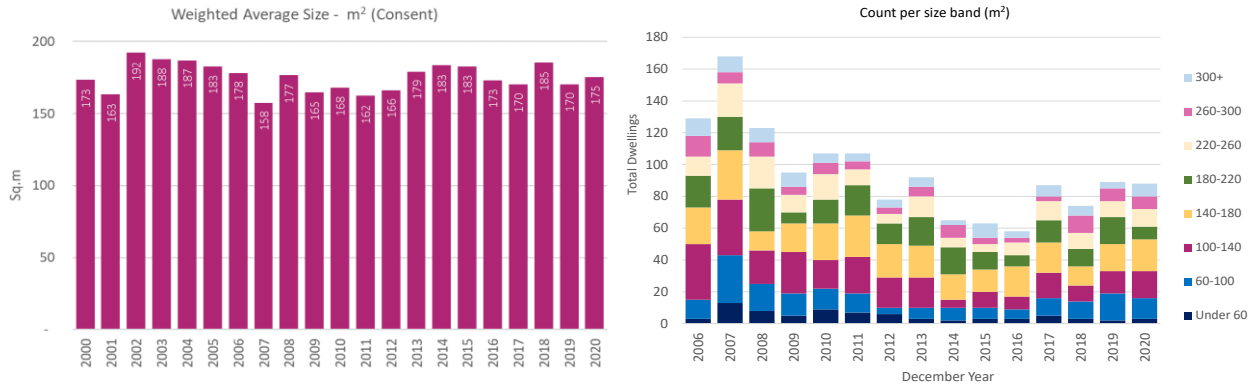
Parameter	Houses	Town houses Flats Units	Apartments	Retirement Units	Total Dwellings
2016-2020 Period					
Number of Consents	342	68	5	29	444
Total Value of Consents ($m)	$ 135	$ 16	$ 1	$ 5	$ 158
Total Value (Real $m) 2020	$ 139	$ 17	$ 1	$ 6	$ 162
Floor Area of Consents (sqm)	63,294	7,836	519	3,572	75,221
Mean Value of Consents ($000)	$ 390	$ 233	$ 30	$ 74	$ 351
Mean Real Value of Consents ($000)	$ 402	$ 241	$ 30	$ 79	$ 362
Mean Floor Area of Consents (sqm)	185	115	21	49	169
Mean Value $ per Sqm	$ 2,105	$ 2,076	$ 289	$ 605	$ 2,070
Mean Real Value $2020 per Sqm	$ 2,171	$ 2,140	$ 293	$ 641	$ 2,134

Source: Statistics NZ 2021

Figure 3-5 shows the trends for weighted average size of dwellings and the distribution of consents over different value bands.

The consent data suggests the weighted average size of dwellings being consented has remained relatively stable over time, with a slight decrease observed from the early 2000s. This can be ascribed to the increasing number of consents issued for apartments/flats/retirement units and other attached housing, which usually has a smaller floor area than standalone dwellings.

Figure 3-5: Consent Trends (2000-2020)



The graph on the right shows number of consents issued annually, and the distribution of consents across different size bands[29], from 2006 onwards. The decline in annual residential consents post GFC is evident, with a particularly small number of consents being issues between 2014 and 2016, before picking up again. Over time there is also a decline in units under 60m^2, and in units in the 100-140m^2 size band. At the upper end of the spectrum, large(r) dwellings (+220m^2) have experienced strong growth over the past four years. A potential reason for this is the need to maximise the return on land values. That is, in order to generate a sufficient return on the land investment, developers have to use the land as intensively as practical. This leads to decisions favouring relatively large dwellings (relative to sites). Within-NZ movements in response to high property prices in Auckland could also be a driver of these shifts.

Another way of looking at the consents is by value band. Table 3-5 shows the distribution of residential consents by value band. Keep in mind, this is the value of the consent and has no land component attached to it yet. This is the reason these consents are concentrated in lower value bands than what would be expected in terms of property values.

Table 3-5: Dwelling Consent by Value Band

Value Band	2013	2014	2015	2016	2017	2018	2019	2020
$0,000 - $100,000	1%	2%	3%	3%	4%	0%	1%	0%
$100,000 - $200,000	6%	23%	10%	19%	13%	14%	11%	9%
$200,000 - $300,000	27%	13%	26%	22%	32%	7%	17%	21%
$300,000 - $400,000	43%	34%	26%	18%	12%	28%	16%	19%
$400,000 - $500,000	16%	22%	15%	24%	19%	16%	25%	18%
$500,000 - $600,000	4%	4%	12%	8%	13%	19%	15%	10%
$600,000 - $700,000	0%	2%	3%	1%	4%	4%	9%	4%
$700,000 - $800,000	1%	0%	1%	4%	0%	6%	3%	13%
$800,000 - $900,000	1%	0%	2%	0%	1%	5%	3%	5%
$900,000 - $1.0M	0%	1%	2%	0%	1%	1%	0%	0%
$1.0M - $1.1M	0%	1%	1%	0%	1%	1%	1%	1%
$1.1M - $1.2M	0%	0%	0%	0%	0%	0%	0%	0%
$1.2M - $1.3M	0%	0%	0%	0%	0%	0%	0%	1%
$1.3M - $1.4M	1%	0%	0%	0%	0%	0%	0%	0%
$1.4M +	1%	0%	0%	0%	0%	0%	0%	0%

[29] Consents for units smaller than 1m^2 have been excluded.

3.3 Conclusion

Gisborne urban area's existing dwelling estate predominantly consists of standalone dwellings on full sites. It is characterised by a relatively low dwelling value profile, with nearly two-thirds of the estate in value bands below $500,000. This is due to a combination of lower land values (due to the lower cost of the location), and sizeable proportions of the estate made up from smaller, older dwellings.

The semi-rural area surrounding Gisborne has a sizeable number of higher value lifestyle properties. These occur in the lifestyle rural residential zones and are outside the scope of this urban assessment. While there is growth in this part of the market, they are unlikely to meet demand for urban dwellings due to their location and substantially higher dwelling value profile.

The Gisborne housing market has generally moved together with national trends in relation to the direction of movement within the market. There has been growth in the value of dwellings through time, and more recently, dwelling prices in Gisborne have grown faster than national averages. Part of this effect is likely to have occurred as a result of gradual changes in the dwelling stock in relation to the new dwellings constructed. There has been recent growth in demand for higher value lifestyle dwellings around the outer edges of the rural lifestyle area.

There have been around 80 to 100 consents for new dwellings issued per year within the Gisborne District over the past decade. This is similar to the level of household growth, which is the main driver of growth within the district. There were higher numbers of consents issued prior to the global financial crisis in 2008/2009.

On average, the new additions to Gisborne's dwelling estate are typically larger and higher value than the existing estate. There has been a gradual shift through time to increasing shares of attached dwellings, partly driven by growth in the retirement dwelling market.

The following section considers the affordability of the current housing estate within Gisborne. It takes account of the structure and value of the existing estate, combined with an analysis of the underlying structure of demand to calculate the level of housing affordability. The projected future affordability of the potential future estate (based on the capacity analysis) is included within Section 8.1.

4 Housing Affordability

This section looks at the current housing affordability patterns. Section 8.1 will explore the future affordability (future estate) by incorporating growth in the current estate with household projections and income growth.

4.1 Current Ownership Patterns 2020

Across Gisborne's urban area it is estimated, out of the approximately 12,800 households, 7,940 (62%) own their dwellings. It is assumed that non-owner households are in some sort of rental situation. Kāinga Ora data indicates that they manage approximately 1,260 properties[30] across the district. It was not possible to determine from the available data where these properties are located, but it is assumed that a large share of them would be within the urban area, which suggests many households rent in the private market. Table 4-1 and Figure 4-1 show the current ownership patterns across households in different income bands and by household composition.

Table 4-1: Dwelling Ownership by Income levels (Gisborne Urban Area)

Income Band	Owner House holds	Non-Owner House holds	Total	Owner House holds %	Non-Owner House holds %
<$20,000	610	890	1,500	41%	59%
$20-30,000	850	770	1,620	52%	48%
$30-40,000	690	490	1,180	58%	42%
$40-50,000	690	490	1,180	58%	42%
$50-70,000	1,200	850	2,050	59%	41%
$70-100,000	1,420	680	2,100	68%	32%
$100-120,000	820	270	1,090	75%	25%
$120-150,000	730	220	950	77%	23%
$150,000+	930	210	1,140	82%	18%
Total	7,940	4,870	12,810	62%	38%

Source: ME Housing Demand Model 2021

Some key observations about the current dwelling ownership patterns include:

- The data suggests that currently, 62% of households in Gisborne own the dwelling they live in. At the last Census (2018) Gisborne (and Auckland) were reported to have the lowest rate[31] of home ownership and below the national average (65%).[32]
- Owner households are concentrated in the $50,000-120,000 income band (43% of total), while non-owner households have somewhat lower incomes, i.e., concentrated (41%) in $40,000-$100,000 income band.

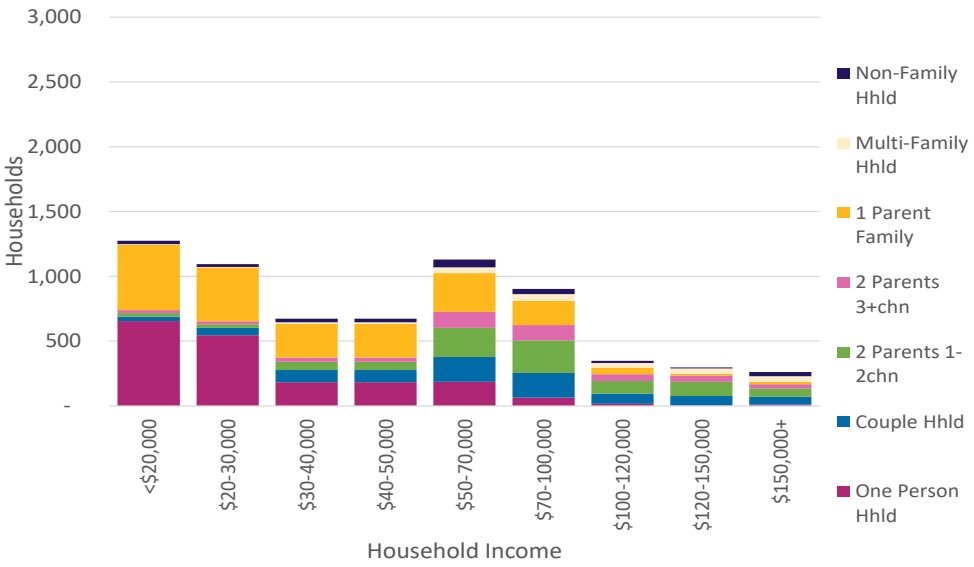
[30] https://kaingaora.govt.nz/assets/Publications/Managed-stock/Managed-Stock-TLA-September-2021.pdf Covering the year to September 2021.

[31] Stats NZ estimated the home ownership rates in Gisborne as 59% at Census 2018.

[32] https://www.stats.govt.nz/assets/Uploads/Reports/Housing-in-Aotearoa-2020/Download-data/housing-in-aotearoa-2020.pdf

- With the exception of the lowest income band (<$20,000pa), more than half of households in each income bracket, own their dwelling. This suggests historical investment decisions, especially in the very low-income brackets where households' ability to afford a mortgage is more likely to be limited.
- Owner households in the highest income bracket, ($150,000+ incomes) make up 82% of total households in that income range. The remaining households (18%) could afford ownership, so it is assumed that non-ownership is by choice, or the dwellings are held through another legal vehicle (e.g., trust).
- Non-owner households in the lower income bands (<$30,000pa) are made up largely of One person households and One parent families. One parent families are also prominent in non-owner households on annual incomes between $30,000 and $70,000.

Figure 4-1: Non-owner households, by type of household and income band



4.1.1 Ownership Affordability (2020)

Using assumptions about mortgage lending[33], the *M.E Housing Affordability Model,* shows what households in each income band could afford in terms of mortgage repayments and then compares this against the number of dwellings[34] in each value band. The affordability data is reported in Table 4-2. It shows the number of households in each income band and at which price they could afford a dwelling. The table also shows in which percentile of dwelling value the households can afford a dwelling. The dwelling value profile used in the current affordability analysis is estimated from the Ratings database. It is acknowledged that a property's rated value will not necessarily be the actual sales price but is viewed as a useful proxy. Figure 4-2 is a graphic representation of this information. The following information is shown in the table:

- The household income bands in $2020-terms, and a count of non-owner households in each band.
- The dwelling value percentile which would be affordable for a household in this income band.

[33] Loan term, deposit and interest rates.
[34] In the current estate.

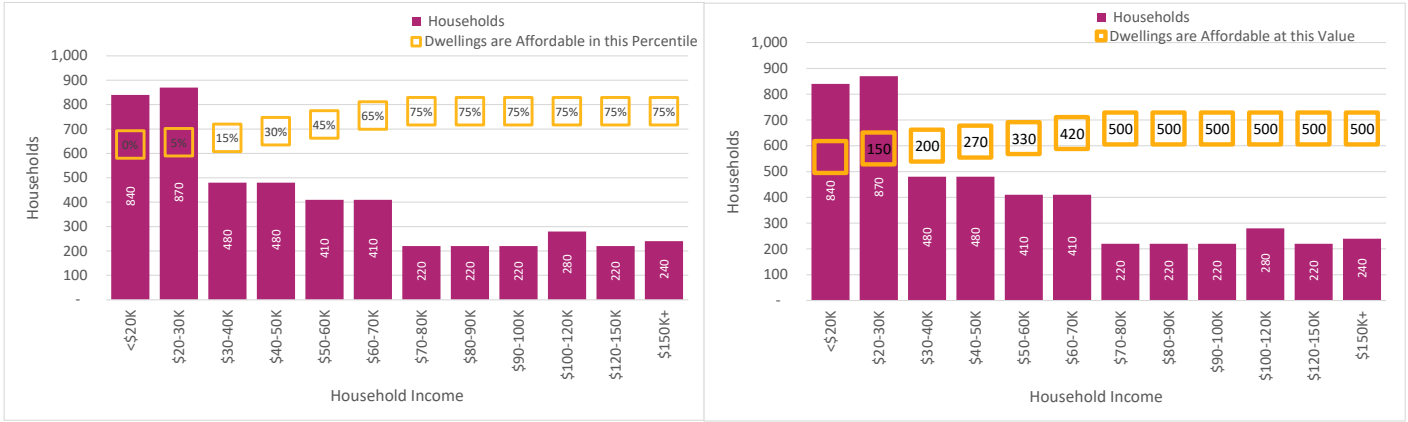
- The number of dwellings in the percentile band plus all lower value bands that a household could afford (column heading '*No. of Dwellings Can be Afforded'*).
- The share of dwellings in the value band which would be required to enable all households in an income band to become owners (column heading *'Share % of Dwellings Required'*).

Table 4-2: Dwelling affordability parameters (2020)

Household Income	2020				
	Non-Owner Households	Dwelling Percentile Value Affordable (%)	Dwelling Value Affordable ($000)	No. of Dwellings Can be Afforded	Share % of Dwellings Required
<$20,000	890	3%	$ 150	400	100+%
$20-30,000	770	8%	$ 200	990	78%
$30-40,000	490	21%	$ 300	2,690	18%
$40-50,000	490	32%	$ 350	4,110	12%
$50-70,000	850	66%	$ 500	8,450	10%
$70-100,000	680	86%	$ 700	11,110	6%
$100-120,000	270	94%	$ 900	12,040	2%
$120-150,000	220	97%	$ 1,050	12,430	2%
$150,000+	210	99%	$ 1,400	12,690	2%

Source: ME Housing Demand Model 2021

Figure 4-2: Housing affordability by percentile and Value Band (2020)



As expected, there are very few houses (<3%) that would be affordable to low-income households. The data suggest households with an income below $30,000 can theoretically afford a dwelling valued around $150,000-$200,000. According to Council's rating data there are 990 of these in the current stock, representing approximately 11% of the current stock. However, at present, there are around 1,660 households with an income below $30,000 annually. The 'shortfall' in affordable dwellings have implications for the housing market and highlights the role of community housing providers (such as Kāinga Ora).

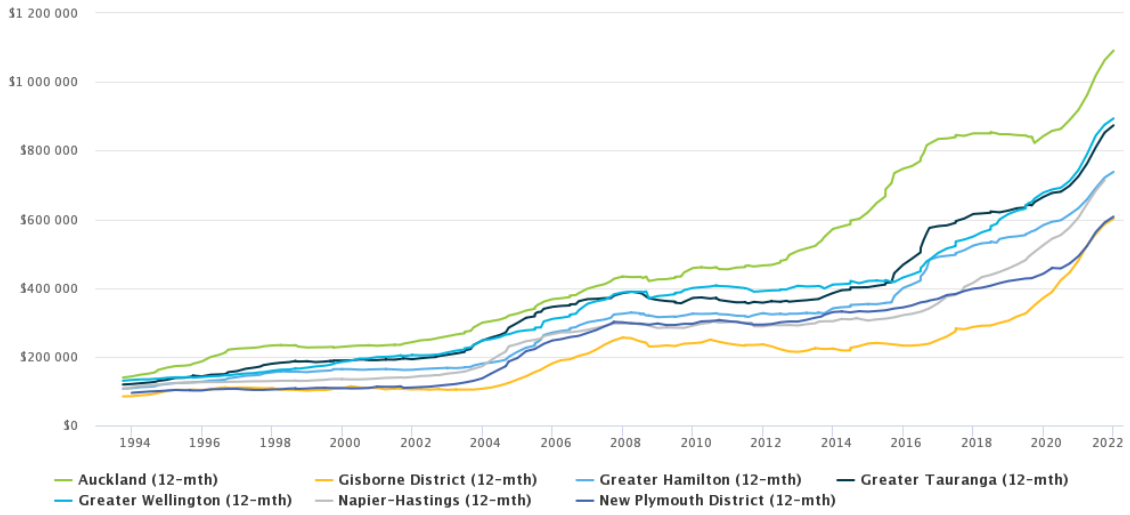
We do not report every income band, so as an example of how to interpret the table, we'll use households earning between $70,000 and $100,000 (which account for 14% of total households). These households could afford a dwelling up to the 86th percentile of property values or a mortgage in the order of $700,000 (assuming they had an adequate deposit). That implies that for these 680 non-owner households, there are around 11,110 affordable dwellings[35]. In other words, if all 11,110 dwellings in that band came to market, all 680 households could become owners if they wanted to. This suggests the demand from these households would represent approximately 6% of total dwelling supply up to that value band. Obviously, the ownership options are wider for households in the higher income bands. It is further key to consider that there are other demand sources (e.g., investors, and out of region households).

4.1.2 Sales price and rental patterns (2020)

This section addresses the NPS-UD requirement of providing detail on rental patterns and rental affordability. This assessment draws on information from MHUD's dashboard[36] on rental levels by council area and compares the trends in Gisborne against other urban economies around NZ.

Figure 4-3 shows the change in nominal median prices[37] of residential dwellings sold in each quarter, in seven housing markets over time.

Figure 4-3: Selected Urban Economies Sales Price Trends – 12m rolling Dwelling sales prices (actual)



Source: Ministry for Housing and Urban Development Dashboard, 2022

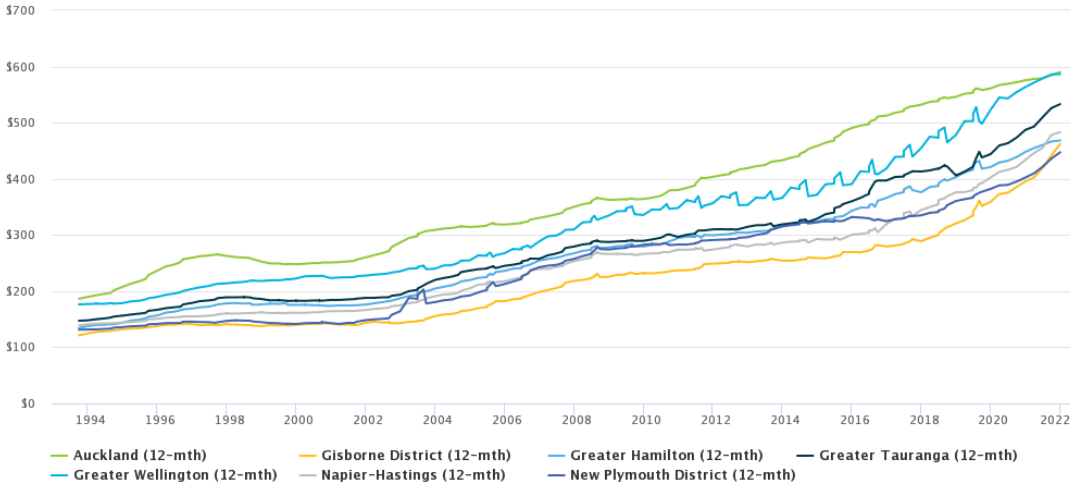
Napier-Hastings and New Plymouth has been included as comparator districts, with the other larger North Island urban areas (Auckland, Wellington, Tauranga and Hamilton) also included. Faster growth across all the areas is noticeable in the periods between 2004 and 2008 and again from 2014 to the present. Except for the past two years, these growth periods broadly correspond with periods of higher net migration.

[35] From the current estate
[36] https://huddashboards.shinyapps.io/urban-development/#
[37] This median price series is not adjusted for size and quality of dwellings.

Gisborne prices were stable (even declining slightly) between 2008 and 2014, before entering a period of recovery. With the exception of Auckland, all areas in the graph saw strong growth in sales prices between 2016 and 2020. During this time Auckland saw a period where prices plateaued somewhat. Anecdotally it was reported that Aucklanders were 'selling up' and moving to the regions, pushing up prices (as demand increased).

In terms of rent (see Figure 4-4), the shifts in Gisborne's rental prices have followed a similar pattern over time as experienced by the other urban economies. In the early to mid-nineties, rents in Gisborne were very similar to Napier-Hastings, Greater Hamilton and New Plymouth. Growth in the other comparator economies outpaced Gisborne from the late nineties, with the exception of New Plymouth, which showed similar growth to Gisborne until 2003. The data suggests that Gisborne rents have been lagging other comparators since 2003, only catching up to New Plymouth District recently. Gisborne has seen strong growth over the recent past, bringing values broadly in line with other areas, like Greater Hamilton, Napier-Hastings and New Plymouth. The rate of change in Gisborne rental prices over the year between June 2020 and June 2021, has been amongst the fastest across all locations around NZ.[38]

Figure 4-4: Selected NZ Urban Economies - 12 month rolling dwelling rents (actual)



Source: Ministry for Housing and Urban Development Dashboard, 2022

According to the MHUD dashboard, the median price as of 31 December 2021 in Gisborne was estimated at just over $600,000, up from around $249,000 at the end of 2016. This suggests dwellings prices have more than doubled (242% growth) over the last five years. In comparison, over the same period, Napier-Hastings dwelling prices grew by 200% and New Plymouth by 165%. A similar pattern has occurred with rents, where in Gisborne's median rent was estimated at $462 at the end of 2021, up from $277 at the end of 2016 (five years ago), which equates to a 167% rise. In comparison, rents in Napier-Hastings increased by 156% and 138% in New Plymouth. The 10-year increase equates to a 250% lift sales prices and 187% rise in rents in Gisborne.

It is important to note that these graphs are an aggregation of the total housing market in each location. They are appropriate for informing a broad understanding of the movement of the market in relation to wider national trends.

[38] Massey University – The Property Foundation. Rental Report September 2021.

These rises are important when it comes to affordability considerations. The next section will present the current ownership patterns and discuss the implications of household incomes (and types) on housing affordability.

4.2 Ownership and Affordability Patterns

As part of the NPS-UD requirements, councils need to provide detail on housing affordability for segments within the community, especially in terms of incomes, ethnicity, and age group. In response to this requirement, this section provides detail on ownership and affordability for key segments within Gisborne (2020), maintaining the focus on non-owner households and ownership affordability. Detailed data tables are included in the appendices with the highlights summarised in Table 4-3. The appendices present:

- Non-ownership Rates by Household Type, Income and Ethnicity (Appendix 3), and
- Relative incidence of non-ownership (Appendix 4).

Table 4-3 shows whether households in a certain group (ethnicity, income, and type) are less likely to own their home, relative to households of a similar size and income across the rest of the district. A tick suggests that households in a particular group (ethnicity, income, and type) are more likely to be non-owners (when compared with households of similar income and type across the rest of Tairāwhiti). For households of all ethnicities, the prevalence of ownership is compared with households in the same income bracket and demography across the district. Importantly, the *relative* positions of households (by income bands, ethnicity, and household types) are shown in the table. That is, if a group is not ticked, then it does not mean that there are not any owners in that group, it simply means that relative to similar households in the district, the subject group is underrepresented.

The table shows the bias of dwelling ownership towards European and Other ethnicity, with Māori households underrepresented across all categories. This is an important social consideration, which may require mitigation measures to be put in place to alleviate these issues. (However, many of the potential issues and approaches are beyond the scope of this report). Prevalence of non-ownership among Pacific and Asian peoples is also much higher than for European and Other. However, note, household numbers in these two groups are relatively low, i.e., 220 Pacific households and 170 Asian households.

Selected observations about the ownership and affordability patterns are presented below. The discussion draws on the tables as well as the information in the appendices.

- Māori households account for 51% of non-owner households, but only 37% of total households[39] in Gisborne. This suggests a relative overrepresentation of Māori households among non-owner households.
- Dwelling ownership also varies according to household type and household income. Households in the lower and lower-middle income bands ($70,000 and below) are less likely to be owners, and thus more likely to be renters. Conversely, households with higher incomes are more likely to be owners because they can afford to purchase dwellings.

[39] It is acknowledged that Census 2018 estimated 53% of Gisborne's population is Māori. The variance could possibly be because it is difficult to record the ethnicity of a household, as it is made up of several individuals who might not all be of the same ethnicity. In the household survey (of the Census) the ethnicity of the 'index' person in the household is recorded.

- A strong relationship between income and household types is illustrated in earlier sections. This suggests that the link between income and household types, flows through into non-ownership ratios. Smaller households appear to have a higher probability to be non-owners.
- Non-ownership rates range between 12% and 83% across household type and incomes. However, clear patterns emerge, where non-ownership rates are higher for the low-income bands and for households with children, the non-ownership rates are higher, and even more so for lower income bands.

Table 4-3: Relative incidence of non-ownership

Household income Band	Household income Band									
	<$20,000	$20-30,000	$30-40,000	$40-50,000	$50-70,000	$70-100,000	$100-120,000	$120-150,000	$150,000+	Total
Total All Ethnicities										
One Person Hhld	✓	-	-	-	-	-	-	-	-	-
Couple Hhld	-	-	-	-	-	-	-	-	-	-
2 Parents 1-2chn	✓	✓	✓	✓	✓	-	-	-	-	-
2 Parents 3+chn	✓	✓	✓	✓	✓	-	-	-	-	-
1 Parent Family	✓	✓	✓	✓	✓	-	-	-	-	✓
Multi-Family Hhld	✓	✓	✓	✓	✓	✓	-	-	-	-
Non-Family Hhld	✓	✓	✓	✓	✓	✓	✓	-	✓	✓
Total	✓	✓	-	-	-	-	-	-	-	-
European and Other										
One Person Hhld	-	-	-	-	-	-	-	-	-	-
Couple Hhld	-	-	-	-	-	-	-	-	-	-
2 Parents 1-2chn	-	-	-	-	-	-	-	-	-	-
2 Parents 3+chn	-	-	-	-	-	-	-	-	-	-
1 Parent Family	-	-	-	-	-	-	-	-	-	-
Multi-Family Hhld	-	-	-	-	-	-	-	-	-	-
Non-Family Hhld	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-
Maori										
One Person Hhld	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Couple Hhld	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2 Parents 1-2chn	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
2 Parents 3+chn	-	-	-	-	-	-	-	-	✓	✓
1 Parent Family	-	-	-	-	-	✓	✓	✓	✓	-
Multi-Family Hhld	-	-	-	-	-	-	-	-	-	-
Non-Family Hhld	-	-	-	-	✓	-	-	-	-	-
Total	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pacific										
One Person Hhld	✓	✓	✓	✓	-	-	-	-	-	✓
Couple Hhld	-	-	✓	✓	✓	✓	✓	✓	-	✓
2 Parents 1-2chn	✓	-	-	-	✓	✓	✓	✓	✓	✓
2 Parents 3+chn	✓	-	-	-	-	✓	✓	✓	-	✓
1 Parent Family	-	-	✓	✓	✓	✓	-	-	-	✓
Multi-Family Hhld	-	-	-	-	-	-	-	-	✓	✓
Non-Family Hhld	-	-	-	-	-	-	-	-	✓	✓
Total	-	✓	-	-	✓	-	✓	✓	✓	✓
Asian										
One Person Hhld	✓	✓	✓	✓	✓	-	-	-	-	✓
Couple Hhld	-	-	✓	✓	✓	✓	✓	✓	✓	✓
2 Parents 1-2chn	-	-	-	-	-	✓	✓	✓	✓	-
2 Parents 3+chn	-	-	-	-	-	✓	-	-	-	✓
1 Parent Family	-	-	-	-	-	-	-	-	-	-
Multi-Family Hhld	-	-	-	-	-	-	-	-	-	-
Non-Family Hhld	-	-	-	-	-	-	-	-	✓	✓
Total	✓	✓	-	-	-	-	✓	✓	✓	✓
Total All Ethnicities	**890**	**760**	**470**	**470**	**810**	**650**	**260**	**220**	**200**	**4,880**

Source: ME Housing Demand Model 2021

PART 2: HOUSING CAPACITY ASSESSMENT

5 Capacity Assessment

The housing capacity assessment estimates the total capacity for additional residential dwellings in Gisborne's urban area. There are several stages to the capacity assessment to identify the effect of key factors on capacity, including planning provision, commercial feasibility of development and infrastructure constraints.

This section firstly contains an overview of the method used to calculate dwelling capacity within Gisborne's urban area. It describes the different types of capacity that are estimated, the development options modelled within each stage of capacity, and the modelled growth scenarios for the Gisborne market. It concludes with an outline of the structure of the capacity outputs contained in the subsequent results sections.

The remainder of this section then provides the estimated dwelling capacity at each of the modelled stages. Section 5.2 contains the plan enabled capacity, Section 5.3 the plan enabled capacity which is estimated to be commercially feasible, and Section 5.4, the capacity for additional dwellings within the scale and geographic extent of the infrastructure networks. Section 5.5 then estimates the reasonably expected to be realised share of this capacity within these stages. This forms the final share of capacity that is applied within the sufficiency assessment in Section 6.

The final part of this section (Section 5.6) summarises the different stages of capacity and discusses the outputs of capacity supplied by the commercial sector within the wider Gisborne dwelling supply market.

5.1 General method

5.1.1 Types of Dwelling Capacity

Detailed modelling has been undertaken to estimate the residential dwelling capacity of the Gisborne urban environment. In accordance with the NPS-UD requirements, the assessment calculates the capacity that is measured against a range of different development process layers. The measures of capacity are:

i. Plan enabled capacity – the dwelling capacity that is enabled by land zoning within the relevant district plan, proposed district plan, future development strategy or spatial plan.

ii. Commercially feasible capacity – plan enabled capacity where it is estimated to be feasible for a commercial developer to construct a dwelling.

iii. Infrastructure serviced capacity – plan enabled dwelling capacity that is served by infrastructure at each assessment point in time at a total catchment level. This considered the capacity for dwelling (and business) growth that was catered for by water supply, wastewater and stormwater networks. The capacity assessment also takes into account the geographic extension of infrastructure networks into each greenfield area, where applicable.

iv. Feasible and infrastructure serviced capacity - In this assessment, this is a sub-set of the plan enabled and commercially feasible capacity. Infrastructure catchment limits have been applied to take into account the maximum dwelling capacity across the combined areas of the existing urban area and potential future areas of greenfield expansion. Two measures of infrastructure serviced capacity are produced. These include:

a. the commercially feasible greenfield areas that are within the spatial extent of infrastructure network coverage in each period; and
b. the total additional infrastructure served dwelling limits applied at the infrastructure catchment level overall (i.e., to include growth at the catchment level across both the existing urban and greenfield areas).

v. Reasonably expected to be realised capacity – this is measured as a sub-set of the commercially feasible and infrastructure-served capacity that could reasonably be realised to accommodate future dwellings. The approach to reasonably expected to be realised capacity is outlined in Section 5.5.1 of this Report.

Capacity is calculated across Gisborne's urban environment both within the existing urban areas (intensification) as well as further outward expansion within greenfield areas. Capacity can be categorised as:

i. Infill capacity – this refers to the number of additional dwellings that can be constructed within the existing urban area without the removal or demolition of any existing dwellings. It includes development on vacant (titled) lots as well as the construction of additional dwellings on the vacant areas of parcels (e.g., constructing an additional dwelling in a large back yard area of an already developed property parcel). Development on the vacant sites and undeveloped areas of underutilised urban land parcels are included within this category.

ii. Redevelopment capacity – this refers to the number of additional dwellings that can be constructed within the existing urban area through the redevelopment of sites. It involves the demolition or removal of existing dwellings on a site and the subsequent construction of a greater number of dwellings on the same site (without changes to the lot boundary).

iii. Greenfield capacity – this refers to the outward expansion of the urban edge to form new areas of urban residential development. It typically occurs on areas that are zoned for future urban use and may require the geographic extension of infrastructure at different points in time to enable the urbanisation of these areas.

The greenfield areas included within the main Gisborne urban area capacity modelling are displayed in Figure 5-1. These include:

a. The main areas of urban expansion at the north-western edge of Gisborne's main urban area (Taruheru and Hospital).
b. The urban residential zoned areas along the north-eastern edge of the main urban area that are currently undeveloped (Foothills 1 to 4). These predominantly occur within the higher sloped areas and the topography is reflected in the capacity assessment.
c. An undeveloped area on the urban edge at Okitu. The topography of this parcel is also reflected in the capacity assessment.
d. Larger blocks of undeveloped urban areas within the extent of the urban edge (Rivers Edge and Tamarau).

Figure 5-1: Gisborne Main Urban Area Dwelling Capacity Modelling Greenfield Areas

Greenfield capacity can be added to infill capacity or redevelopment capacity, but all three are not additive. The capacity results also include maximums of infill or redevelopment capacity within the existing urban area. Here, the model returns the greatest yield for each parcel out of the infill and redevelopment capacity options which is able to be added to greenfield capacity (this is reported as 'Greenfield and Max Infill or Redevelopment' in the results tables). Under the plan enabled capacity, the redevelopment option will always represent the greatest yield. However, under the commercially feasible capacity often only one of the development options (e.g., standalone infill dwelling) will be feasible (with the option differing between parcels), meaning that the model selects the option that is feasible with the highest yield.

5.1.2 Defining Development Options and Planning Spatial Requirements

The first stage of the assessment identifies the potential development options that can occur on each property parcel. These refer to the types of dwellings that can be constructed (e.g., standalone, duplex/terrace, apartments) on each site and their corresponding spatial requirements. Development options are determined through the district plan provisions with different zones allowing different types of development. In some cases, a property parcel yield (i.e., potential number of additional dwellings) can vary depending on the type of dwelling option constructed and, within the existing urban area, whether infill or redevelopment is undertaken.

The capacity results also include a maximum yield for each type of development path (infill vs. redevelopment vs. greenfield) which is the aggregation of the maximum capacity across all enabled dwelling types within each of the development options. The maximums are produced for both plan enabled and commercially feasible capacity. 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 in that model.

5.1.3 Modelled Growth Scenarios

The NPS-UD requires that capacity is modelled under a Current Prices Scenario, with the option to include further modelled growth scenarios for the long term that allow for a level of market growth to reflect the observed changes within the housing market through time. The NPS-UD requires short and medium-term capacity and sufficiency assessments to be modelled only under the Current Prices Scenario and allows for the inclusion of additional scenarios for the long-term assessment.

Current Prices Scenario

Our assessment has modelled capacity under the Current Prices Scenario across all three time periods. To do this, the model applies the current prices within the market (in relation to dwelling sales and land prices, and development process costs) to the long-term planning zoned areas. This scenario therefore holds prices constant through time and does not allow for any dwelling price or construction cost growth through time.

The current costs and prices scenario means that the feasible capacity across the current and future urban area reflects the current 2020 market and remains constant through time. It assumes that no further currently zoned development opportunities will become feasible (or more feasible) through time. It does not take account of changes in the feasibility of the current and future zoned/infrastructure served opportunity and assumes their future feasibility is equivalent to the current 2020 market.

Increases in reasonably expected to be realised capacity within this scenario are therefore, within the modelling, entirely a function of zoning changes (intensification and expansion) and increases in the geographical extent and total capacity of infrastructure provision through time. Beyond the current modelling inputs, the reasonably expected to be realised capacity may also be affected by other factors such as developer or landowner decisions (if they differ to the indicated intentions supplied for the modelling), or policy/planning changes within Council or other agencies with a jurisdictional role within the area. While reasonably expected to be realised capacity can be influenced beyond the factors included within the modelling, this is beyond the scope of the modelling, where the core focus is instead to estimate the effect of the existing planning factors.

Market Growth Scenario

In addition, we have included a Market Growth Scenario for the long-term assessment in alignment with the NPS-UD. 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 through time, in response to growth in demand, is an important driver of feasibility within growing urban economies. As demand increases for a location, a greater range of development options generally become feasible. This includes increased dwelling density typologies, redevelopment to further intensity already urbanised sites, as well as outward expansion of the existing urban edge. A market growth scenario is able to show the additional level of capacity that is likely to become feasible through time.

Under the Market Growth Scenario, changes in the feasible capacity are also a function of growth in demand for different dwelling development options (balanced against growth in costs) as well as changes in zoning and infrastructure provision. These include growth in achievable sales prices in different locations and for different typologies.

An annual growth rate of 2.5% has been applied to dwelling sales prices and land prices under the Market Growth Scenario. 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 Gisborne Region and New Zealand trends.

5.1.4 Structure of Capacity Modelling Outputs

The following sections contain the estimated dwelling capacity for each key stages of capacity modelling described above. Capacity is reported as the net additional dwellings, where existing dwellings have been removed from the total capacity estimates. Each assessment layer is a sub-set of the previous stage:

i. Plan enabled capacity with no infrastructure constraints.
ii. Commercially feasible capacity. This includes the plan enabled development options that are estimated to be commercially feasible assuming no infrastructure constraints.
iii. Infrastructure-served feasible greenfield capacity. This includes the capacity within the commercially feasible greenfield areas that are covered by physical infrastructure extensions within each time period.
iv. Total infrastructure served capacity. This includes the total capacity limits across each of the reporting areas for additional dwelling growth able to be supported by the infrastructure networks. These are applied at the catchment level.
v. Reasonably expected to be realised and infrastructure-served capacity (RER). This includes the commercially feasible capacity expected to be developed over time, accounting for demand and supply trends (based on recent market conditions) and taking account of known infrastructure constraints and their planned resolution (on non-resolution) over time.

Total estimated capacity is provided across the current and planned future urban area of Gisborne. This is identified spatially within Section 5.1.5, and is defined by the urban zoned areas within the main urban area of Gisborne. The surrounding rural and lifestyle development areas are excluded as these do not form part of the identified urban area and do not meet demand for urban dwellings.

The upper section of each table contains the estimated capacity across the existing urban area. It is reported by type of location (Levels 1 to 5) as mapped in the Spatial Framework (Section 5.1.5). The lower section of the table contains the estimated capacity across the greenfield areas. These are mapped above in Figure 5-1.

Within each set of results, the following measures of capacity are provided:

i. Max Infill – this is an aggregation across all existing urban parcels of the maximum dwelling yield option on each parcel from infill development. Parcels may contain multiple yield options where different dwelling typologies and corresponding spatial requirements are enabled under the Plan.

ii. Max Redevelopment - this is an aggregation across all existing urban parcels of the maximum dwelling yield option on each parcel from redevelopment. Parcels may contain multiple yield options where different dwelling typologies and corresponding spatial requirements are enabled under the Plan. The yields are expressed as net additional dwellings as the outputs subtract any existing dwellings. Infill and redevelopment yields are not additive – the following measure provides the maximum combination of these two development options.

iii. Max Infill or Redevelopment – this is an aggregation across all existing urban parcels of the maximum dwelling yield option on each parcel from either infill or redevelopment.

iv. Greenfield – this is the number of additional dwellings within the greenfield areas. These are areas of urban expansion beyond the existing urban area but within the defined long term urban environment.

v. Greenfield and Infill – this is the greenfield and Max infill yields combined and can be broadly used to define a lower range of capacity.[40]

vi. Greenfield and Max Infill or Redevelopment – this is the greenfield yield plus the Maximum Infill or Redevelopment yield, as specified above. It defines the maximum potential capacity across the combined existing urban area and greenfield areas of urban expansion. This HBA relies on this estimate of development capacity for the sufficiency assessment.

Each section contains the capacity outputs across the total modelled area as well as a subset of the capacity results where capacity on parcels with selected constraints are excluded. Here, capacity on parcels within moderate to high slope areas has been excluded as this is likely to have a substantial impact on the viability of development within these areas.

5.1.5 Spatial Framework for Gisborne Main Urban Area

A spatial framework was developed for Gisborne's main urban area as a key input into the plan enabled and commercially feasible capacity stages. The spatial framework divides the urban area into types of location to enable the model to better reflect the dwelling value, configuration and density trends within different parts of the urban area. These locational parameters affect the feasibility of plan enabled capacity.

There are five levels within the spatial framework that broadly reflect the value profiles of different parts of the urban environment. These are formed through an analysis of a combination of dwelling and land value trends within the Ratings Database, an analysis of the nature and age of dwelling stock, and the location of the area relative to amenity and accessibility.

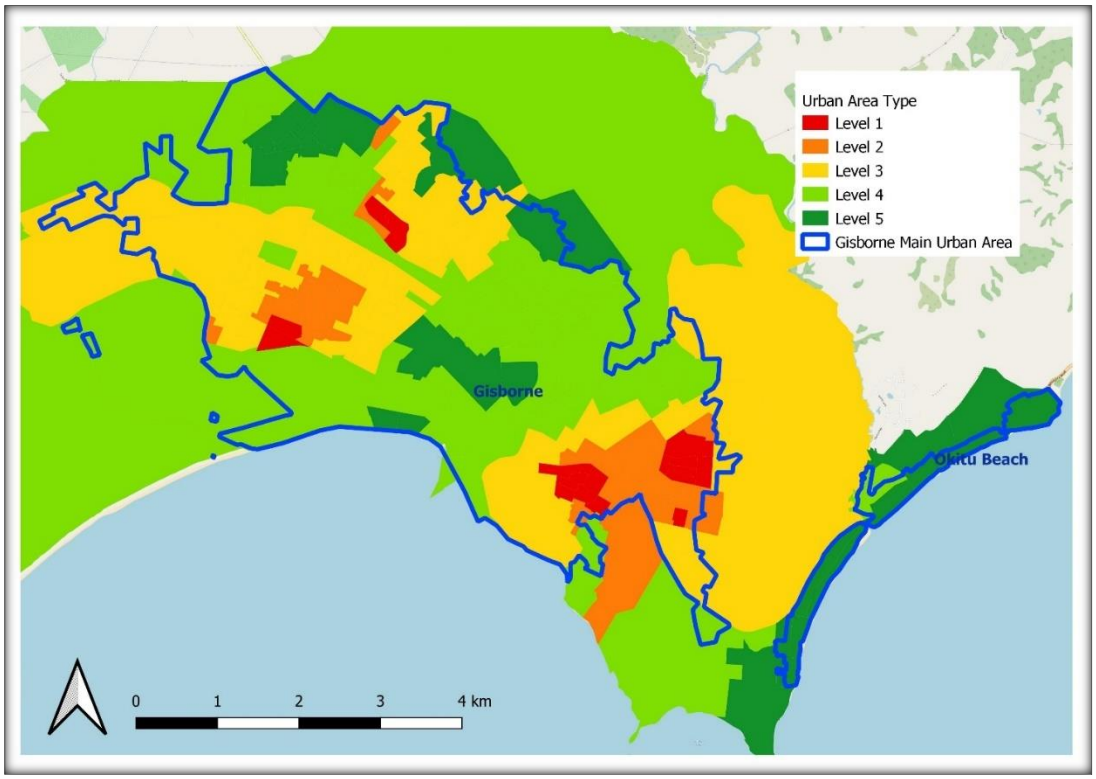
The spatial framework for Gisborne's main urban area is shown in Figure 5-2. Level 1 areas show the lowest value locations, which are likely to have lower potential dwelling sales prices. Level 5 areas are the highest value locations, with correspondingly higher potential sales prices.

These spatial framework areas form the base level inputs within the feasibility modelling. The value profiles within the models are further adjusted for the greenfield areas and for apartment developments within commercial zones. In some areas, the development of new greenfield subdivisions may represent new development patterns that differ to the existing urban spatial structure, therefore requiring further adjustment within the model to better reflect the potential dwelling value profile. Further adjustments are

[40] Although is not included in the sufficiency assessment for this HBA.

also made to apartments within commercial zones to reflect the greater differentiation that occurs on a more localised level within this typology.

Figure 5-2: Gisborne Main Urban Area - Spatial Framework



5.2 Plan Enabled Capacity

This section quantifies the maximum zoned dwelling capacity that is provided under the planning framework. It includes the capacity provided under the Operative District Plan (ODP). M.E's Plan Enabled Capacity Model (2021) estimates infill and redevelopment capacity in existing urban areas as well as capacity in areas classified as greenfield land. Capacity in some greenfield areas has been provided by associated structure plans or developer information and combined with the parcel level modelling results. The plan enabled capacity reflects the zoned capacity without the application of infrastructure constraints.

Plan enabled capacity is consistent across the short, medium and long-term as there are no additional future growth areas included within the medium or long-term assessments.

Table 5-1 contains the estimated capacity within Gisborne's urban area enabled under the ODP. In total, the Plan provides for 32,700 additional dwellings. This amounts to around two and a half times the existing dwelling base of 12,840 dwellings. These capacity estimates do not include infrastructure or other topographical constraints, and do not take into account the commercial feasibility of development.

A high share (90%) of the plan enabled capacity is located within the existing urban area, which has an estimated capacity for an additional 29,600 dwellings. Most of this capacity occurs through redevelopment potential, with the provisions for attached dwelling development substantially increasing capacity. This is

an emerging market area within Gisborne's urban area, which has historically been dominated by standalone dwellings on individual sites.

Table 5-1: Plan Enabled Dwelling Capacity in the Gisborne District Urban Environment

	INFILL					REDEVELOPMENT						GREENFIELD					TOTAL	
LEVEL or GREENFIELD AREA	Standalone	Attached	Apartment	Lifestyle	Max Infill	Standalone	Attached	Apartment	Lifestyle	Max Redev	Max Infill or Redev	Standalone	Attached	Apartment	Lifestyle	Max GF	GF + Infill	GF + Max Infill /Redev
Level 1	100	100	-	-	100	300	1,100	-	-	1,100	1,100	-	-	-	-	-	100	1,100
Level 2	300	300	-	-	400	1,100	3,100	-	-	3,100	3,100	-	-	-	-	-	400	3,100
Level 3	1,000	1,300	-	-	1,500	3,500	8,600	-	-	8,600	8,700	-	-	-	-	-	1,500	8,700
Level 4	1,200	1,500	-	-	1,800	3,500	7,600	6,200	-	14,000	14,100	-	-	-	-	-	1,800	14,100
Level 5	300	400	-	-	500	600	1,200	1,300	-	2,600	2,600	-	-	-	-	-	500	2,600
TOTAL EXISTING URBAN	**2,900**	**3,700**	**-**	**-**	**4,400**	**9,100**	**21,600**	**7,600**	**-**	**29,500**	**29,600**	**-**	**-**	**-**	**-**	**-**	**4,400**	**29,600**
Elmers	-	-	-	-	-	-	-	-	-	-	-	200	400	-	-	400	400	400
Foothills 1	-	-	-	-	-	-	-	-	-	-	-	300	500	-	-	500	500	500
Foothills 2	-	-	-	-	-	-	-	-	-	-	-	200	400	-	-	400	400	400
Foothills 3	-	-	-	-	-	-	-	-	-	-	-	300	600	-	-	600	600	600
Foothills 4	-	-	-	-	-	-	-	-	-	-	-	200	300	-	-	400	400	400
Hospital	-	-	-	-	-	-	-	-	-	-	-	200	300	-	-	300	300	300
Okitu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oswald Street	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rivers Edge	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Tamarau	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Taruheru	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	400	400
TOTAL GREENFIELDS	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2,100**	**2,700**	**-**	**-**	**3,100**	**3,100**	**3,100**
TOTAL	**2,900**	**3,700**	**-**	**-**	**4,400**	**9,100**	**21,600**	**7,600**	**-**	**29,500**	**29,600**	**2,100**	**2,700**	**-**	**-**	**3,100**	**7,500**	**32,700**

Source: M.E Gisborne Residential Capacity Model, 2021.

Infill capacity within the urban area is considerably lower, at around 4,400 additional dwellings. This capacity reflects the addition of dwellings to either vacant or already developed properties without the removal of existing dwellings[41]. Within this, there is capacity for up to 2,900 standalone dwellings, or up to 2,700 attached dwellings[42].

Only 10% of Gisborne's plan enabled capacity is within greenfield areas. This amounts to around 3,100 additional dwellings. Importantly, the plan enabled capacity reflects the development of greenfield areas at densities provided for under the plan. Differences in capacity between developer plans and Plan provisions are captured within the calculation of reasonably expected to be realised capacity.

Over half (58%; 1,830 dwellings) of the plan enabled greenfield capacity occurs within the foothill areas. These areas have significant topographical constraints, with any realised development likely to occur at much lower densities.

Table 5-2 shows the plan enabled capacity within Gisborne once topographical constraints have been applied. Here, capacity on parcels within moderate to high slope areas has been removed. A substantial share of Gisborne's plan enabled greenfield capacity occurs within these areas, with greenfield capacity reduced to around an additional 1,500 dwellings. Under this scenario, nearly all (90%) of the capacity within the greenfield foothills areas have been excluded. The largest areas of greenfield capacity include the Taruheru Block (440 additional dwellings), the land area adjacent to the hospital (300 additional dwellings) and the Elmers Block (400 additional dwellings) on the south-eastern urban edge. The remaining greenfield capacity (370 dwellings) is spread across several smaller areas (including 190 dwellings within the foothills), some of which have signalled developer intentions.

Once this capacity is removed, greenfield areas account for only 5% of Gisborne's total plan enabled capacity. However, while this is a small share, the total plan enabled capacity within the existing urban

[41] For example, this includes the construction of a dwelling(s) on a backyard area of a parcel containing a dwelling.

[42] Note that apartments in commercial areas are not captured as part of infill capacity. These are reported only within redevelopment capacity estimates.

environment is substantive relative to the existing dwelling base. A more useful comparison of greenfield capacity occurs in relation to the level of urban demand, which is undertaken Section 5.5.

Table 5-2: Plan Enabled Dwelling Capacity in Urban Environment: Topographic Constraints Applied

	INFILL					REDEVELOPMENT						GREENFIELD					TOTAL	
LEVEL or GREENFIELD AREA	Standalone	Attached	Apartment	Lifestyle	Max Infill	Standalone	Attached	Apartment	Lifestyle	Max Redev	Max Infill or Redev	Standalone	Attached	Apartment	Lifestyle	Max GF	Greenfield + Infill	GF + Max Infill /Redev
Level 1	100	100	-	-	100	300	1,100	-	-	1,100	1,100	-	-	-	-	-	100	1,100
Level 2	300	300	-	-	400	1,100	3,100	-	-	3,100	3,100	-	-	-	-	-	400	3,100
Level 3	800	1,000	-	-	1,200	3,200	8,000	-	-	8,100	8,100	-	-	-	-	-	1,200	8,100
Level 4	900	1,100	-	-	1,400	3,000	6,700	6,200	-	13,100	13,200	-	-	-	-	-	1,400	13,200
Level 5	200	300	-	-	400	400	900	1,300	-	2,300	2,300	-	-	-	-	-	400	2,300
TOTAL EXISTING URBAN	**2,300**	**2,800**	**-**	**-**	**3,500**	**8,100**	**19,800**	**7,600**	**-**	**27,700**	**27,800**	**-**	**-**	**-**	**-**	**-**	**3,500**	**27,800**
Elmers	-	-	-	-	-	-	-	-	-	-	-	200	400	-	-	400	400	400
Foothills 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Foothills 2	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Foothills 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Foothills 4	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Hospital	-	-	-	-	-	-	-	-	-	-	-	200	300	-	-	300	300	300
Okitu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oswald Street	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rivers Edge	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Tamarau	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Taruheru	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	400	400
TOTAL GREENFIELDS	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,100**	**1,000**	**-**	**-**	**1,500**	**1,500**	**1,500**
TOTAL	**2,300**	**2,800**	**-**	**-**	**3,500**	**8,100**	**19,800**	**7,600**	**-**	**27,700**	**27,800**	**1,100**	**1,000**	**-**	**-**	**1,500**	**5,000**	**29,300**

Source: M.E Gisborne Residential Capacity Model, 2021.

There is also a sizeable reduction in the plan enabled infill capacity once slope constraints have been taken into account. The total infill capacity reduces from around 4,400 additional dwellings to around 3,500 additional dwellings. The relative decrease in capacity within this category is high due to the infill potential on the large areas of these parcels which are undeveloped due to slope constraints.

Redevelopment potential reduces from around 29,500 additional dwellings to around 27,700 additional dwellings.

The following section estimates the feasibility of developing the plan enabled capacity for a commercial, profit-driven developer.

5.3 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 to construct. Importantly, it shows the range of development opportunities available, a share of which are likely to be taken up by the market.

At a high level, the approach calculates the cost to construct the dwellings on each land parcel, then compares this to the likely dwelling sales price. If a sufficient profit margin is achieved, then the capacity is regarded as commercially feasible. In accordance with the NPS-UD, the assessment is based on current costs and prices within the 2020 market[43] for the short to medium-term. Additional scenarios are provided for the long-term, that allow a gradual level of growth within the market through time. Further technical detail on the commercial feasibility model is contained in Appendix 5.

[43] Increases in prices through time, in response to growth in demand, are an important driver of feasibility. As demand increases for a location, a greater range of development options generally become feasible. This includes increased dwelling density typologies, redevelopment to further intensity already urbanised sites, as well as outward expansion of the existing urban edge. A baseline scenario of current prices shows the level of feasibility of capacity if prices remained constant, with further scenarios able to show the additional level of capacity that is likely to become feasible through time.

Commercially feasible capacity has been calculated across the total urban plan enabled zoned opportunity. This is important because infrastructure constraints 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.

5.3.1 Commercially Feasible Capacity

The commercially feasible capacity in Gisborne's urban area is consistent across the short and medium-term, and the long-term under the Current Prices Scenario. This is due to the requirement to apply the Current Prices Scenario where prices and costs are held constant at 2020 values, meaning that changes in feasible capacity can only occur as a function of changes in the underpinning Plan zoning. As there are no changes in the input zoning layers, the feasibility remains unchanged. The long-term capacity, under the Market Growth Scenario, contains changes in capacity as a level of market growth is allowed under this scenario.

Table 5-3 contains the commercially feasible capacity for the short to long-term under the Current Prices Scenario. It is estimated that around 6,500 dwellings represent potentially feasible development options for commercial developers. This equates to one-fifth (20%) of the plan enabled capacity.

Table 5-3: Commercially Feasible Dwelling Capacity: Current Prices Scenario

	INFILL					REDEVELOPMENT						GREENFIELD					TOTAL	
LEVEL or GREENFIELD AREA	Standalone	Attached	Apartment	Lifestyle	Max Infill	Standalone	Attached	Apartment	Lifestyle	Max Redev	Max Infill or Redev	Standalone	Attached	Apartment	Lifestyle	Max GF	Greenfield + Infill	GF + Max Infill /Redev
Level 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Level 2	200	-	-	-	200	-	-	-	-	-	200	-	-	-	-	-	200	200
Level 3	800	-	-	-	800	-	-	-	-	-	800	-	-	-	-	-	800	800
Level 4	1,200	1,000	-	-	1,600	800	500	200	-	1,100	2,100	-	-	-	-	-	1,600	2,100
Level 5	300	300	-	-	400	300	100	200	-	600	700	-	-	-	-	-	400	700
TOTAL EXISTING URBAN	**2,600**	**1,300**	**-**	**-**	**3,100**	**1,200**	**600**	**300**	**-**	**1,700**	**3,900**	**-**	**-**	**-**	**-**	**-**	**3,100**	**3,900**
Elmers	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	200	200	200
Foothills 1	-	-	-	-	-	-	-	-	-	-	-	300	200	-	-	400	400	400
Foothills 2	-	-	-	-	-	-	-	-	-	-	-	200	200	-	-	300	300	300
Foothills 3	-	-	-	-	-	-	-	-	-	-	-	300	500	-	-	500	500	500
Foothills 4	-	-	-	-	-	-	-	-	-	-	-	200	300	-	-	300	300	300
Hospital	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	200	200	200
Okitu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oswald Street	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rivers Edge	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Tamarau	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Taruheru	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	400	400
TOTAL GREENFIELDS	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2,100**	**1,400**	**-**	**-**	**2,600**	**2,600**	**2,600**
TOTAL	**2,600**	**1,300**	**-**	**-**	**3,100**	**1,200**	**600**	**300**	**-**	**1,700**	**3,900**	**2,100**	**1,400**	**-**	**-**	**2,600**	**5,700**	**6,500**

Source: M.E Gisborne Residential Capacity Model, 2021.

Under the Current Prices Scenario, 40% (2,600 additional dwellings) of the feasible development options are estimated to occur within the greenfield areas. Most (83%) of the plan enabled greenfield capacity is estimated to represent commercially feasible options. However, it is important to note that over half (61%; 1,590 additional dwellings) of this capacity is within the foothills areas, which are likely to be developed at much lower yields.

Within the existing urban area, lower shares of the capacity are estimated to be commercially feasible. Overall, it is estimated that 13% of the plan enabled capacity within the existing urban area represents feasible development options. This share differs substantially between infill and redevelopment capacity.

It is estimated that around 71% of the infill capacity represents feasible options, amounting to around 3,100 additional dwellings. Within this, the share of standalone dwellings as feasible is significantly higher than attached dwellings, which reflects current market preferences.

Lower shares of redevelopment capacity are estimated to currently represent commercially feasible options for developers. Only 6% of the plan enabled redevelopment capacity is estimated to be currently commercially feasible. Similar to infill capacity, most of the feasible redevelopment capacity is in standalone dwellings, reflecting market preferences. Greater shares of redevelopment capacity are likely to become feasible through time as price growth increases the feasibility of removing existing dwellings and redeveloping sites.

The estimated commercially feasible capacity decreases substantially when topographic constraints are applied to exclude areas of moderate to high slopes. Table 5-4 contains the estimated feasible capacity once capacity on these parcels are excluded. In total, there are around 4,200 feasible dwelling development options.

The largest capacity decreases occur within the greenfield areas where most of the feasible capacity within the foothills areas is excluded. The total feasible greenfield capacity reduces to around 1,200 additional dwellings. The largest areas are the Taruheru Block (400 additional dwellings), the greenfield area adjacent to the hospital (200 additional dwellings) and the Elmers Block (200 additional dwellings). Further capacity is also excluded from within the existing urban area, resulting in an overall capacity of 3,000 dwellings within the existing urban area.

Table 5-4: Feasible Capacity: Current Prices – Top. Constraints Applied

	INFILL					REDEVELOPMENT						GREENFIELD					TOTAL	
LEVEL or GREENFIELD AREA	Standalone	Attached	Apartment	Lifestyle	Max Infill	Standalone	Attached	Apartment	Lifestyle	Max Redev	Max Infill or Redev	Standalone	Attached	Apartment	Lifestyle	Max GF	Greenfield + Infill	GF + Max Infill /Redev
Level 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Level 2	200	-	-	-	200	-	-	-	-	-	200	-	-	-	-	-	200	200
Level 3	600	-	-	-	600	-	-	-	-	-	600	-	-	-	-	-	600	600
Level 4	900	700	-	-	1,200	500	300	200	-	800	1,600	-	-	-	-	-	1,200	1,600
Level 5	200	200	-	-	300	200	100	200	-	400	600	-	-	-	-	-	300	600
TOTAL EXISTING URBAN	**2,000**	**900**	**-**	**-**	**2,400**	**800**	**400**	**300**	**-**	**1,300**	**3,000**	**-**	**-**	**-**	**-**	**-**	**2,400**	**3,000**
Elmers	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	200	200	200
Foothills 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Foothills 2	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Foothills 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Foothills 4	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	100	100	100
Hospital	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	200	200	200
Okitu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oswald Street	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rivers Edge	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Tamarau	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Taruheru	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	400	400
TOTAL GREENFIELDS	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,100**	**300**	**-**	**-**	**1,200**	**1,200**	**1,200**
TOTAL	**2,000**	**900**	**-**	**-**	**2,400**	**800**	**400**	**300**	**-**	**1,300**	**3,000**	**1,100**	**300**	**-**	**-**	**1,200**	**3,600**	**4,200**

Source: M.E Gisborne Residential Capacity Model, 2021.

The estimated feasible development options increase significantly over the long-term with market growth. Table 5-5 shows that the estimated total feasible development options increase to an estimated 17,700 dwellings in the long-term – nearly three times the estimated capacity when the market is held constant.

Nearly all the increase occurs within the existing urban area where a greater range of redevelopment capacity options become feasible. Under this scenario, around half of the plan enabled capacity within the existing urban area is estimated to represent feasible development options. Within this, nearly all of the infill plan-enabled capacity is estimated to be commercially feasible options over the long-term, and around 45% of the redevelopment capacity.

The increase in feasible capacity within the greenfield areas is smaller, at around 400 additional dwellings, to reach a total of 3,000 feasible dwellings. The increase is smaller as high shares of the greenfield capacity were already estimated to represent feasible development options under the Current Prices Scenario.

Table 5-5: Feasible Dwelling Capacity: Market Growth Scenario (Long-Term)

	INFILL					REDEVELOPMENT						GREENFIELD					TOTAL	
LEVEL or GREENFIELD AREA	Standalone	Attached	Apartment	Lifestyle	Max Infill	Standalone	Attached	Apartment	Lifestyle	Max Redev	Max Infill or Redev	Standalone	Attached	Apartment	Lifestyle	Max GF	Greenfield + Infill	GF + Max Infill /Redev
Level 1	100	100	-	-	100	100	100	-	-	100	100	-	-	-	-	-	100	100
Level 2	300	300	-	-	400	300	300	-	-	400	600	-	-	-	-	-	400	600
Level 3	1,000	1,000	-	-	1,400	1,000	1,000	-	-	1,500	2,100	-	-	-	-	-	1,400	2,100
Level 4	1,200	1,500	-	-	1,800	1,700	3,100	6,200	-	9,400	9,800	-	-	-	-	-	1,800	9,800
Level 5	300	400	-	-	500	400	800	1,100	-	2,000	2,100	-	-	-	-	-	500	2,100
TOTAL EXISTING URBAN	**2,900**	**3,300**	**-**	**-**	**4,200**	**3,500**	**5,200**	**7,300**	**-**	**13,300**	**14,700**	**-**	**-**	**-**	**-**	**-**	**4,200**	**14,700**
Elmers	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	200	200	200
Foothills 1	-	-	-	-	-	-	-	-	-	-	-	300	500	-	-	500	500	500
Foothills 2	-	-	-	-	-	-	-	-	-	-	-	200	400	-	-	400	400	400
Foothills 3	-	-	-	-	-	-	-	-	-	-	-	300	600	-	-	600	600	600
Foothills 4	-	-	-	-	-	-	-	-	-	-	-	200	300	-	-	400	400	400
Hospital	-	-	-	-	-	-	-	-	-	-	-	200	300	-	-	300	300	300
Okitu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oswald Street	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rivers Edge	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Tamarau	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Taruheru	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	400	400
TOTAL GREENFIELDS	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2,100**	**2,300**	**-**	**-**	**3,000**	**3,000**	**3,000**
TOTAL	**2,900**	**3,300**	**-**	**-**	**4,200**	**3,500**	**5,200**	**7,300**	**-**	**13,300**	**14,700**	**2,100**	**2,300**	**-**	**-**	**3,000**	**7,200**	**17,700**

Source: M.E Gisborne Residential Capacity Model, 2021.

The Market Growth Scenario estimated feasible development options decrease by around 3,000 dwellings when capacity constrained by moderate to high slope hazards is excluded. When this capacity is excluded, the estimated feasible development capacity options is around 14,600 additional dwellings. The relative decreases within the greenfield areas are larger, where around 55% of the capacity is within the excluded areas of the foothills. Once constrained capacity is excluded, there is an estimated feasible greenfield capacity of around 1,300 additional dwellings under the Market Growth Scenario.

Table 5-6: Feasible Dwelling Capacity: Market Growth Scenario (Long-Term) – Topographic Constraints Applied

	INFILL					REDEVELOPMENT						GREENFIELD					TOTAL	
LEVEL or GREENFIELD AREA	Standalone	Attached	Apartment	Lifestyle	Max Infill	Standalone	Attached	Apartment	Lifestyle	Max Redev	Max Infill or Redev	Standalone	Attached	Apartment	Lifestyle	Max GF	Greenfield + Infill	GF + Max Infill /Redev
Level 1	100	100	-	-	100	100	100	-	-	100	100	-	-	-	-	-	100	100
Level 2	300	200	-	-	300	300	200	-	-	400	500	-	-	-	-	-	300	500
Level 3	800	700	-	-	1,100	800	800	-	-	1,200	1,700	-	-	-	-	-	1,100	1,700
Level 4	900	1,100	-	-	1,400	1,300	2,400	6,200	-	8,700	9,100	-	-	-	-	-	1,400	9,100
Level 5	200	300	-	-	400	300	600	1,100	-	1,800	1,800	-	-	-	-	-	400	1,800
TOTAL EXISTING URBAN	**2,300**	**2,400**	**-**	**-**	**3,300**	**2,800**	**4,100**	**7,300**	**-**	**12,100**	**13,300**	**-**	**-**	**-**	**-**	**-**	**3,300**	**13,300**
Elmers	-	-	-	-	-	-	-	-	-	-	-	200	-	-	-	200	200	200
Foothills 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Foothills 2	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Foothills 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Foothills 4	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Hospital	-	-	-	-	-	-	-	-	-	-	-	200	300	-	-	300	300	300
Okitu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oswald Street	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rivers Edge	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Tamarau	-	-	-	-	-	-	-	-	-	-	-	100	100	-	-	100	100	100
Taruheru	-	-	-	-	-	-	-	-	-	-	-	400	-	-	-	400	400	400
TOTAL GREENFIELDS	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1,100**	**600**	**-**	**-**	**1,300**	**1,300**	**1,300**
TOTAL	**2,300**	**2,400**	**-**	**-**	**3,300**	**2,800**	**4,100**	**7,300**	**-**	**12,100**	**13,300**	**1,100**	**600**	**-**	**-**	**1,300**	**4,700**	**14,600**

Source: M.E Gisborne Residential Capacity Model, 2021.

The following section examines the share of capacity served by infrastructure within Gisborne's urban area.

5.4 Infrastructure Served Capacity

This section examines what amount of dwelling growth 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 Gisborne housing market.

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

1. In relation to the short term, there is adequate existing development infrastructure to support the development of land.
2. 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 long-term plan.
3. 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.

The capacity assessment has analysed the proportions of Gisborne's plan enabled and commercially feasible capacity that is served by infrastructure across the short, medium and long-term. Infrastructure capacity has been applied at the overall citywide catchment level as well as taking into account the requirement for and timing of any infrastructure extensions into greenfield areas that are not currently served by infrastructure.

GDC have supplied M.E with the estimated additional dwelling capacities within the water supply and wastewater networks. These take into account the existing and planned infrastructure upgrades/additions within the LTP's[44] and other infrastructure assessment documentation[45]. The GDC Infrastructure Team have provided the estimated additional dwelling capacity enabled by these networks. This includes additional capacity within the water supply network through a planned future water metered approach that is anticipated to reduce the average household water consumption by around 20%. Corresponding increases in capacity within the wastewater network were unable to be estimated (making the wastewater capacity a conservative estimate) due to the complexities associated with the interaction between the stormwater and wastewater networks.

The estimated additional dwelling capacity contained within the wastewater and water supply networks is shown in Table 5-7. GDC have advised that constraints in these networks should be applied at the citywide level. There is an estimated capacity for an additional 3,200 dwellings within the wastewater network. This is a function of the wastewater treatment plant and remains constant across all three time periods.

There is an estimated capacity for an additional 2,500 dwellings within the water supply network. This is projected to increase to around 4,420 additional dwellings in the medium and long-term. This is anticipated to occur through reductions in water use across the existing and future household base through the introduction of metered services.

[44] Gisborne District Council, 2021, *Water Supply Management Plan LTP 2021-2031,* June 2021; Gisborne District Council, 2021, *Wastewater Management Plan LTP 2021-2031,* June 2021; Gisborne District Council, 2021, *Urban Stormwater Management Plan LTP 2021-2031,* June 2021.
[45] Black & Veatch, 2020, *Gisborne Maximum Probably Development,* prepared for Gisborne District Council, August 2020; Gisborne District Council, 2021, *Te Rautaki Hanganga Infrastructure Strategy.*

Table 5-7: Estimated Additional Dwelling Capacity in the Wastewater and Water Supply Networks

Infrastructure Network	ADDITIONAL DWELLING CAPACITY		
	Short-Term	Medium-Term	Long-Term
Wastewater	3,200	3,200	3,200
Water Supply	2,500	4,420	4,420
Capacity Limit Applied	**2,500**	**3,200**	**3,200**

Source: Gisborne District Council and M.E, 2021.

Additional capacity within these networks as a function of potential future investment are not included within these networks as part of the assessment. GDC advise that the potential network upgrades are insufficiently confirmed to enable their inclusion within the assessment.

The HBA assumes that capacity is required within both infrastructure networks to provide for growth. It therefore applies the minimum capacity provided across the two networks in each time period. Following this approach, the assessment assumes an infrastructure served capacity of an additional 2,500 dwellings in the short-term, and 3,200 additional dwellings in the medium and long-term. This capacity is applied at the total level and is therefore the limitation on total capacity across both the existing urban and greenfield areas combined.

Information on additional dwelling capacity was unable to be calculated for the stormwater network. Additional infrastructure modelling is required within GDC that requires a longer timeframe than the housing capacity assessment. However, dwelling capacity is not assumed to be unlimited in relation to the stormwater network as it is still limited by the wastewater and water supply networks. Calculated stormwater dwelling capacity can be included in future updates of the HBA.

Infrastructure limits were also applied to the greenfield areas to reflect the timing of any required infrastructure network extensions to serve the areas of urban expansion. Table 5-8 shows the estimated plan enabled and commercially feasible capacity within each of the greenfield areas that is served by existing or planned future infrastructure network extensions. It excludes the capacity in areas that have topographical constraints and is therefore a subset of the capacity in Table 5-2, Table 5-4 and Table 5-6.

Table 5-8 shows that most of the (unconstrained) greenfield areas are within the extent of Gisborne's infrastructure networks and do not require network expansions beyond the provision of local infrastructure that would occur as part of the subdivision development process. Taruheru block is the exception where only a small portion of the area is currently served by infrastructure, with the remainder to be served by infrastructure within the next two years[46]. At this point, infrastructure networks will cover the full area, with an estimated feasible capacity of around 400 additional dwellings.

In total, there is an estimated plan enabled capacity of around 1,100 additional dwellings within these areas in the short-term. This is projected to increase to 1,500 dwellings in the medium-term with infrastructure network extensions. The commercially feasible capacity is projected to increase from 800 dwellings in the short-term, to 1,200 dwellings in the medium-term with the extension of infrastructure in the Taruheru

[46] Although this will occur within the short-term three-year timeframe, it is unable to be included within the short-term assessment. The NPS-UD requires short-term capacity to have existing infrastructure in place.

Block. Under the Market Growth Scenario, the capacity increases to 1,300 additional dwellings in the long-term as more areas become feasible with market growth.

Table 5-8: Plan Enabled and Feasible Capacity in Greenfield Areas Served by Infrastructure Networks (Topographic Constraints Applied)

GREENFIELD AREA	PLAN ENABLED CAPACITY			COMMERCIALLY FEASIBLE CAPACITY			
	Short-Term	Medium-Term	Long-Term	Short-Term	Medium-Term	Long-Term (Current Prices Scenario)	Long-Term (Market Growth Scenario)
Elmers	400	400	400	200	200	200	200
Foothills 1	-	-	-	-	-	-	-
Foothills 2	100	100	100	100	100	100	100
Foothills 3	-	-	-	-	-	-	-
Foothills 4	90	90	90	70	70	70	90
Hospital	300	300	300	200	200	200	300
Okitu	-	-	-	-	-	-	-
Oswald Street	20	20	20	20	20	20	20
Rivers Edge	90	90	90	90	90	90	90
Tamarau	80	80	80	80	80	80	80
Taruheru	40	400	400	40	400	400	400
TOTAL GREENFIELDS	**1,100**	**1,500**	**1,500**	**800**	**1,200**	**1,200**	**1,300**

Source: M.E Gisborne Residential Capacity Model, 2021.

It is important to note that the realised yield within some of these areas is likely to be lower than the feasible areas of plan enabled capacity. Some areas, particularly within the foothills areas, are likely to be developed at lower densities, which is reflected in the reasonably expected to be realised capacity in Section 5.5.

5.5 Serviced, Feasible and Reasonably Expected to be Realised 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 5.3) that is likely to represent RER capacity across each time period within each of the reporting areas. They take into account the infrastructure constraints across the urban environment outlined in Section 5.4 as well as the likely development patterns across the district's urban environment.

5.5.1 Approach

The approach estimates the commercially feasible development options that are likely to represent RER capacity. It is not an estimate of up-take of capacity as this is driven by demand projections by dwelling type, location, and price band (discussed already in Section 2). The key stages to the RER assessment are listed below, and described in the following paragraphs:

- Establish the likely feasible, infrastructure-served RER capacity within the greenfield areas.

- Estimate the corresponding growth within the existing urban area through analysis of the growth distribution structure.
- Estimate the distribution of development patterns by dwelling typology.
- Assess the potential RER capacity in relation to its corresponding share of plan enabled and commercially feasible capacity.
- Ensure that RER capacity at each stage of the allocation process does not exceed the infrastructure limits at the city level.

The RER capacity reflects the likely yields in the commercially feasible greenfield areas, and the corresponding levels of development across different parts of the existing urban environment. Yield information on greenfield sites that reflects developer intentions and estimated subdivision potential was obtained from GDC's Manaaki database, where available, on development information and incorporated into the estimated RER capacity.

In other greenfield areas, RER yields reflect the recent development densities in other similar surrounding areas. In some cases, these differ substantially to the densities enabled under the Plan, reflecting local land and market conditions. Actual development densities within Gisborne's foothill areas are considerably lower than those enabled under the plan.

A detailed analysis of building consent data[47] was then undertaken to establish the recent patterns and relative proportions of development activity occurring across the district's existing and greenfield urban environment. These are important for estimating the likely future distribution of development between urban expansion vs. intensification within existing urban areas.

Analysis of the building consent data also established the likely distribution of capacity uptake by dwelling typology (detached vs. attached dwellings). These provided the structures to estimate the distribution of growth within each area by dwelling typology.

At each stage of the assessment, the potential levels of development were limited by infrastructure constraints within each area as set out in Section 5.4. Capacity is only allocated up to the identified infrastructure limit.

The initial estimated RER capacity was then evaluated relative to its share of the estimated plan enabled and commercially feasible capacity. This process ensured that the estimated RER capacity did not rely on unreasonably high shares of capacity uptake. It recognises that there are other factors beyond infrastructure and commercial feasibility that determine the availability of plan enabled capacity to the market.

The following outlines estimated RER capacity within each time period across the district's urban environment. These form the inputs into the subsequent sufficiency assessment in Section 6 of this HBA.

[47] Building consent data was obtained from Statistics New Zealand for the last three decades by dwelling typology and location for Gisborne District. Individual building consent data was also provided by Gisborne District Council for a similar time period, which provided detailed information on each consent.

5.5.2 Short-Term RER Capacity

The estimated RER capacity in the short-term is shown in Table 5-9. There is an estimated RER capacity of around 1,000 additional dwellings in the short-term across Gisborne's main urban area. Around two-thirds of the capacity (65%; 600 dwellings) is within the greenfield area, which reflects the current patterns of development across Gisborne. This amounts to around 57% of the infrastructure-served plan enabled greenfield capacity, and around three quarters (76%) of the yield enabled by the Plan on the feasible greenfield areas to develop. The RER yield is lower than that enabled under the Plan due to topographical constraints requiring lower densities within the foothills areas.

Table 5-9: Short-Term Serviced, Feasible and RER Urban Dwelling Capacity

EXISTING URBAN/GREENFIELD AREA	EXISTING URBAN			GREENFIELD			TOTAL
	Detached	Attached	Existing Urban Total	Detached	Attached	Max Greenfield	
TOTAL EXISTING URBAN	**200**	**120**	**300**	**-**	**-**	**-**	**300**
Elmers	-	-	-	180	-	180	**180**
Foothills 1	-	-	-	-	-	-	**-**
Foothills 2	-	-	-	20	20	20	**20**
Foothills 3	-	-	-	-	-	-	**-**
Foothills 4	-	-	-	10	10	10	**10**
Hospital	-	-	-	180	-	180	**180**
Okitu	-	-	-	-	-	-	**-**
Oswald Street	-	-	-	10	10	20	**20**
Rivers Edge	-	-	-	50	90	90	**90**
Tamarau	-	-	-	50	80	80	**80**
Taruheru	-	-	-	50	-	50	**50**
TOTAL GREENFIELDS	**-**	**-**	**-**	**400**	**190**	**600**	**600**
TOTAL	**200**	**120**	**300**	**400**	**190**	**600**	**1,000**

Source: M.E Gisborne Residential Capacity Model, 2021.

Greenfield RER capacity[48] is limited in the short-term by infrastructure constraints where only a small portion of the Taruheru Block, the largest greenfield area, currently has infrastructure in place. The existing urban RER capacity is also constrained by the greenfield capacity where the main development activity is occurring within the greenfield area. It is unlikely that greenfield developer activity would otherwise directly transfer to development within the existing urban area due to the differences in scale and nature of this activity.

It is estimated that around 70% of the greenfield RER capacity is likely to occur as detached dwellings in the short-term. The share is lower in the existing urban environment, at around 64%. Overall, this results in over two-thirds of Gisborne's RER capacity (68%; 650 dwellings) estimated to be detached dwellings.

There is an RER capacity of around 300 dwellings within the existing urban area. This amounts to around only 1% of the plan enabled capacity and around 11% of the capacity estimated to represent commercially feasible development opportunities.

[48] Greenfield RER capacity shows the potential yield by dwelling typology within each area. The maximum greenfield column shows the maximum yield for each greenfield area.

5.5.3 Medium-Term RER Capacity

The estimated RER capacity in the medium-term is shown in Table 5-10. There is an estimated RER capacity of an additional 1,700 dwellings in the medium-term. This is an increase of around 770 dwellings from the short-term.

Table 5-10: Medium-Term Serviced, Feasible and RER Urban Dwelling Capacity

EXISTING URBAN/GREENFIELD AREA	EXISTING URBAN			GREENFIELD			TOTAL
	Detached	Attached	Existing Urban Total	Detached	Attached	Max Greenfield	
TOTAL EXISTING URBAN	**400**	**300**	**700**	**-**	**-**	**-**	**700**
Elmers	-	-	-	180	-	180	**180**
Foothills 1	-	-	-	-	-	-	**-**
Foothills 2	-	-	-	20	20	20	**20**
Foothills 3	-	-	-	-	-	-	**-**
Foothills 4	-	-	-	10	10	10	**10**
Hospital	-	-	-	180	-	180	**180**
Okitu	-	-	-	-	-	-	**-**
Oswald Street	-	-	-	10	10	20	**20**
Rivers Edge	-	-	-	50	90	90	**90**
Tamarau	-	-	-	50	80	80	**80**
Taruheru	-	-	-	500	-	500	**500**
TOTAL GREENFIELDS	**-**	**-**	**-**	**700**	**300**	**1,000**	**1,000**
TOTAL	**400**	**300**	**700**	**700**	**300**	**1,000**	**1,700**

Source: M.E Gisborne Residential Capacity Model, 2021.

Around 60% of the RER capacity is estimated to occur within the greenfield areas. This is slightly lower than the short-term, with a likely gradual increase in the share of growth within existing urban areas through time as more development options become feasible.

In the medium-term, there is additional greenfield land served by infrastructure. The full extent of the Taruheru Block is projected to be served by infrastructure by the end of the short-term, resulting in a net increase in RER capacity of around 400 dwellings. Taruheru is Gisborne's largest greenfield area, with a total RER capacity of around 500 dwellings. The next largest greenfield areas are the area of land adjacent to the hospital and the Elmers Block on the south eastern urban edge.

The RER capacity within the existing urban environment has a projected increase of around 350 dwellings between the short and medium-term. This results in an estimated RER capacity of around 700 dwellings, amounting to 40% of Gisborne's RER capacity. Attached dwellings are estimated to account for a gradually increasing share of Gisborne's existing urban area capacity, at around 38% across the short and medium-term combined.

The estimated existing urban area RER capacity equates to only 2% of plan enabled capacity and around one-quarter (23%) of the commercially feasible development options. The RER share of feasible greenfield options is higher at 87%, with the difference to commercially feasible capacity occurring in the foothills area due to lower realised yields.

5.5.4 Long-Term RER Capacity

The estimated long-term RER capacity for Gisborne is shown in Table 5-11 for the Current Prices Scenario and in Table 5-12 for the Market Growth Scenario. In total, there is an RER capacity for around 2,600 additional dwellings under the Current Prices Scenario. This increases to around 3,000 additional dwellings under the Market Growth Scenario where a greater share of the development options become commercially feasible.

Table 5-11: Long-Term Serviced, Feasible and RER Urban Dwelling Capacity: Current Prices Scenario

EXISTING URBAN/GREENFIELD AREA	EXISTING URBAN			GREENFIELD			TOTAL
	Detached	Attached	Existing Urban Total	Detached	Attached	Max Greenfield	
TOTAL EXISTING URBAN	**900**	**600**	**1,500**	**-**	**-**	**-**	**1,500**
Elmers	-	-	-	180	-	180	**180**
Foothills 1	-	-	-	-	-	-	**-**
Foothills 2	-	-	-	20	20	20	**20**
Foothills 3	-	-	-	-	-	-	**-**
Foothills 4	-	-	-	10	10	10	**10**
Hospital	-	-	-	180	-	180	**180**
Okitu	-	-	-	-	-	-	**-**
Oswald Street	-	-	-	10	10	20	**20**
Rivers Edge	-	-	-	50	90	90	**90**
Tamarau	-	-	-	50	80	80	**80**
Taruheru	-	-	-	500	-	500	**500**
TOTAL GREENFIELDS	**-**	**-**	**-**	**700**	**300**	**1,000**	**1,000**
TOTAL	**900**	**600**	**1,500**	**700**	**300**	**1,000**	**2,600**

Source: M.E Gisborne Residential Capacity Model, 2021.

Table 5-12: Long-Term Serviced, Feasible and RER Urban Dwelling Capacity: Market Growth Scenario

EXISTING URBAN/GREENFIELD AREA	EXISTING URBAN			GREENFIELD			TOTAL
	Detached	Attached	Existing Urban Total	Detached	Attached	Max Greenfield	
TOTAL EXISTING URBAN	**1,000**	**800**	**1,800**	**-**	**-**	**-**	**1,800**
Elmers	-	-	-	180	-	180	**180**
Foothills 1	-	-	-	-	-	-	**-**
Foothills 2	-	-	-	20	20	20	**20**
Foothills 3	-	-	-	-	-	-	**-**
Foothills 4	-	-	-	20	10	20	**20**
Hospital	-	-	-	180	300	300	**300**
Okitu	-	-	-	-	-	-	**-**
Oswald Street	-	-	-	10	20	20	**20**
Rivers Edge	-	-	-	50	90	90	**90**
Tamarau	-	-	-	50	80	80	**80**
Taruheru	-	-	-	500	-	500	**500**
TOTAL GREENFIELDS	**-**	**-**	**-**	**800**	**400**	**1,200**	**1,200**
TOTAL	**1,000**	**800**	**1,800**	**800**	**400**	**1,200**	**3,000**

Source: M.E Gisborne Residential Capacity Model, 2021.

The estimated RER capacity within Gisborne increases by between 900 to 1,200 additional dwellings between the medium and long-term. However, further increases in RER capacity are constrained by the limited provision of greenfield areas for future expansion. There is no additional greenfield land provided in Gisborne, meaning that there is no increase in the greenfield RER under the Current Prices Scenario. Greenfield RER increases by only 150 dwellings under the Market Growth Scenario, where all zoned land is estimated to represent feasible development options in the long-term.

Most of the increase in RER capacity is projected to occur within the existing urban area due to the constraints in greenfield land. However, while there is a large amount of feasible development options within the existing urban area, it is unlikely that development activity would substantially transfer to these locations in the absence of greenfield development opportunities. This is due to the differences in scale and nature of brownfield vs. greenfield development.

Under the current modelling, 60% of the long-term RER capacity occurs within the existing urban area. This share is considerably higher than past patterns of development where greater shares of growth typically occur within greenfield areas. However, it is high due to the constraint in allocation to greenfield areas and equates to around 39%-45% of the long-term base dwelling demand growth. It does not assume a substantial transfer of demand from greenfield to existing urban areas.

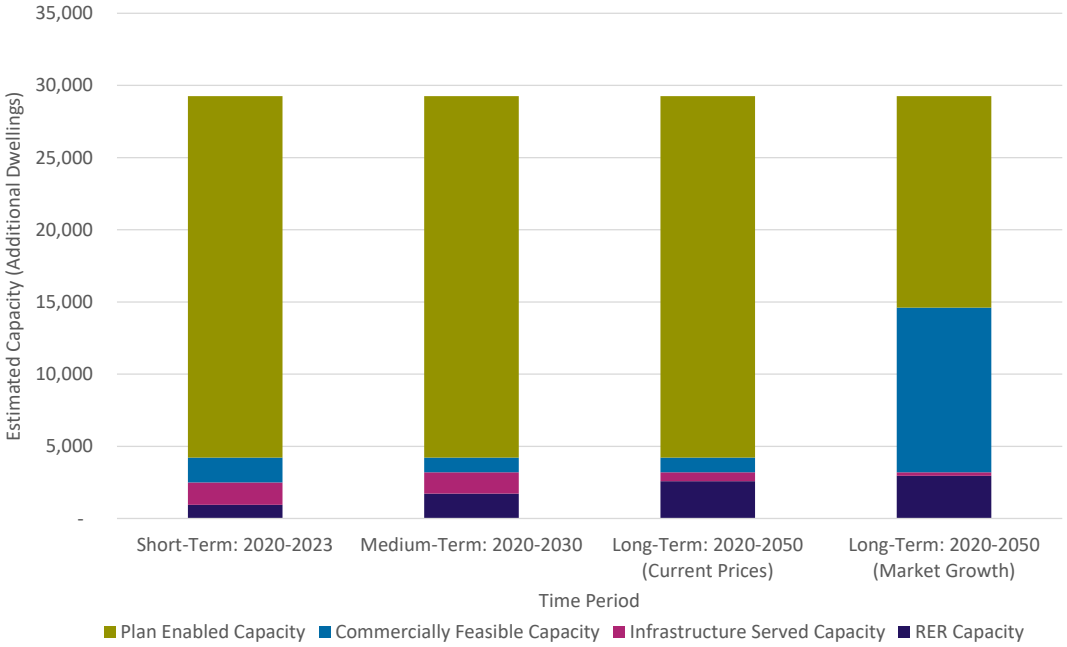
The estimated existing urban RER capacity amounts to 6% of the plan enabled capacity and 13% of the commercially feasible development options under the Market Growth Scenario. The share is higher for the greenfield areas where all infrastructure-served feasible areas are assumed to represent RER capacity.

5.6 Summary

The capacity calculated at each stage of the assessment is summarised below in Figure 5-3 for the short, medium and long-term. The full extent of each bar shows the plan enabled capacity. Within each bar, the share of the plan enabled capacity that is commercially feasible, served by infrastructure and RER capacity is shown. Long-term capacity is shown for both the Current Prices and Market Growth scenarios. Capacity within moderate to high slope hazard locations has been excluded.

Figure 5-3 shows that plan enabled capacity is consistent across all three time periods, at an additional 29,300 dwellings. There is no change to the plan enabled capacity during this timeframe as the planning provisions have remained consistent with no additional areas included within the assessment.

Figure 5-3: Summary of Gisborne Urban Area Capacity by Type (Topographic Constraints Applied)



Source: M.E Gisborne Residential Capacity Model, 2021 and Gisborne District Council.

The figure shows that 14% of the plan enabled capacity (4,200 additional dwellings) is estimated to represent currently feasible development options for a commercial developer. Under the Current Prices Scenario, this remains constant across all three time periods. The share of plan enabled capacity that is estimated to be commercially feasible increases to 50% (14,600 additional dwellings) in the long-term under the Market Growth Scenario with gradual market growth through time.

The modelling estimates that there is capacity for an additional 2,500 dwellings within the infrastructure networks within the short-term, increasing to around 3,200 additional dwellings in the medium and long-term. This amounts to 9% to 11% of the plan-enabled capacity. This limit applies at the city level and is not affected, within the modelling, by the spatial distribution of capacity within the urban area.

Finally, the RER capacity is a sub-set of the infrastructure-served, commercially feasible plan enabled capacity. It increases from 3% (960 additional dwellings) of the plan enabled capacity in the short-term, to 9%-10% of the plan enabled capacity in the long-term (3,000 additional dwellings). In the short-term, this equates to around 23% of the feasible capacity, increasing to over half (61%) of the long-term feasible capacity under the Current Prices Scenario. Under the Market Growth Scenario, the long-term share remains at 20% with the increase of share plan enabled capacity that becomes feasible through time.

It is important to note that the Gisborne capacity assessment does not include any further capacity than is currently provided under the Operative District Plan, including the additional infrastructure coverage within the Taruheru Block in the short-term. It is likely that there will be further planning provision for capacity in the future once growth areas have been identified and assessed. GDC is currently undergoing the development of a Future Development Strategy (FDS), which will immediately lead into substantial change to the Tairāwhiti Resource Management Plan (TRMP), which will respond to the demand projections by

including further growth areas. This process was insufficiently advanced to include within the current assessment. Inclusion of these areas within future assessments is likely to increase the RER capacity, which will have corresponding effects on the sufficiency of capacity.

6 Sufficiency of Housing Capacity

This section assesses the sufficiency of capacity to meet future urban dwelling demand across the district's urban environment. It compares the level of RER capacity estimated in Section 5.5 with the demand for urban dwellings in Section 2. Our approach to the sufficiency assessment and the sufficiency results by dwelling type across Gisborne's main urban environment in the short, medium, and long term are contained in the sub-sections below.

6.1 Approach

Clause 3.2 of the NPS-UD specifies that GDC 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 assessment sufficiency for housing development capacity is also set out in clause 3.27 of the NPS-UD.

To test whether the Gisborne urban environment provides at least sufficient capacity to meet projected demand, M.E has used the outputs from the RER assessment (in Section 5.5). These identify the RER dwelling capacity that is feasible, expected to be realised and unconstrained by infrastructure limitations. This is then compared to the net additional demand (using the medium-high outlook growth scenario), including a margin, for the dwellings within the urban environment. The demand includes a 20% margin in the short and medium term and a 15% margin in the long term. The supporting Technical Report contains additional sufficiency assessment tables for the high demand growth scenario.

Sufficiency is assessed by dwelling type (detached vs. attached) across the urban environment. An assessment of sufficiency by dwelling value band is contained within the Impact of Planning and Infrastructure on Future Housing Affordability (section 8) and not here. It is a more nuanced model of sufficiency that differs from the assessments below which compare total demand with total capacity, irrespective of price and whether the dwelling is for resident households or holiday homes or is owned or un-owned. The assessment in (section 8) considers the demand by non-owner households for dwellings at different prices based on what they can afford, compared to current and projected future dwelling supply by price band.

6.2 Urban Environment Sufficiency by Type

This section contains the sufficiency assessment results by dwelling type within the urban environment in the short, medium, and long term. The assessment is summarised in Table 6-1.

Structure of Assessment

The first section of the table shows the projected future demand for detached and attached dwellings in Gisborne's main urban area by time. The first row shows the projected urban dwelling demand growth. It then includes the competitiveness margin on demand, which is applied to the net increase in demand

across the assessment period. The third row includes the estimated latent demand (around 750 dwellings) together with the projected increase in demand and margin.

The middle section of each table then shows the potential future dwelling estate. This includes the existing dwelling estate together with the RER capacity estimated in Section 5.5.

The final section of the table contains the sufficiency analysis. It shows the net difference in the potential future estate to the future demand (with a margin and latent demand). Net differences greater than zero suggest a surplus in capacity, while negative net differences indicate a potential shortfall in capacity. The table also expresses sufficiency as a percentage. This is calculated as the total current and potential future dwelling estate (RER capacity) as a percentage of total projected demand (incl. a margin and latent demand).

Results

The sufficiency assessment has indicated there are likely to be shortfalls in residential dwelling capacity within Gisborne's main urban area across all three time periods. The estimated shortfalls are predominantly due to limitations in the supply of infrastructure-served greenfield land, with infrastructure constraints also likely to occur in the long-term. The shortfalls are projected to increase through time, and are slightly smaller under the long-term Market Growth Scenario in comparison to the long-term Current Prices Scenario.

It is unlikely that capacity within the existing urban area would form a substitution for greenfield capacity on any substantial scale. The estimated shortfalls already capture this effect where the modelling has already allowed for a higher share of growth into the existing urban area.

The assessment does indicate small surpluses of attached dwelling capacity across all three time periods. These are offset by larger shortfalls in the detached dwelling typology, resulting in overall shortfalls. The attached dwelling surpluses occur due to the estimated feasibility of this development option, which is larger than the limited projected demand for this typology.

The following sub-sections analyse the sufficiency outputs within each period and is based on Table 6-1.

Table 6-1: Short, Medium and Long-Term Sufficiency of RER Dwelling Capacity – Gisborne Urban Area

	Short-Term: 2020-2023			Medium-Term: 2020-2030			Long-Term: 2020-2050 (Current Prices)			Long-Term: 2020-2050 (Market Growth)		
	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total	Detached	Attached	Total
DEMAND												
Demand	400	40	**400**	1,300	190	**1,500**	3,300	600	**3,900**	3,300	600	**3,900**
Demand + Margin	500	50	**500**	1,600	200	**1,800**	3,900	700	**4,600**	3,900	700	**4,600**
Demand + Margin + Latent	1,200	130	**1,300**	2,200	300	**2,600**	4,500	800	**5,400**	4,500	800	**5,400**
CAPACITY												
Existing Base	11,600	1,200	**12,800**	11,600	1,200	**12,800**	11,600	1,200	**12,800**	11,600	1,200	**12,800**
RER	600	300	**1,000**	1,100	600	**1,700**	1,600	1,000	**2,600**	1,800	1,100	**3,000**
Current + Potential Future	12,300	1,500	**13,800**	12,800	1,800	**14,600**	13,300	2,200	**15,400**	13,500	2,300	**15,800**
SUFFICIENCY	Current and Potential Future Capacity (RER) vs. Demand (Incl. Margin + Latent Demand)											
Net	-500	180	**-300**	-1,100	300	**-800**	-2,900	140	**-2,800**	-2,700	300	**-2,400**
Percentage	96%	114%	**98%**	92%	117%	**95%**	82%	107%	**85%**	83%	115%	**87%**

Source: M.E Gisborne Residential Capacity Model, 2021 and M.E Gisborne Residential Demand Model, 2021.

Short-Term Sufficiency

The sufficiency assessment indicates that there is likely to be a shortfall of around 300 dwellings in Gisborne's main urban area in the short-term. There is a projected RER capacity of around 1,000 dwellings and a demand for around 1,300 dwellings, including the margin and latent demand.

The latent demand amounts to around 750 dwellings. If it were excluded, then there would be a projected surplus. The modelling suggests that there is sufficient RER capacity to meet the base demand growth (incl. a margin) and over half (56%) of the latent demand.

This is a relevant consideration as the RER capacity applied within the sufficiency assessment reflects the capacity that is estimated to be feasible for a commercial, profit-driven developer to construct. Commercial developers are a sub-set of the overall market, with dwelling capacity also likely to be supplied through other development pathways. Social housing providers (e.g., central government and community-based organisations) and some Iwi developments deliver dwellings under different development models than that of private developers. A share of the demand within the latent demand component may be met through these other development models. Capacity provided by other parts of the market could potentially meet a significant share of the latent demand or projected shortfalls in certain parts of the market. This is discussed further in Section 6.3.

The assessment indicates that the short-term shortfall occurs due to the limited supply of infrastructure-served greenfield land. However, only a minor share of the capacity within the Taruheru Block has been included in the short-term assessment due to the NPS-UD requirement to include only areas where infrastructure is already in place. GDC have stated that infrastructure will be supplied to the remainder of the Taruheru Block within the short-term, which would provide additional capacity of around 400 dwellings. If this capacity were included, then the shortfall would be resolved.

Medium-Term Sufficiency

The sufficiency assessment indicates that there is likely to be a shortfall of around 800 dwellings in Gisborne's main urban area in the medium-term. There is a projected demand for around 2,600 additional dwellings, including a 20% margin and latent demand. This compares to a RER capacity of around 1,700 dwellings, resulting in the shortfall. If latent demand and the margin were excluded, then there would be a small surplus.

Limitations in the supply of feasible greenfield land is the key contributor to the projected shortfall in the medium-term. The RER greenfield land capacity increases by around 400 dwellings in the medium-term (in comparison to the short-term) due to the extension of infrastructure networks across the balance of the Taruheru Block. However, there is no additional supply of greenfield land beyond the existing zoned provision that has been included within the assessment.

It is important to note that the modelling indicates that there are no infrastructure constraints, in relation to total network capacity, that would result in a shortfall in capacity in the medium-term. The urban area level infrastructure constraint of an additional 3,200 dwellings exceeds the projected demand of 2,600 additional dwellings (including a margin and latent demand). However, infrastructure network extensions may be required for any additional greenfield land supplied to alleviate the projected shortfall.

Long-Term Sufficiency

The sufficiency assessment indicates that there is likely to be a shortfall of around 2,400 to 2,800 dwellings in Gisborne's main urban area in the long-term. This equates to a sufficiency level of 85% to 87%, which reflects the current and potential future (RER) dwelling estate as a share of total projected demand (including the margin and latent demand). There is a projected demand for around 5,400 additional dwellings, including a margin and latent demand[49]. This compares to a RER capacity of around 2,600 to 3,000 additional dwellings, resulting in the shortfall. If latent demand and the margin were excluded, then a sizeable projected shortfall would remain.

Both the supply of feasible, infrastructure-served greenfield land and citywide infrastructure network limits contribute to the long-term projected shortfall. The zoned greenfield land supply emerges as a constraint, particularly in the medium-term, and persists in the long-term as no further greenfield land is included in the capacity assessment.

It is important to note that only the current zoned provision of greenfield areas has been included within the capacity modelling. GDC is currently undergoing the development of a Future Development Strategy (FDS), which will immediately lead into substantial change to the Tairāwhiti Resource Management Plan (TRMP), which will respond to the demand projections by include further growth areas. This process was insufficiently advanced to include within the current assessment.

In the long-term, citywide infrastructure limits are also projected to contribute to the anticipated shortfalls. Infrastructure network capacity is estimated to provide for an additional 3,200 dwellings, which is less than both the demand with a margin and latent demand (at an additional 5,400 dwellings) as well as the base demand only (an additional 3,900 dwellings).

The infrastructure capacity estimates include the existing network surplus capacity and future per household demand reductions on the network. They do not include any further capital works or infrastructure extensions (beyond the short-term Taruheru Block extension) as these did not have sufficient certainty for inclusion within the assessment. **GDC have advised that there is likely to be additional capacity within the infrastructure networks in the long-term, although there is insufficient information on these upgrades to enable their inclusion within the assessment.**

6.3 Other Relevant Factors

The sufficiency assessment has identified potential shortfalls in dwelling capacity within Gisborne's main urban area across the short, medium and long-term. It indicates that there are core aspects of greenfield land supply and infrastructure provision that contribute to these shortfalls, which become most significant in the medium and long-term.

It is important to consider any estimated net position of capacity in relation to the nature of the assessment, particularly for the medium and long-term. This relates to the parts of the dwelling supply market and aspects of futures growth planning (infrastructure and zoning provisions) included within the assessment.

[49] The base demand amounts to an additional 3,900 dwellings within the Gisborne urban area. It is noted that the base demand is substantially higher than long-term future demand projections in previous assessments.

The following sub-sections provide discussion of areas of consideration relevant to the sufficiency assessment.

Other Dwelling Capacity Providers

The sufficiency assessment is a function of comparing the projected demand (including a margin and latent demand) with the RER capacity. The RER capacity includes capacity that is estimated to represent commercially feasible development options for a commercial developer where dwellings are delivered by private developers for a sufficient profit margin. While the private developer sector is an important, and typically dominant, part of the market, it is likely to represent a sub-set of the future dwelling capacity delivered within Gisborne's urban area. There are other sections of the market that are also likely to deliver minor, albeit important, shares of dwellings.

There are other agents within the market that are likely to deliver future dwelling capacity. This includes capacity delivered under different development models than the commercial feasibility assessment that estimates whether a dwelling can be constructed then sold for a sufficient profit margin. Examples of other parts of the wider market include social and community housing providers and Iwi. Often these providers deliver dwellings under different models, including papakāinga housing, leasehold models or dwellings that are constructed to generate a rental income stream. The capacity delivered under these models can differ significantly to that estimated to be commercially feasible for a profit-driven developer.

The role of social housing within Gisborne's dwelling stock is significant. The most recent information from Kāinga Ora[50] shows that there are 1,260 dwellings within the Gisborne District that are managed or owned by Kāinga Ora. This equates to around 7% of the district's households[51], which is over double the national average of 3%.

Iwi is also likely to play an important role within Gisborne's residential dwelling sector. They often deliver capacity under models that differ to a private sector commercial developer model of constructing dwellings to sell for profit. These may include papakāinga housing, leasehold dwelling models, or the provision of housing driven by social objectives. A recent example includes an initiative by Te Aitanga ā Māhaki where 131 Smartbuilt dwellings are to be constructed in Gisborne and provided to households under the rent to own and ownership models. A core objective is to meet whānau needs, reduce homelessness and improve housing security for Māori[52].

A summary of the known potential additional dwelling stock that may be provided by the non-commercial sector in Gisborne District is contained in Table 6-2. In total, it amounts to nearly 500 additional dwellings. This compares to 3.9% of Gisborne's main urban total existing dwelling stock, and 2.6% of the district's existing dwelling stock overall. If supplied, the potential additional dwelling stock is sizeable relative to demand. It equates to around two-thirds of the existing latent demand and would be likely to correspond to this part of the market.

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[50] Kāinga Ora, 2021, *Managed Kāinga Ora Properties by Territorial Local Authority as at 30 September 2021;* Kāinga Ora, 2021, *Vacant Kāinga Ora Rental Properties by Territorial Local Authority as at 30 September 2021.*

[51] This should be treated as an indication of the size of the role of Kāinga Ora in the local market as it includes properties that are owned by Kāinga Ora as well as those managed by Kāinga Ora (and owned by another entity).

[52] Ashton, A. 2021. Iwi Housing Initiative, *Gisborne Herald,* 27 July 2021.

The inclusion of additional dwelling supply within the capacity assessment is unlikely to remove the estimate medium and long-term shortfalls as these occur through limitations in greenfield land supply and infrastructure, which determine the quantity of dwellings able to be supplied across the market overall.

Table 6-2: Non-Commercial Market Potential Additional Dwelling Stock to be Supplied

Provider	Dwelling Capacity	Description
Kāinga Ora	100	Additional dwellings planned for 2022-2024.
Kāinga Ora	127	Proposed to be delivered on sites yet to be identified.
ToiTu Tairāwhiti	111	New dwellings across Tairāwhiti.
ToiTu Tairāwhiti	160	Dwellings in a wellness community, adjacent to the hospital. Combination of pre-affordability, affordable and rent to purchase.
Total	**498**	

Source: Gisborne District Council, 2022.

However, additional capacity from other parts of the market is likely to affect the distribution of any shortfalls within dwelling types of market demand segments.

The nature and structure of the dwelling stock delivered by other parts of the market may differ to dwellings supplied by the private commercial developer sector of the market and is likely to meet dwelling demand from different parts of the market. Social housing provision typically meets dwelling demand from households in the lower dwelling value band segments of the market. This does not suggest the dwellings occupied by the households are lower value than those supplied by the private market. Instead, it reflects the value of the dwellings able to be afforded by the households if they were to enter the private market.

This is an important consideration as there are parts of the market that the commercial developer sector is unlikely to supply. The lower dwelling values able to be afforded by parts of the market may mean that sufficient margins are not able to be achieved for commercial developers irrespective of the zoned or infrastructure capacity. Construction costs and lending restrictions may preclude the ability to construct dwellings at a sufficiently low cost within the required value bands. It is therefore important that any assessment of an urban areas housing market also consider these other parts of the market that are more likely to meet demand within certain parts of the market.

The social housing sector may have a greater ability to provide a wider range of dwelling types than the private, profit-driven commercial developer sector. The distribution of dwellings delivered by the profit-driven sector typically reflects the areas of greatest profit and overall market size where sufficient margins can be achieved. As the social housing sector has other drivers, it is likely to have a greater ability to deliver dwelling types in parts of the market which may have lower margins if they were delivered for private sale. This may include higher density dwelling typologies (e.g., attached dwellings) that have higher risk through being less established within the marketplace.

Future Growth Planning in Gisborne

The NPS-UD sets out the requirements for the inclusion of plan-enabled development capacity within the HBA. In the short-term, development capacity must be land zoned within an Operative District Plan (ODP); in the medium-term, it can also include land zoned within a Proposed District Plan (PDP); and in the long-term, can also include land identified by the local authority for future urban use in an FDS or relevant plan or strategy.

The number of development capacity areas included within the assessment can have a direct effect on the overall sufficiency assessment. It is important to note that the Gisborne capacity assessment does not include any further capacity than is currently provided under the Operative District Plan, including the additional infrastructure coverage within the Taruheru Block in the short-term.

GDC is currently undergoing the development of a Future Development Strategy (FDS), which will immediately lead into substantial change to the Tairāwhiti Resource Management Plan (TRMP), which will respond to the demand projections by include further growth areas. This process was insufficiently advanced to include within the current assessment.

It is therefore likely that there will be further planning provision for capacity in the future once growth areas have been identified and assessed. Inclusion of these areas within future assessments is likely to increase the RER capacity, which will have corresponding effects on the sufficiency of capacity. Once these future growth areas have been identified as part of the FDS, they may remove part/all of the long-term capacity shortfall estimated within this assessment based on the ODP provision. This is important for long-term sufficiency estimates where the provision of greenfield growth areas was identified as a contributor to shortfalls.

Future Infrastructure Investment

The infrastructure limits applied within the capacity assessment reflect the physical extent and volumetric capacity within the existing infrastructure networks. The increase in total infrastructure limits in the medium-term are a function of anticipated demand reduction across existing and potential future households in response to the implementation of water meter systems.

The assessment does not include any future capital investment or physical upgrades to the infrastructure networks. This information was not available at the time of assessment. Specific network upgrades have not been identified, which are required to then estimate the additional capacity they would enable.

The sufficiency assessment identified long-term shortfalls in capacity. It found that these would still occur if additional greenfield land were supplied due to the infrastructure constraints that would occur in the long-term. Therefore, if additional infrastructure capacity were included, together with additional greenfield areas, it would be likely to reduce the estimated shortfalls.

PART 3: BUSINESS CAPACITY

7 Business Assessments

The business land assessment is presented in this section and draws on a set of economic outlook projections prepared for the assessment. The projections consider the population growth scenarios as well as exports and capital formation. The employment projections are used to estimate the business land requirements. The spatial and temporal aspects are included in the modelling. The section starts with a brief description of the process followed to translate the economic outlook into demand for land and then how this was reconciled with existing spatial patterns. The current land use patterns and recent development trends inform the reconciliation. Key ratios were estimated using local information. These ratios were compared against NZ-wide ratios and adjusted to reflect the broad development intensities. The current business land capacity (e.g., plan enabled) is presented and compared against the expected growth patterns. The section concludes with commentary on the capacity assessment, the outlook and the potential issues that could be expected looking forward.

7.1 Process

The business land assessment was completed using several parts. A high-level summary is presented but the technical details are not covered. The assessment was delivered using the following steps[53]:

- The first part estimated the **demand for business land**. The current land use patterns were investigated and linked to employment levels (2020). Next, the anticipated change in employment (after 3, 10 and 30 years) was translated into business land requirement by using employment densities as a proxy. Key ratios, explaining the link between floor space (building area), land area and employment densities by location, were estimated. The Council's rating data, planning zones, information from Stat NZ and other sources all informed this process. The analysis considered the current spatial distribution of employees throughout the district (as recorded in the datasets).
- The second part considered the **supply of land** across the region, summarising the area that is currently occupied (developed), vacant, under-developed and areas showing development capacity. The development intensity in the different locations was evaluated to identify patterns of how the market was developing sites. This approach offered an indication of land development rates (i.e., level of intensity), by zone and by location. Historic consent data was reviewed and analysed, to identify the patterns and relationships of how the market delivers 'new space/floor area' relative to the changes in employment levels. Unfortunately, due to data structure issues, it is not possible to look at the temporal (over time) distribution of how the market is responding to growth. The final part of the land supply picture was the plan enabled capacity. Essentially this is the theoretical maximum to which parcels can be developed based on the current planning rules.
- Next, the two parts are combined, and the **growth outlook** is added. The projected change in employment is translated into land area (by location) and compared to the currently available area based on the revealed spatial patterns and densities. We considered vacant land, infill,

[53] The modelling approach was based on the 2019-modelling work (for Council), with several minor updates for more recent data and new spatial data (e.g. moving from .id's small areas, to SA2s).

redevelopment and up-development. We used the 80th percentile of the land use densities (to show the market's development intensity). The available demand is compared against the current plan enabled capacity (i.e. the maximum) as well as the revealed market trends (developed up to the 80th percentile for capacity). The results are presented using a series of tables.

We note that the report contains the key findings and is at an aggregate level for both the broad spatial areas and the main business zones. Different areas were defined using the SA2 boundaries and the zoning information but are mainly used to simplify reporting. The following two figures show the planning zones, and reporting areas (see Figure 7-1 and Figure 7-2). The reporting areas reflect the spatial areas used in the analysis. These spatial areas have been redefined and do not align directly with those used in 2019. Therefore, a direct comparison with the earlier results would be inappropriate.

Figure 7-1: Map of selected areas (SA)

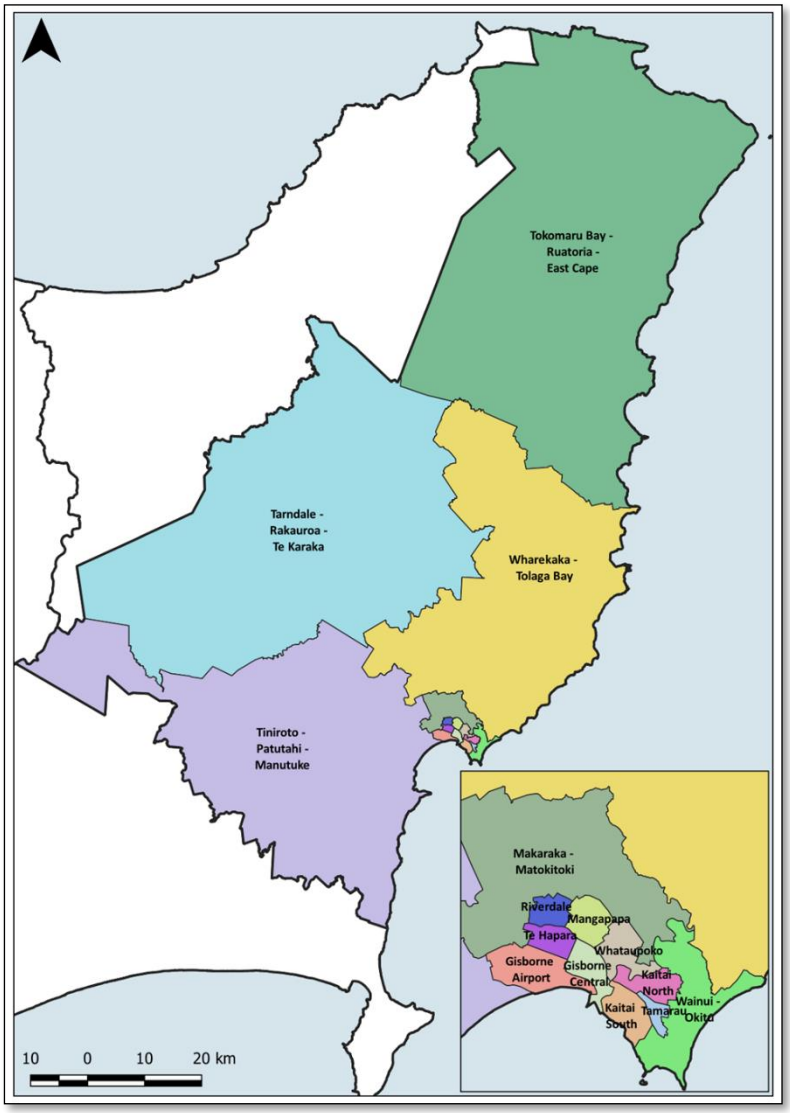
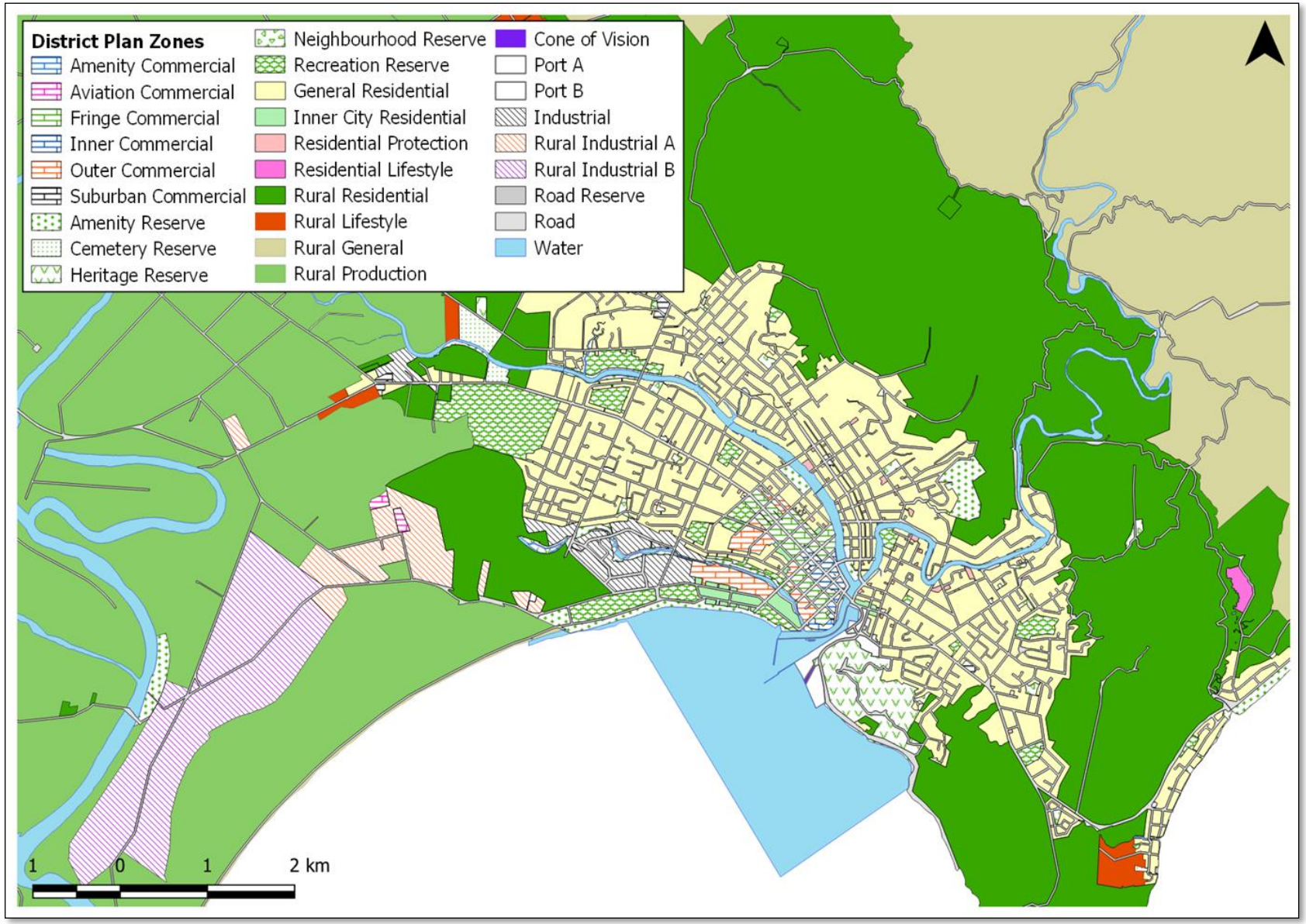


Figure 7-2: Location of main Business Zones



7.2 Current land use zones

Gisborne District covers a large and diverse area. It includes natural land, forests, horticultural land, and the urban area of Gisborne. The district's land use is managed using a range of planning zones. For this analysis the zones were aggregated into 23 zones with zones like 'roads' and 'water' aggregated into one zone (called 'other'). Table 7-1 presents the area (in hectares) of vacant and developed land, in each planning zone.

Table 7-1: Summary of area by planning zone (selected zones)

		Developed		Vacant		Total	
Planning zone	Type	Parcel count	Area (Ha)	Parcel count	Area (Ha)	Parcel count	Area (ha)
Amenity Commercial	Business	191	1	6	2	197	3
Outer Commercial	Business	103	35	19	3	122	38
Fringe Commercial	Business	218	36	18	1	236	38
Inner Commercial	Business	129	8	39	1	168	9
Suburban Commercial	Business	80	10	4	2	84	11
Industrial	Business	167	76	46	17	213	93
Inner City Residential	Residential	207	16	7	4	214	19
General Residential	Residential	12,521	1,469	1,083	364	13,604	1,833
Residential Lifestyle	Residential	11	4	10	4	21	9
Residential Protection	Residential	65	10	-	-	65	10
Neighbourhood Reserve		-	-	30	20	30	20
Recreation Reserve		32	202	37	151	69	353
Amenity Reserve		12	27	151	305	163	332
Cemetery Reserve		3	20	18	34	21	55
Heritage Reserve		2	0	32	115	34	115
Port	Business	23	17	24	20	47	37
Rural Commercial	Rural business	98	19	42	6	140	25
Rural General		2,149	459,230	3,344	319,111	5,493	778,341
Rural Industrial	Rural business	46	214	69	217	115	431
Rural Lifestyle	Residential	188	155	49	44	237	199
Rural Production		792	6,290	468	5,185	1,260	11,475
Rural Residential	Rural Residential	717	2,575	333	1,746	1,050	4,321
Other*		8	24	77	29,667	85	29,691
TOTAL		**17,762**	**470,440**	**5,906**	**357,017**	**23,668**	**827,458**

** Includes unknowns, roads, and water.*

Source: Summarised using GDC rating data and zone layers

The table shows the developed, vacant, and total area[54]. The vacant areas are identified using three criteria:

- Identified as 'vacant' in the rating database,
- A parcel with no ($0) value of improvement, or
- A parcel with a building footprint of less than 50m^2.

[54] The size of the land making up Tairāwhiti, varies slightly between information sources. We suspect that this could be due to how islands are treated.

The district covers over 827,000 ha across 23,668 parcels. Unsurprisingly, the Rural General zone covers a large part. This zone covers around 94% of the district, i.e., 778,000ha. Other rural related zones include:

- Rural Industrial 431ha,
- Rural Lifestyle 199ha,
- Rural Production 11,475ha, and
- Rural Residential 4,321ha.

This is followed by the General Residential zone, with a total of 1,833ha. Inner City Residential and Residential Lifestyle zones add another 28ha to the residential area. The business zones (commercial and industrial) are covered by several different zones, including:

- Amenity Commercial 3ha,
- Aviation Commercial 5ha,
- Outer Commercial 38ha,
- Fringe Commercial 38ha,
- Inner Commercial 9ha,
- Suburban Commercial 11ha,
- Industrial 88ha,
- Port 37ha, and
- Rural Commercial 25ha.

At a total level, there appears to be a large vacant land resource available with the rating data suggesting that the district has some 357,017ha of vacant land. However, this figure is misleading because 89% (319,111ha) is in Rural General zone. It is worthwhile looking into the vacant figures in more detail because this is where a portion of the growth could be accommodated.

Looking at the residential and business zones respectively, the business and residential zones currently account for (based on generic definitions):

- Business zones Total area: 230ha of which 46ha is vacant or underdeveloped, and
- Residential zones Total area: 2,070ha of which 416ha is vacant or underdeveloped,
- Rural business[55] Total area: 456ha of which 223ha is vacant or underdeveloped, and
- Rural residential Total area: 4,321ha of which 1,746ha is vacant or underdeveloped.

Clearly, the zones with a 'rural' character have the largest coverage and the largest vacant potential. But these zones cover the wider district and are associated with land-based activities, such as forestry, horticulture, and so forth. Therefore, care is needed because the land that is identified as 'vacant' could related to rural (economic) activities. A portion of the future growth is expected in agriculture and the support sectors. These activities are predominantly based in the rural areas and apart from the economic linkages to urban areas, they are spatially bound to the land resource (i.e., where the farming/forestry activity occurs).

At the urban (and town areas) level, the business-related zones have around 46ha of vacant land. This equates to 20% of the total business land. This includes the port area. For residential, the available data suggests that there is around 416ha of vacant land available for development.

[55] This excludes rural production zones which are associated with farming activities.

Due to the scale of the rural zones (i.e., the hectares involved), we do not report on the suggested vacant or underdeveloped area because it is irrelevant for this analysis. With reference to the spatial distribution of the zoned land throughout the district, the reporting areas are used to show the spatial pattens. The following figures (refer to Figure 7-3 to Figure 7-5 and Appendix 7) show the land areas broken down as follows:

- By selected area (15),
- By main planning zone (23),
- By type (developed, vacant, under-developed and total).

Figure 7-3: Total Area (by Zone and Selected Area)

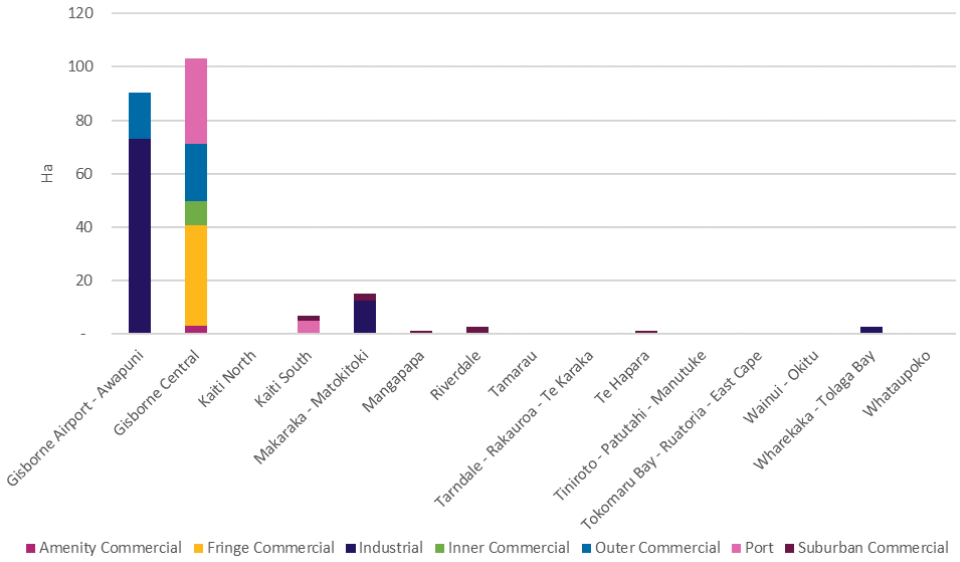


Figure 7-4: Total Developed Land (by Zone and Selected Area)

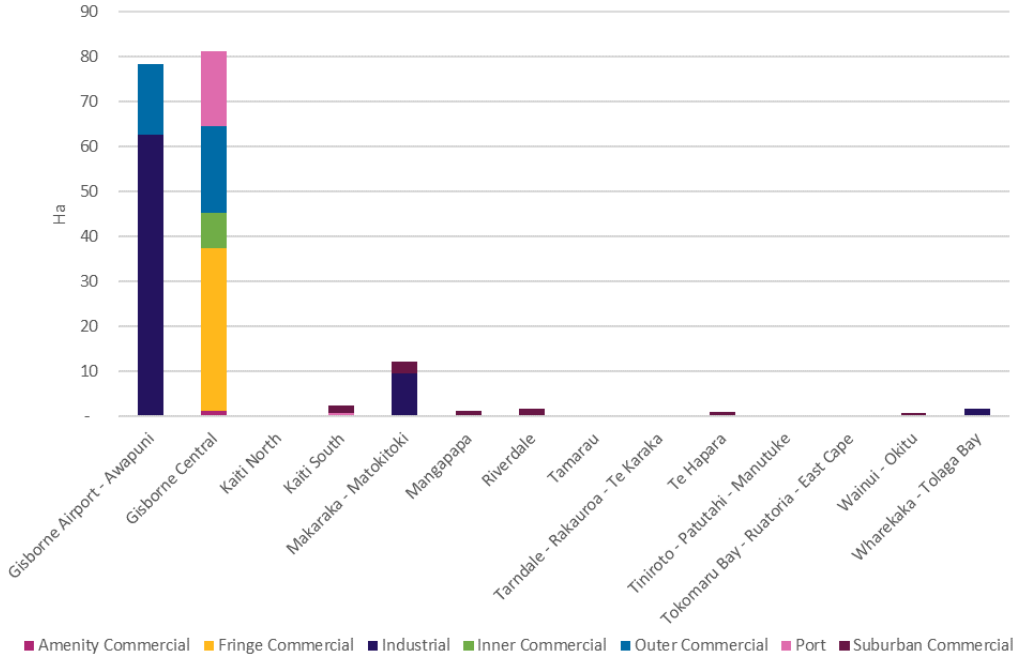
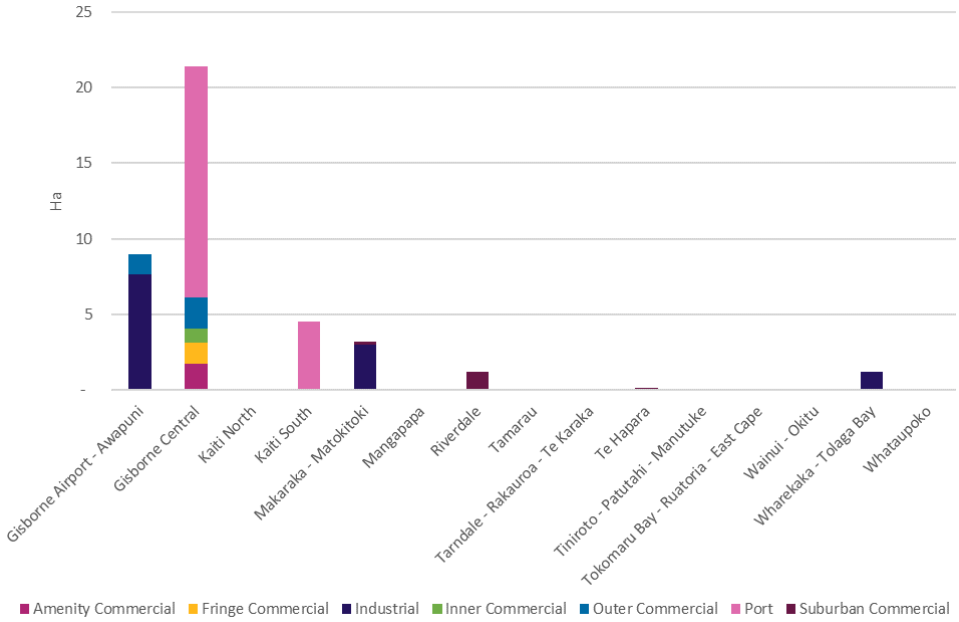


Figure 7-5: Vacant land (by Zone and Selected Area)



The figures present the information for the main (business) zones. Including the rural zones would overshadow the other zones. Using Council's rating data and the classifications within that dataset, the following observations are pertinent:

- The business zones, which include commercial and industrial, are concentrated in the CBD, which sits in the Gisborne Central reporting area, and the industrial areas located in the Airport-Awapuni area. The majority (83%) of industrial zoned land, is in the Airport-Awapuni SA and this is followed by 14% in Makaraka-Matokitoki SA and 3% in Wharekaka - Tolaga Bay SA.
- Gisborne Central includes all (100%) of the business land zoned as Amenity Commercial, Fringe Commercial, and Inner Commercial. Outer Commercial is split between Gisborne Central (55%) and Airport-Awapuni (45%). These commercial business zones account for around 88ha or 39% of the total business zones. The Port zone is located across Gisborne Central and Kaiti-South area, which adds some 37ha to the total business land.
- The residents are also serviced by businesses located throughout the suburbs with 'Suburban Commercial' zones across Tairāwhiti in the following SAs:
    - Kaiti-North (0.2ha),
    - Kaiti-South (1.7ha),
    - Makaraka – Matokitoki (2.8ha),
    - Mangapapa (1.1ha),
    - Riverdale (2.8ha),
    - Te Hapara (1.2ha), and
    - Wainui – Okitu (0.5ha).
- In terms of developed land, the areas correspond with the main business locations (as expected). Large portions of the total (zoned) land have been developed.

- In the Airport-Awapuni SA, 86% of the industrial land has been developed. Eight hectares of industrial zoned land is vacant in this general location.
- In Gisborne Central, large portions of the commercial zones have been developed as follows:
  - Ninety-five percent of the Fringe Commercial zone has been developed, with 1.4 hectares vacant,
  - Eighty-nine percent of the Inner Commercial zone has been developed, with one hectare vacant,
  - The Outer Commercial zone has been developed to a relatively high level, with 90% of the zoned land developed.

  Overall, the commercial and industrial zones have been developed to a reasonably high level (based on the share of area that has been developed), coming in at 80% across all the zones.

- Looking at Airport-Awapuni and the Gisborne Central, Council's rating information suggests that there is 9ha and 21ha of vacant land, respectively. However, this includes 15 ha of land zoned for the Port within Gisborne Central. Vacant land zoned for the Port also includes 5ha within Kaiti South, while across the other selected areas there is a combined total of 4ha of vacant business land zoned as Industrial and Suburban Commercial.

Importantly, how much land is developed (area developed with a building on it) is only one measure of development. It is necessary to consider the degree of development intensity, and this can be done using employment density (sqm/employee). To estimate the employment densities, information[56] in Council's rating data base was linked to Statistical Area 1-level[57] employment data. This yielded high level estimates of the employment densities (employment per land area). The densities show a large degree of variation (by zone and by location) and the spread is substantial:

- Industrial 429sqm/MEC to over 3,695sqm/MEC, and
- Commercial 15 sqm/MEC to 416sqm/MEC.

A reason for the spread is that the planning zones are wide, with multiple types of land use enabled within zones. This complicates the density analysis at a fine land use scale i.e., retail, office, or other activities. It should also be noted that a share of the total employment is in 'out of zone' locations. In other words, there is employment in residential zones (without any business zones). This often relates to education (schools) and similar uses. The local employment densities were reviewed, and a set of assumed densities were defined. Table 7-2 lists the employment density used in each case. The decision to use alternative densities was based on a review of each location-zone combination, comparing it to the overall, district wide density, and the densities in other areas around New Zealand[58]. These ratios informed the capacity assessment (presented in the next section).

[56] Specifically, the parcel area, building areas and value of improvement.
[57] Statistical Area 1 (SA1) is a new output geography that allows for the release of more detailed information about population characteristics than is available at the meshblock level. SA1s are defined at meshblock level. *Source: Statistics NZ, 2018*
[58] This includes areas around the Western Bay of Plenty, Selwyn District, Waimakariri District, Auckland North (Rodney area) and Auckland South (Franklin area).

The analysis also considered the relationship between employment, building area and floor area ratios (FAR). These relationships were applied in translating the growth scenarios into future demand for business land.

Table 7-2: Employment densities

Selected Area	Main planning zones	Density used Sqm/MEC
Gisborne Airport - Awapuni	Industrial	105
Gisborne Airport - Awapuni	Rural Industrial	110
Gisborne Airport -Awapuni	Outer Commercial	153
Gisborne Central	Outer Commercial	153
Gisborne Central	Fringe Commercial	59
Gisborne Central	Inner Commercial	51
Gisborne Central	Amenity Commercial	155
Kaiti North	Suburban Commercial	40
Kaiti South	Suburban Commercial	40
Makaraka - Matokitoki	Industrial	200
Makaraka - Matokitoki	Rural Industrial	250
Makaraka - Matokitoki	Suburban Commercial	40
Mangapapa	Suburban Commercial	40
Riverdale	Suburban Commercial	40
Tamarau	Suburban Commercial	40
Tarndale - Rakauroa - Te Karaka	Rural Commercial	230
Te Hapara	Suburban Commercial	40
Tiniroto - Patutahi - Manutuke	Rural Industrial	100
Tokomaru Bay - Ruatoria - East Cape	Rural Commercial	230
Wainui - Okitu	Suburban Commercial	40
Wharekaka - Tolaga Bay	Rural Commercial	230
Wharekaka - Tolaga Bay	Industrial	250
Whataupoko	Suburban Commercial	40

7.3 Capacity of zoned business land

This section presents the capacity assessment, focusing on the business land component. Several measures and approaches are used to present a full picture of the current capacity, including:

- The plan enabled capacity – the total capacity of the areas if the entire parcel (per zone) is developed to the maximum, as permitted by the current planning rules.
- The 'revealed' redevelopment capacity – the total capacity across the industrial and commercial zones, based on development of vacant parcels as well as the 'redevelopment' of parcels that can be used more intensively. For this analysis, we have assumed that developers would develop properties up to the 80th percentile of the current FAR (as revealed by location and zones). Put differently, redevelopment capacity is defined as the difference between the current 'floor area to

site area' ratio (FAR) and the 80th percentile of this ratio across all properties in the same zone. If a property is not currently developed up to this level, then the remaining area (site) is developed up to 80th percentile. This level of development is viewed as the feasible development capacity as it shows the 'revealed' level of investment and the development intensity that developers are using. It is important to note that there might be more intensive developments but using the 80th percentile is an appropriate threshold as it reflects a high level of development (but not the maximum).

The relationship between plan enabled capacity and the revealed capacity is explored.

7.3.1 Plan enabled capacity

The plan enabled capacity is seen as the theoretical maximum to which an area (or areas) can be developed. The assessment covers the Gisborne urban area and excludes the rural areas. The following steps were followed to estimate the plan enabled capacity:

- The planning zones were mapped in GIS and the rating dataset was imposed over the zones. This connected the planning zones with individual parcels and parcel level information (floor area, building area and site information like hazards).
- Applying the planning rules at a property level, the maximum area was calculated by:
    - Estimating the setback distances, and applying the heights and setbacks (subject to the zone that applies to neighbouring properties),
    - Estimating and applying the internal buffers based on the zone specifications,
    - Applying the recession plane rules to the area/properties where they apply,
    - Applying other location specific rules such as coverage and height restrictions to buildings.
- The outcomes of applying the planning rules to the business parcels in Gisborne are summarised by location (and zone type) as 'potential building floor area'.
- The difference between the current capacity (floor area, building footprint and site area) and the potential development capacity[59] is estimated, to highlight the underlying capacity.

A summary of the planning rules that were applied (at a parcel level) is presented in Appendix 8.

Table 7-3 shows the plan enabled capacity (Potential Building Floor Area – BFA) compared with the current situation. The table shows the BFA that can be added in business zones (industrial and commercial) under the current plan rules. Assessment of the plan enabled capacity did not look at the impact of natural hazards on the development potential in this section. However, this is considered in Section 0, which provides a high-level discussion on the impact of natural hazards on the business land.

The analysis suggests there is significant scope for up-development in all industrial and commercial zones in Gisborne. It appears that the large commercial areas are currently developed to levels which provides a margin between the current building floor areas and plan enabled capacity. For example, the Inner commercial zone in Gisborne Central with a current BFA of around 75% of the theoretical maximums associated with the District Plan rules (for commercial zones over 1ha). For industrial zones, the rural industrial zone in Makaraka – Matokitoki currently utilises around 84% of its plan enabled BFA. On the other hand, the rural industrial zone in Gisborne-Awapuni is the most 'underdeveloped' with only 9% of its plan

[59] Also referred to as potential building floor area

enabled capacity currently developed. Across the business zones in all areas there is a similar pattern, i.e., there is substantial capacity that could be delivered under the current rules.

Table 7-3: Plan enabled capacity in industrial and commercial zones

Planning Zone	Reporting area	Plan Enabled Building Floor Area (ha)	Current Building Floor Area (ha)	Potential Building Floor Area (ha)
Amenity Commercial	Gisborne Central	5.4	2.6	2.7
Fringe Commercial	Gisborne Central	21.8	16.1	5.7
Industrial	Gisborne Airport - Awapuni	24.4	15.7	8.7
Industrial	Makaraka - Matokitoki	2.4	1.6	0.7
Industrial	Wharekaka - Tolaga Bay	0.5	0.2	0.3
Inner Commercial	Gisborne Central	12.8	9.6	3.2
Outer Commercial	Gisborne Airport - Awapuni	5.3	2.6	2.7
Outer Commercial	Gisborne Central	10.4	7.6	2.8
Rural Commercial	Tarndale - Rakauroa - Te Karaka	1.1	0.7	0.4
Rural Commercial	Tokomaru Bay - Ruatoria - East Cape	3.5	1.4	2.1
Rural Commercial	Wharekaka - Tolaga Bay	0.4	0.3	0.1
Rural Industrial	Gisborne Airport - Awapuni	4.6	0.4	4.3
Rural Industrial	Makaraka - Matokitoki	8.6	7.2	1.5
Rural Industrial	Tiniroto - Patutahi - Manutuke	17.3	4.7	12.6
Suburban Commercial	Kaiti North	0.1	0.1	0.0
Suburban Commercial	Kaiti South	0.7	0.6	0.2
Suburban Commercial	Makaraka - Matokitoki	0.4	0.3	0.0
Suburban Commercial	Mangapapa	0.4	0.4	0.1
Suburban Commercial	Riverdale	1.0	0.5	0.5
Suburban Commercial	Te Hapara	0.5	0.4	0.1
Suburban Commercial	Wainui - Okitu	0.1	0.1	-
Suburban Commercial	Whataupoko	0.4	0.3	0.1

However, it is not anticipated that a developer will always develop 'up to' the implied maximum. If this was the case, then the current development intensity (e.g., floor area relative to site area) would be close to the enabled capacity levels. When looking at the current development intensity in Gisborne (and across the region), then this is not the case. The reasons for this mismatch normally relate to building and other costs, a mismatch between broad supply and demand factors or historic development patterns. This means that developing to the 'theoretical maximum' does not happen often, as the financial and economic factors restrict it. Therefore, we use the 80th percentile as the threshold between feasible and not feasible. This threshold suggests that 1 in 5 existing developments are more intensive than the level used in our assessment. The next section discusses revealed capacity using the 80th percentile.

7.3.2 Revealed development capacity

The revealed development capacity across the region consists of two parts – the vacant capacity and the redevelopment capacity. The vacant capacity reflects all the properties that are currently marked as vacant (in the rating database) and the potential scale of the activity that can be undertaken on those parcels. The redevelopment capacity reflects the difference between the current level of use (intensity) and the 80th percentile (of use intensity) as explained earlier. Table 7-4 shows the revealed development capacity (vacant *plus* redevelopment) for the business zones and the subsequent floor area that could be delivered.

Table 7-4: Summary of Capacity

Zone	Land Area Ha	Potential Building Floor Area Sqm	Implied Employment Capacity
Amenity Commercial	2	27,100	170
Fringe Commercial	8	57,000	970
Industrial	25	97,500	840
Inner Commercial	2	31,700	620
Outer Commercial	11	54,600	360
Suburban Commercial	3	10,000	250
TOTAL	**50**	**277,900**	**3,210**
Rural Commercial	243	183,750	1,710
Rural Industrial	10	25,900	110
TOTAL	**253**	**209,650**	**1,820**

The table shows the capacity in the rural areas, for rural industrial and rural commercial zones only. These zones are associated with activity (and employment) that is not in the urban areas.

- The vacant area per zone (as described earlier),
- The building area that can be delivered on the vacant area and the redevelopment area. Column two shows the potential building floor area that can be developed based on the building to site ratios (for the vacant areas) and the redevelopment of existing areas. For the redevelopment, the building area reported in this table is the 'additional' (potential) area that could be developed if the existing buildings are redeveloped to the 80th percentile.
- Implied Employment Capacity shows the estimated number of **additional** employees that could be accommodated in the zone through developing vacant land and redevelopment of current sites.

Appendix 9 details the capacity by locations and by zone. Based on the current zoning, and assuming that development will take place up to the 80th percentile (of FAR), there is capacity in Gisborne to accommodate 5,030 additional employees in the main business zones. In terms of the non-rural zones with the most capacity, the analysis suggests that 30% of the capacity is in the Fringe Commercial Zone (to accommodate 970 jobs based on the assumed densities) and this is followed by 840 jobs in industrial areas.

Spatially, the capacity is distributed unevenly throughout the district. The capacity is concentrated:

- Industrial
    - Gisborne Airport – Awapuni 94% (795 jobs),
    - Makaraka – Matokitoki 4% (36 jobs).

- Rural industrial
    - Tiniroto–Patutahi–Manutuke 74% (1,262 jobs),
    - Gisborne Airport–Awapuni 23% (388 jobs),
    - Makaraka–Matokitoki 3% (59 jobs).
- Outer commercial
    - Gisborne Central 51% (181 jobs),
    - Gisborne Airport-Awapuni 49% (175 jobs).
- Inner commercial
    - Gisborne Central 100% (621 jobs).
- Fringe commercial
    - Gisborne Central 100% (966 jobs).

Across the business zones associated with the rural economy, 1,820 employees can be accommodated in the rural commercial and rural industrial zones. The split between rural commercial and rural industrial is 6% rural commercial and 94% rural industrial. The Tiniroto-Patutahi-Manutuke area has large vacant area which are skewing the results and suggesting that there is a lot of available capacity, however, this capacity should be viewed in terms of other considerations like:

- Location relative to other activities,
- Urban form considerations,
- Transport implications, and
- Natural hazards (flooding, sea level rise and so forth).

In terms of development capacity, there is a reasonable mix of opportunities i.e., developing vacant land vs redeveloping existing sites (see Table 7-5).

Table 7-5: Mix of capacity - Vacant vs Redevelopment

Planning Zone	Mix of capacity	
	Vacant	Redevelopment
Fringe Commercial	18%	82%
Industrial	47%	53%
Inner Commercial	44%	56%
Outer Commercial	32%	68%
Suburban Commercial	60%	40%
TOTAL	**42%**	**58%**
Rural Industrial	81%	19%
Rural Commercial	61%	39%
TOTAL	**80%**	**20%**

In the urban area, a large portion of the capacity (58%) is associated with redeveloping sites to a higher density. Most of the urban zones reveal a similar pattern, ranging between 40% and 82%. However, this excludes amenity and suburban commercial zones, as the situation is reversed with 90% and 72% of capacity associated with vacant sites, respectively.

In the rural zones, most (80%) of the capacity is associated with vacant parcels. The rural industrial zone has some 217ha of vacant land. This is concentrated in the Tiniroto-Patutahi-Manutuke area where Council data suggests some 208ha of land is vacant.

Furthermore, the analysis suggests that the redevelopment potential is high across the 'port' area. However, as the port is seen as a strategic economic asset, no growth is allocated to this area to ensure that it remains available for port specific operation. Instead, growth is allocated to the existing industrial and commercial locations (and not the port zone).

Table 7-6 offers a breakdown of the capacity by zone and location. The observed patterns are consistent with the above discussion.

Table 7-6: Capacity by Zone and location

	Hectare							
Small Area	Amenity Commercial	Fringe Commercial	Industrial	Inner Commercial	Outer Commercial	Suburban Commercial	Rural Commercial	Rural Industrial
Gisborne Airport - Awapuni	-	-	19.5	-	5.7	-	-	7.7
Gisborne Central	2.0	7.7	-	2.2	4.9	-	-	-
Kaiti North	-	-	-	-	-	0.0	-	-
Kaiti South	-	-	-	-	-	0.3	-	-
Makaraka - Matokitoki	-	-	4.1	-	-	0.3	-	8.3
Mangapapa	-	-	-	-	-	0.1	-	-
Riverdale	-	-	-	-	-	1.4	-	-
Tamarau	-	-	-	-	-	-	-	-
Tarndale - Rakauroa - Te Karaka	-	-	-	-	-	-	1.9	-
Te Hapara	-	-	-	-	-	0.3	-	-
Tiniroto - Patutahi - Manutuke	-	-	-	-	-	-	-	180.2
Tokomaru Bay - Ruatoria - East Cape	-	-	-	-	-	-	7.7	-
Wainui - Okitu	-	-	-	-	-	-	-	-
Wharekaka - Tolaga Bay	-	-	1.5	-	-	-	0.3	-
Whataupoko	-	-	-	-	-	0.1	-	-

The next section combines the employment projections and the capacity assessment to determine if there is sufficient capacity to accommodate the growth.

7.4 Sufficiency

The growth outlook and the estimated employment densities are used to estimate the land capacity demand. The change (growth in employment) is then distributed spatially (by location and zone) thereby providing an ability to assess the sufficiency. If an area has enough land area to accommodate growth, then there is sufficient capacity. But, if the anticipated growth is greater than the available capacity, then

it signals a need for action (i.e., enable greater density or provide alternative development capacity in other, suitable locations).

In Tairāwhiti, a large component of employment and business activity is in zones that are not traditionally associated with business zones. The following table (Table 7-7) shows the employment, and the share of total employment in non-business zones.

Table 7-7: Employment in non-business zones

Zone	Estimated Employment	% of Employment
Amenity Reserve	66	0%
Cemetery Reserve	-	0%
General Residential	5,320	22%
Heritage Reserve	0	0%
Inner City Residential	174	1%
Neighbourhood Reserve	158	1%
Port*	528	2%
Recreation Reserve	36	0%
Residential Lifestyle	9	0%
Residential Protection	53	0%
Rural General	3,869	16%
Rural Lifestyle	58	0%
Rural Production	1,893	8%
Rural Residential	1,180	5%
Total	13,344	55%

The port is an important economic asset (and a business). Growth is not allocated to this area, and it is retained for port activity. This is consistent with the approach followed in other areas, like Tauranga.

More than half of the employment is in non-business zones (55%) and a share of employment is located in the general residential zone (22%). Some of this reflects working proprietors and small businesses like accountants, trade workers as well as other professional services operating from home. Other activities are not specifically reflected in the planning zones and include some large employers. Examples of this include schools and early childhood centres. These activities are identified as 'education employment' and are in residential areas. Growth in the surrounding households and shifts in demographic patterns affect the employment in local schools and early childhood centres. Another example of a large employer in a non-business zone, located in the general residential zone, is Gisborne Hospital. The hospital is in Riverdale. Similarly, the Gisborne District Council office and the small retail complex across from it (Fitzherbert and Ormond Road, Whataupoko) are in a residential zone.

The non-business 'rural' zones accommodate more than a quarter (29%) of employment. These zones are associated with agricultural and farming activity. It includes forestry and related activities and considering Tairāwhiti's economic structure and outlook, these primary sector activities will continue to play a central role in the local economy. These activities are not office-based (not working from an office), are mobile and move to the physical location of the work and in some cases seasonal. These jobs are directly related to the use, location and quality of the natural land endowment and they are excluded from the capacity assessment.

'Agriculture, forestry and fishing support services' is a sector that is anticipated to see continued growth. This sector includes activities like sheep shearing, tree pruning and thinning, fruit or vegetable picking, crop

harvesting and so forth. This means the activity does not occur where the business is registered, instead the work is undertaken at the client's premises (in the rural area). Put differently, employment in this sector is not desk-bound and not necessarily located in commercial (or industrial) zones. A portion of these activities are however currently found in the industrial areas. The relative ratios are maintained looking forward (e.g., share of sector located in the zoned areas).

For the analysis, we have firstly considered the sufficiency in the business zones and the ability to accommodate growth that would locate in 'business locations'. This means that a portion of the anticipated growth will continue to be in non-business zones (e.g., rural production). The current spatial patterns were retained. In other words, if x-% of a sector's employment is in non-business zones, then that percentage was kept constant.

The capacity and growth are reconciled at a zone and location basis, looking over 3, 10 and 30 years. We acknowledge that large parts of the district are subject to natural hazards like sea level rise, storm inundation, geological instability and so forth. Consequently, a separate section provides a high-level indication of the implications of including the natural hazards in the capacity assessment. The capacity assessment is based on the current planning rules. Table 7-8 shows the ability to accommodate growth in the different broad locations on a per zone basis. The top three tables report the percentage of available capacity that remains after development. Three timeframes are used, 3 years, 10 years, and 30 years. The bottom three tables show the same information but with a 20% margin added i.e., lifting demand by 20% so that any potential shortfall is identified in a timely manner.

The following observations are made based on the table (Table 7-8):

- Overall, there is sufficient capacity across all the zones over the short, medium, and long term. This is the case for all the business zones.
- The scale of the land resources (zoned land), and the low growth (future demand) translates into a large, zoned area available for development. As mentioned earlier, a large portion of the district's employment is located outside the business zones. The following example illustrates the size of the available capacity in Gisborne Central: The analysis suggests that the remaining capacity (after 30 years) in Gisborne Central's commercial zones[60] can accommodate all the growth that is currently anticipated across the rest of the district (excluding growth allocated to business zones). Even if all redevelopment capacity is removed and only the vacant capacity is used, and three quarters of the rest of the district's growth is allocated to Gisborne Central's commercial zones. In other words, 89% of growth can be accommodated in vacant areas.
- The redevelopment capacity and vacant capacity both contribute to the ability to accommodate growth. The capacity analysis does not differentiate between the two types. If it is assumed that no redevelopment capacity will be taken up and all growth will be accommodated on vacant parcels, then there is still enough capacity to accommodate the growth. Under this approach, Gisborne Central will still have around on average 67%[61] of currently vacant area, available.

[60] Inner, Fringe and Outer commercial zones

[61] Average remaining capacity for the main zones (inner, fringe, outer commercial and industrial zones).

Table 7-8: Ability to Accommodate Growth

How to interpret Table 7-8:
The percentage value represents the share of available capacity that remains after development to accommodate employment growth for that zone and location combination. For example: By 2023, there is 98% of the capacity available in industrial zone(s) in Gisborne Airport-Awapuni after development. Over the medium term (by 2030), there is 97% of the capacity still available in this zone, after development, and by 2050, 99% of the initial capacity is available after development

Unadjusted	2020-2023						
Selected Area	Amenity Commercial	Fringe Commercial	Industrial	Inner Commercial	Outer Commercial	Rural Commercial	Rural Industrial
Gisborne Airport - Awapuni			98%		97%		99%
Gisborne Central	99%	97%		99%	90%		
Kaiti North							
Kaiti South							
Makaraka - Matokitoki			95%				100%
Mangapapa							
Riverdale							
Tamarau							
Tarndale - Rakauroa - Te Karaka						98%	
Te Hapara							
Tiniroto - Patutahi - Manutuke							100%
Tokomaru Bay - Ruatoria - East Cape						100%	
Wainui - Okitu							
Wharekaka - Tolaga Bay			100%			98%	
Whataupoko							

Unadjusted	2020-2030						
Selected Area	Amenity Commercial	Fringe Commercial	Industrial	Inner Commercial	Outer Commercial	Rural Commercial	Rural Industrial
Gisborne Airport - Awapuni			97%		95%		98%
Gisborne Central	96%	91%		96%	73%		
Kaiti North							
Kaiti South							
Makaraka - Matokitoki			85%				100%
Mangapapa							
Riverdale							
Tamarau							
Tarndale - Rakauroa - Te Karaka						95%	
Te Hapara							
Tiniroto - Patutahi - Manutuke							100%
Tokomaru Bay - Ruatoria - East Cape						99%	
Wainui - Okitu							
Wharekaka - Tolaga Bay			98%			96%	
Whataupoko							

Unadjusted	2020-2050						
Selected Area	Amenity Commercial	Fringe Commercial	Industrial	Inner Commercial	Outer Commercial	Rural Commercial	Rural Industrial
Gisborne Airport - Awapuni			99%		95%		99%
Gisborne Central	96%	90%		96%	71%		
Kaiti North							
Kaiti South							
Makaraka - Matokitoki			85%				100%
Mangapapa							
Riverdale							
Tamarau							
Tarndale - Rakauroa - Te Karaka						94%	
Te Hapara							
Tiniroto - Patutahi - Manutuke							100%
Tokomaru Bay - Ruatoria - East Cape						98%	
Wainui - Okitu							
Wharekaka - Tolaga Bay			97%			95%	
Whataupoko							

+20% Buffer	2020-2023						
Selected Area	Amenity Commercial	Fringe Commercial	Industrial	Inner Commercial	Outer Commercial	Rural Commercial	Rural Industrial
Gisborne Airport - Awapuni			98%		97%		99%
Gisborne Central	98%	96%		98%	88%		
Kaiti North							
Kaiti South							
Makaraka - Matokitoki			94%				100%
Mangapapa							
Riverdale							
Tamarau							
Tarndale - Rakauroa - Te Karaka						98%	
Te Hapara							
Tiniroto - Patutahi - Manutuke							100%
Tokomaru Bay - Ruatoria - East Cape						100%	
Wainui - Okitu							
Wharekaka - Tolaga Bay			99%			98%	
Whataupoko							

+20% Buffer	2020-2030						
Selected Area	Amenity Commercial	Fringe Commercial	Industrial	Inner Commercial	Outer Commercial	Rural Commercial	Rural Industrial
Gisborne Airport - Awapuni			97%		93%		98%
Gisborne Central	96%	89%		96%	68%		
Kaiti North							
Kaiti South							
Makaraka - Matokitoki			82%				100%
Mangapapa							
Riverdale							
Tamarau							
Tarndale - Rakauroa - Te Karaka						94%	
Te Hapara							
Tiniroto - Patutahi - Manutuke							100%
Tokomaru Bay - Ruatoria - East Cape						98%	
Wainui - Okitu							
Wharekaka - Tolaga Bay			98%			95%	
Whataupoko							

+20% Buffer	2020-2050						
Selected Area	Amenity Commercial	Fringe Commercial	Industrial	Inner Commercial	Outer Commercial	Rural Commercial	Rural Industrial
Gisborne Airport - Awapuni			98%		95%		99%
Gisborne Central	96%	88%		95%	65%		
Kaiti North							
Kaiti South							
Makaraka - Matokitoki			82%				100%
Mangapapa							
Riverdale							
Tamarau							
Tarndale - Rakauroa - Te Karaka						93%	
Te Hapara							
Tiniroto - Patutahi - Manutuke							100%
Tokomaru Bay - Ruatoria - East Cape						98%	
Wainui - Okitu							
Wharekaka - Tolaga Bay			97%			94%	
Whataupoko							

The next section describes the risks and hazards.

7.5 Risks and Hazards

Just like many parts of New Zealand, the district is subject and exposed to natural hazards and risks. The effects of climate change will become clearer over time, but it is important to acknowledge these risks and start to put plans in place to mitigate the negative impacts and to avoid or reduce future costs. As part of the spatial analysis, several different hazards were considered. Essentially, the risks and hazards layers as provided by the council were included in the analysis to identify the potential impacts on the available development capacity. It is important to note that this analysis should be seen as a first step in understanding the impacts. There are other solutions and mitigations that can be applied to reduce the impacts (e.g., improved flood controls, engineering solutions and so forth).

To illustrate the effects on the spatial patterns, we have applied the hazards to each affected parcel. If a parcel is affected by a particular hazard, then we excluded it from the assessment. In practise this means that if a parcel is impacted by a hazard, then it cannot be developed or used. In reality, this will not be the case because there are mitigations that can 'protect' development capacity and land use. Clearly, these findings are meant to illustrate the coverage of the impacts and are not meant to be absolute in terms of what can, and can't, be accommodated on different parcels.

Using the Council hazard layers (as included in the GIS files), the potential exposure of economic activity in the main business zones were considered. Looking at the long term (2050), the number of jobs that would be exposed to some disruption due to an event(s) is reported. This means that the effects reflect the employment totals in a way that includes the anticipated growth. The number of employees that can be accommodated is used as a proxy to show impacts of events/hazards that are estimated at:

- 1m Sea Level Rise:
    - In total, the reduction of employment capacity by a 1m SLR is 2,450 (MECs) less. Most of this is located in the Gisborne Airport-Awapuni, Gisborne Central and Tiniroto-Patutahi-Manutuke areas. In terms of the impact to zones, the majority of the impacts of this scenario are expected in the Industrial and Rural Industrial zones, with a reduction in capacity of 740 and 1,000, respectively. Across the entire district, the development capacity remaining can still accommodate 2,580 workers (based on the current locations and zones). Regardless, there is sufficient capacity elsewhere to accommodate the expected growth.
- Liquefaction:
    - This hazard has a substantial impact on the development capacity as it affects large parts of the city and district. Assuming that liquefaction risks are avoided by prohibiting development in areas that have this risk, then there is very little development capacity in the business zones. In fact, virtually all the development area will be disqualified. Small pockets will be able to be developed in Tarndale-Rakauroa-Te Karaka SA and Tokomaru Bay-Ruatoria-East Cape SA.
- Flooding:
    - The flood risks affect the same areas (generally) as the 1m SLR impact because they are both associated with low-lying topographies. But the flooding risk is not as pronounced or intense as the 1m SLR setting. Overall, if development capacity is constrained to avoid flooding, and

assuming that no engineering solutions are implemented, then 42% of the potential capacity would be voided, leaving capacity to accommodate 2,880 workers. This is still sufficient to accommodate the growth.

The above considered the relationship between the risks/hazards and the spatial patterns for business development capacity. The analysis suggests that there is enough capacity to accommodate the growth. However, the analysis does not consider the potential need to move or relocate businesses and employment. Including business relocations to other areas will require substantial financial resource and cause large disruptions.

7.6 Concluding remarks

The business land capacity assessment revealed that the district has sufficient supply of zoned business land. Some of the smaller, neighbourhood areas (suburban commercial) will potentially experience some pressure as (and if) the suburbs see an intensification of development. But this is a long-term outlook and unlikely to require attention in the immediate future.

The scale of the supply, in terms of vacant and redevelopment capacity, compared to the growth outlook (and demand for space) clearly shows that there is a large surplus of land. Looking forward and considering the potential economic cost of sub-optimal use of the land resource would suggest that the city needs to consider its options regarding land use. The areas around the central city (inner, outer commercial zones) will see a gradual intensification of land use and the area around the CBD capturing a larger share of total activity. This is a positive outcome, but it is necessary to explore ways of accelerating this process.

Like many of New Zealand's coastal communities, Gisborne is facing the spectre of climate change, with more severe weather events. Flooding and sea level rise will have a marked impact on the city's growth by reducing available development capacity.

PART 4: CONCLUSIONS

8 Impact of Planning

This section builds on the analyses of housing demand, feasibility and sufficiency of capacity to provide the assessment of how GDC's planning decisions and provision of infrastructure are likely to affect the affordability and competitiveness of the local housing market, as required in clause 3.23 of the NPS-UD. Underpinning this section is a discussion of the concept of 'competitive land markets' which is central to the NPS-UD's focus on housing affordability. It then considers how Council's planning decisions and provision of infrastructure may impact on housing affordability in the future and competitiveness of the housing market.

That assessment takes account of the current situation with regard to the patterns of Gisborne growth and the evolution of the land and development market over the last two decades. Understanding the key influences evident in Gisborne over this period is important to distinguish between the effects of planning and infrastructure provision by Council and the effects of other influences on housing affordability and development. Assessing the impacts of planning is a complex task and is a requirement of Clause 3.23 of the NPS-UD. It requires councils to analyse *"...how … planning decisions and provision of infrastructure affects the affordability and competitiveness of the local housing market."* This analysis *"...must be informed by ... market indicators, including ... housing affordability, housing demand, and housing supply; and information about household incomes, housing prices, and rents; and price efficiency indicators."*

A key issue is that affordability and competitiveness are influenced by many factors, local and national, which are outside the ambit of council planning decisions and infrastructure. Separating the role of different factors in the past has been extremely difficult at the national level, let alone the district council level. This analysis considers future housing affordability and the impact of planning on infrastructure. Appendix 10 provides some conceptual detail about the considerations for the clause 3.23 assessment.

8.1 Future Housing Affordability

In this section, the assessment draws together the analysis set out in previous sections covering the current and projected values of residential properties and dwelling tenure patterns, and dwelling feasibility, and adds in the other major influence on housing affordability – the possible future trends in household incomes. In combination, these aspects will influence households' ability to be dwelling owners in the short, medium, and long term in Gisborne. This provides insight on the sufficiency of RER capacity by price band to meet the demand of resident non-owner households in the short, medium, and long term and helps determine the impact of council planning and infrastructure on housing affordability as required in clause 3.23 of the NPS-UD.

8.1.1 Assessing Affordability

Gisborne urban area's expected future dwelling estate is estimated from the current estate, and the estimated future dwellings from the RER capacity analysis in Section 5.5. The focus is on the number of dwellings likely to be developed in each value band, as a key indicator of the opportunity for non-owner households to become owner households.

Estimating the affordability of housing is relatively straightforward as a calculation, in terms of the using information on what households can afford to pay to compile deposits and meet mortgage commitments.

From that, it is not difficult to calculate the price/value of dwelling which a non-owner household in each income band can afford to purchase – assuming that these households have access to finance. This method is relatively robust, in that it reflects the process which most households go through to secure finance from a bank or other financial institution in order to purchase a dwelling. That process is replicated all over the country each year as households purchase their first dwelling or seek to purchase a higher value dwelling. The financing perspective focuses on the debt-to-income ratio (rather than the dwelling price to income ratio) and the lender's comfort as to the security of the income streams on which the households rely.

The more challenging aspects of this assessment relate to the key assumptions informing the modelling, particularly the likely rate of increase (or decrease) in household incomes over time, as well as the future changes in the values of dwellings in the existing estate, and the new dwellings whose prices/values are subject to trends in land value and construction costs.

Household Incomes

A key influence on future affordability is the likely real growth in household income levels. This presents some challenge, because household incomes are not influenced strongly by council planning or the provision of infrastructure. However, it is important to allow for some change in household incomes because the strongest influence on affordability arises from the combined effects of housing price levels and income levels. Simply, where household incomes rise faster than housing prices, then affordability improves. Where incomes lag housing price rises, then affordability declines. Moreover, planning decisions affect mainly the prices of new housing since the direct path is through providing for sufficient land and the plan provisions which affect the cost of the housing itself.

The base position for the assessment is that Gisborne household incomes will change in line with anticipated real growth at the national level, and with the regional effect identified from SNZ time series. Over the period since 2000, incomes in the Gisborne/Hawkes Bay region have increased by 1.8% per annum in real terms, which is slightly faster than the New Zealand pattern (1.6% per annum). We also note that the income levels in Gisborne are generally lower than the rest of Hawkes Bay, this should not be confused with the rate of change.

The Treasury HYEFU[62] (June 2021) indicates an increase in real consumption per capita of 1.5% per annum in the period to 2025. Allowing for longer term income growth of that order of magnitude at the national level, the base case projection for the affordability assessment is for income growth of 1.6% per annum compounding.

Housing Costs

The projected increase in the cost of new dwellings is based on the feasibility analysis and sufficiency assessment. The model estimates the dwelling value band of the RER dwellings constructed in each year, and then converts these to an estimated sales price at the end of each time period. The future prices of the current dwelling estate are also estimated within the Affordability Model. Together these dwelling estates (current plus potential future from RER) produce an estimated total dwelling value profile for each time period.

The estimated future dwelling estate is then compared to the total estimated future dwelling demand to assess the level of projected affordability for households. The analysis considers affordability for non-owner households in relation to their ability to enter the ownership dwelling market.

[62] Half Year Economics and Fiscal Update.

8.1.2 Projected Future Housing Affordability

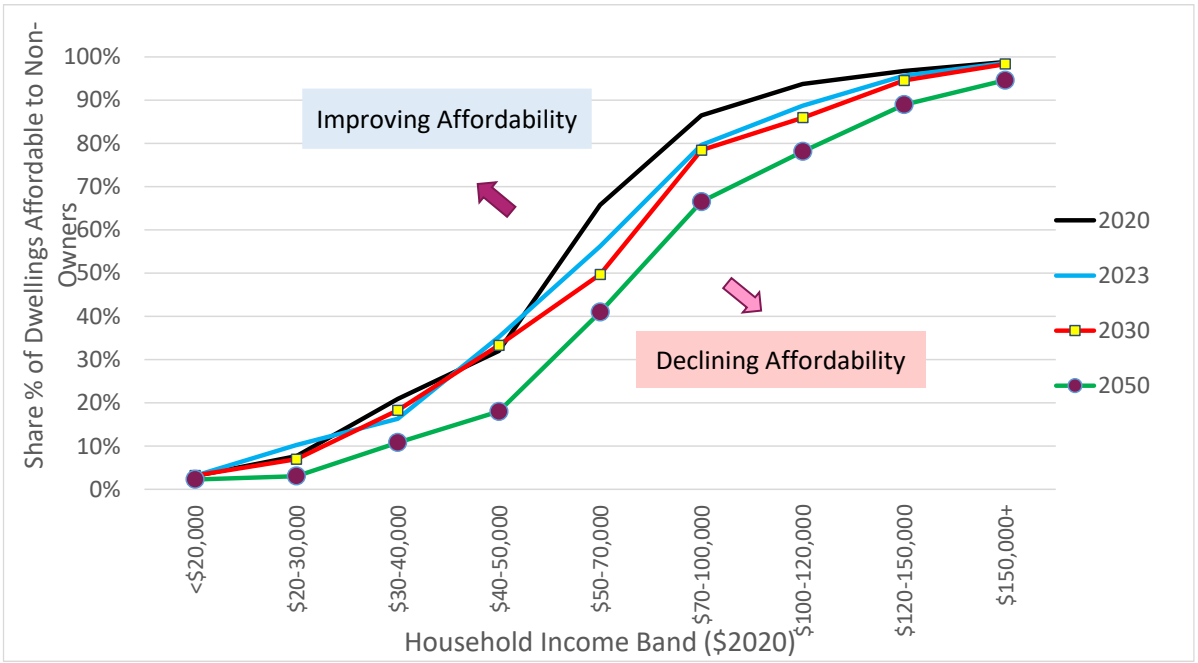
The projected future housing affordability is shown in Figure 8-1. It shows the share of the projected future housing estate that would be affordable to non-owner households, within each income band, wanting to enter the housing market at each time period. This estimates the potential affordability of dwellings for households entering the ownership housing market as first home buyers. The affordability of the housing market for existing owner households within each income band is likely to be higher due to their existing equity within the market.

At each household income band (shown on the horizontal axis), the line shows the share of the projected housing estate (current and potential future) that would be affordable to households within that band (shown on the vertical axis).

The analysis shows that affordability increases with household incomes. Lower shares of the housing market are affordable for lower income households, and higher shares of the market affordable for higher income households. For example, it is estimated that around only 8% of the market is currently (2020) accessible for households in the $20,000 to $30,000 p.a. income band, while over four-fifths (86%) of the market is affordable for households in the $70,000 to $100,000 p.a. income band.

There is a separate line on the graph for each time period. Movement of the lines to the left suggest increases in affordability as greater shares of the housing stock within each dwelling band become affordable through time within each income bracket. Movement of the curve to the right suggests decreases in affordability as the share of the market as affordable decreases.

Figure 8-1: Gisborne Main Urban Area Resident Housing Affordability Projected Trends 2020-2050



Changes in the position of the line occur because of changes to the dwelling value stock as well as growth in real incomes of households (where the bands are in 2020 values). Changes to the dwelling value profiles occur through growth in the housing market overall and the value profile of new dwelling stock added to the market.

The graph indicates that affordability is projected to decrease through time based on the existing dwelling stock and capacity analysis. This is seen in the gradual shift in the curves to the right through time, meaning that decreasing shares of the housing stock are affordable to households within each income band through time. The largest shifts occur within the mid income bands ($50,000 to $100,000 p.a.), where 66% to 86% of the dwelling stock is estimated to be affordable in 2020, decreasing to 41% to 67% in 2050.

The capacity assessment found that the projected RER capacity is likely to occur within the mid to upper dwelling value bands in relation to the existing housing estate. This reflects the past patterns of consents where a large portion are standalone dwellings on individual sites at upper ends of the market in comparison to the overall dwelling stock. In addition, a large share of Gisborne's dwelling stock is lower value, older dwellings, where the values are exceeded by the cost of construction.

The capacity assessment shows that while there are likely to be decreases in affordability within dwelling types, some of the effect is likely to be offset by changes to the structure of new dwelling stock through time. Market growth is likely to increase the feasibility of smaller, attached dwellings, which are likely to be cheaper than larger standalone dwellings. There is significant provision in the ODP for the delivery of attached dwellings on smaller sites.

Gisborne's market demand for attached dwellings is currently small, with dwelling stock patterns historically characterised by standalone dwellings on full sites. However, this is likely to gradually change through time as households make trade-offs between price, accessibility and dwelling size/type. Sites can generally be developed more efficiently with attached dwellings, meaning that larger dwelling sizes can be achieved on smaller sites. There is likely to be some substitutability between lower density attached dwellings (i.e., duplex pairs, and horizontally attached dwellings) and demand for standalone dwellings through time.

It is important to note that the above affordability assessment considers the addition of dwelling stock by the profit-driven commercial developer sector of the market. It does not include capacity provided by other parts of the market. As outlined in Section 6.3, this may be significant within Gisborne, and is likely to be concentrated at meeting demand within the lower value parts of the market.

Although the RER dwelling stock is projected to be delivered in the higher dwelling value bands of the market, which are less affordable to non-owner households, new dwellings are often instead occupied by existing households. Churn and movement within the housing market is an important mechanism in addressing housing affordability. New dwellings are often accessed by existing households that are able to move upward within the market as a function of their equity within their existing dwellings. As such, while new dwellings are less affordable to non-owner households, they are likely to be more affordable to existing households. Movement of existing households into newer dwellings correspondingly frees up older existing dwelling stock for new households and non-owner households, which is likely to be more affordable.

The above analysis has considered the share of the market overall in relation to each income group. It is also important to assess the overall size of demand within each non-owner household income group as this will determine the scale of demand for dwellings within different parts of the market. Moreover, the above analysis considers the share of the market that is accessible and does not provide a picture of the net sufficiency considering any overall constraints in the amount of capacity supplied. The following analysis estimates the sufficiency (surpluses and shortfalls) within each dwelling value band for non-owner households.

8.1.3 Affordability by Dwelling Value Band

Table 8-1 shows the indicated shortfall in housing by dwelling value band into the short, medium, and long terms for Gisborne's main urban area. In the table, a shortfall is indicated where the number of non-owner resident households who could afford to own a dwelling in that value band is greater than the number of dwellings expected in the same value band. For example, there is estimated to be around 780 households who would be able to afford (if they were non-owners) a dwelling in the $0-99,000 value band, if there were sufficient dwellings in 2020 (but there are not). In the higher value bands, the model indicates there are more dwellings in Gisborne than the resident non-owner population demands and could pay for.

Table 8-1: Indicated Urban Area Resident Housing Shortfall by Value Band

Dwelling Value Band ($000)	2020	2023	2030	2050
$0-99	-780	-1260	-1040	-1620
$100-199	-880	-490	-1140	-1730
$200-299	-110	-100	-150	-530
$300-399	-70	-40	-100	-440
$400-499	-20	0	-20	-340
$500-599	10	20	30	-250
$600-699	380	420	90	-170
$700-799	200	270	480	280
$800-899	160	250	270	510
$900-999	110	320	230	430
$1000-1099	70	110	320	410
$1100-1199	40	80	130	260
$1200-1299	30	50	110	140
$1300-1399	20	30	80	230
$1400-1499	10	20	50	290
$1500-1599	20	10	30	230
$1600-1699	10	20	20	80
$1700-1799	10	10	10	70
$1800-1899	0	10	20	120
$1900-1999	10	10	10	30
$2000-2199	10	10	10	30
$2200-2399	0	10	10	30
$2400+	0	0	20	180
Net Outcome	**-770**	**-240**	**-530**	**-1720**
Shortfall	-1860	-1890	-2450	-5080
Surplus	1090	1650	1920	3320

Note: Includes 2020 estimated shortfall

Source: ME Housing Demand Model 2021

Note that the analysis is based on projected dwelling numbers in each period. These do not include a margin of additional dwellings. The Competitiveness Margin applies an additional 20% and 15% to projected demand for housing, and this is translated to feasible capacity and RER on the basis that land would be available for the extra dwellings, and if there was demand then the dwellings could be feasibly built.

However, the comparison here examines projected demand for housing on the basis that each additional resident household would demand one dwelling. While the Competitiveness Margin is assumed to be in place as potentially available land to help keep down the price of housing, the demand projections assume that the

projected increase in households is the actual increase. It is not assumed that additional dwellings would be constructed for the notional 15% or 20% additional households.

The value bands which show a shortfall do not indicate that households are homeless. Rather, it shows that for the Gisborne dwelling estate, those households for which there are not sufficient dwellings that they could afford are (predominantly) in private rental accommodation (or social/public housing). A significant number of households are non-owners, primarily in rental accommodation (around 6,650 households currently, 39% of total district resident houses).

Table 8-1 indicates that there are current (2020) shortfalls of dwellings in price bands less than $500,000 to meet the demands of non-owner resident households. This equates to a gross shortfall of 1,860 dwellings in those price bands relative to a gross surplus of around 1,090 dwellings in price bands greater than or equal to $500,000. Note that this analysis focuses on shifts in affordability and does not take account of estimated shortfall in supply due to capacity constraints.

The estimated shortfalls and surpluses include the effect of the existing latent demand for around 750 dwellings. It is assumed that latent demand is concentrated into the lower dwelling value bands. It therefore increases the shortfalls estimated within these bands.

As noted, the shortfalls relate to dwelling ownership. Most households unable to afford to purchase a dwelling will rent a dwelling to live in (or seek government assistance to do so). The projected numbers show usually resident households in the urban area, on the basis that all households are in a dwelling, whether as owner-occupiers or tenants (renters). The key implication of the table is that the dwelling shortfall shows progressive change and increases faster than resident population growth over time.

Table 8-1 indicates that the projected shortfalls in the lower dwelling value bands are likely to increase through time with the existing estimated capacity. In the short-term, the shortfall is projected to grow slightly within the lowest dwelling value band and is projected to increase to around 1,890 dwellings across these bands (dwellings up to $500,000). The surplus in higher dwelling value bands is also projected to increase to around 1,650 dwellings.

In the medium-term, shortfalls in the lower dwelling value bands are projected to increase to around 2,450 dwellings, with most of the increase occurring within the lowest dwelling value bands (up to $200,000). Surpluses are also projected to increase in the higher dwelling value bands, particularly in dwellings between $700,000 to $1.1m.

Shortfalls across the lower dwelling value bands are projected to increase further in the long-term. There is a projected shortfall of over 5,000 dwellings in the value bands up to $700,000 in the long-term.

The projected shortfalls in the lower dwelling value bands occur due to a combination of factors. These include general price increases from market growth across the dwelling stock overall, the projected higher value of the potential future dwelling estate (new dwellings) relative to the existing dwelling stock, demand growth in the lower dwelling value bands, and the constraints in dwelling supply arising from planning provisions (modelled greenfield land) and infrastructure). The modelled supply of dwellings by value band includes the modelled shortfalls in capacity, which become larger in the long-term.

When assessing the shortfalls by value band, it is important to consider that they represent demand for dwellings based on ownership affordability. They reflect the dwelling values able to be afforded if these households entered the ownership market. However, the dwelling demand from many of these households is

instead likely to be met within the rental sector. As such, the dwellings they occupy are likely to be spread across a wider dwelling value range than what is estimated to be affordable through ownership.

The role of other non-profit-driven parts of the market are also likely to play an important part in meeting this dwelling demand for lower value dwellings. The potential scale of this supply is presented in Table 6-2, and could amount to several hundred dwellings. These are likely to be provided through a combination of the rental market as well as different models within the ownership market, which may broaden the range of dwelling values that can be afforded.

8.1.4 Affordability for Owner Households

It is also relevant to consider housing affordability for owner households. Although the focus of the affordability assessment is firmly on non-owners, owner households have a significant role in the housing market, and in the further development of the dwelling estate.

This is because households which do own a dwelling are generally able to afford that dwelling and, in many cases, could afford a higher value dwelling. A key reason is that with housing price rises, the value uplift accrues to the dwelling owner. With price inflation acting to increase their equity, many current dwelling owners are in a position where they could afford to shift to a more valuable dwelling. That includes new dwellings. Since new dwellings are generally more expensive than existing dwellings on a like-for-like basis, upgrades by existing owners are an important driver of new housing. One consequence of housing price growth is the greater incentive for developers and builders to add to the estate, at the same time as there is greater ability for existing owners to be able to afford those new dwellings.

8.2 Impact of Planning and Infrastructure on Competitiveness in the Housing Market

In this section, we draw on the analysis above and the framework defined, to present findings about the impacts of planning and infrastructure, on competitiveness in the Gisborne housing market.

As identified elsewhere (Appendix 10) we have drawn on the Randerson guidance to identify the two arms of assessment of competitive urban land markets. The first arm, whether there is "*...ample supply of alternative opportunities for development...*" is informed by the sufficiency assessment (Section 6). That shows that Gisborne does not have adequate feasible capacity (based on the zoned capacity included within the assessment), with the Competitiveness Margin and the RER included. On that basis, we conclude the first arm is not satisfied.

The second arm is the evidence to show *"…the price of land is not artificially inflated through scarcity."* The analysis detailed above shows that in Gisborne there is not sufficient capacity. While there is capacity in a range of locations, offering some choices as to location and to dwelling type and to dwelling value, at the aggregate level the assessment indicates that the Gisborne housing market may see the price of land artificially inflated through scarcity which is at least in part attributable to council planning and infrastructure. On that basis, we conclude that the second arm is not satisfied.

However, GDC is currently undergoing the development of a Future Development Strategy (FDS), which will immediately lead into substantial change to the Tairāwhiti Resource Management Plan (TRMP), which will

respond to the demand projections by including further growth areas. This process was insufficiently advanced to include within the current assessment.

The supply of additional zoned areas through this process is likely to increase development capacity and provide alternative opportunities for development. This will correspondingly reduce the effect of land prices being artificially inflated through scarcity and therefore this effect of planning on decreasing affordability.

8.3 Price Efficiency Indicators

Finally, we consider the Price Efficiency indicators on the MHUD Dashboard, which is a requirement of clause 3.23(3)(b). The Dashboard originally offered three price efficiency indicators relevant to housing assessment (housing price cost ratio, rural-urban differential, and land concentration control). Only information on the Price Cost Ratio indicator is still contained on the Dashboard.

8.3.1 Price Cost Ratio

The first indicator is the Price Cost Ratio[63] ("PCR"). This is closely linked to the land value share indicator (discussed already in Section 3.1.3). The rationale for the PCR is that land value should represent no more than $33^{1/3}$ % of total property value, which would produce a PCR of 1.50 (simply, PCR = 1/(1-LV%)). If a market has an average PCR of more than 1.50, then it is deemed according to the Dashboard to be not performing efficiently. A PCR above this 1.5 threshold indicates *"...it appears there are constraints on the supply of infrastructure-serviced sections relative to demand*." – generally interpreted as showing a planning constraint.

The PCR for Gisborne in 2021 is 1.705, up from 0.941 in 2018, and its low of 0.734 in 2003. According to the NPS-UD guidance, this would indicate a supply constraint of new sections.

However, the PCR has significant limitations as an overall indicator of urban markets[64]. One key issue is the selection of 33.3 % as some ideal or norm. Also, as a measure of just the land value to total value relationship, its main utility is to assess new housing, to show the relative contributions of land and built improvements to the property estate. That indicates whether the latest additions are more or less intensive (lower land value share) than for new developments in previous periods.

However, when the measure is applied across whole towns or cities, then the results are dominated by residential properties which were developed and improved many years ago[65]. Even if a city is growing by 2% per annum, its current estate will have 78+% of properties developed more than a decade ago, and well over half the estate developed more than 20 years ago. The general trend has been for housing to become more intensive over time, as plan provisions and market preferences trended toward smaller lot sizes and larger dwelling sizes. This means that analysis of the whole estate includes a cross-section of older properties with higher PCR values, and newer properties with lower PCRs. The average PCR, even with CPI adjustments to estimate the replacement cost of existing dwellings, must reflect that city-wide average. Tracking the PCR value year to year must inevitably show very small change to the average, because over a year or 5 years, the number of new dwellings is too small to indicate a material change. The study for Auckland Council (2018)

[63] National Policy Statement on Urban Development Capacity - Price efficiency indicators technical report: Price-cost ratios (hud.govt.nz)
[64] Market Economics Ltd. Land Efficiency of Auckland's New Housing 2013-17. Report for Auckland Council, November 2018.
[65] JDM Fairgray; Unaffordable Housing: the case against land use planning. October 2021 : New Zealand Planning Institute.

found it could be used to compare the relative land efficiency of new dwellings added to the estate each year, though not the total estate.

Moreover, the PCR is dominated by overall shifts in the market, and not by the land efficiency of new dwellings. This is clear in the substantial changes in PCR values contained in the Dashboard. The shifts from year to year are much greater than could have been generated by new properties entering the market.

To illustrate, the PCR calculated for Gisborne was 1.053 in 2019, which means on average that land accounted for around 5% of total property value. By 2021, the value was 1.705, with land accounting for around 41% of property value. In that time, the number of residential properties (dwellings) increased by less than 2%[66]. The Gisborne change could not have been due to the effects of new properties, instead it arose from an estimated district-wide shift in the relative values of land and built improvements. This means that any PCR change over time is likely to reflect predominantly trends in valuation and revaluation, which are influenced by much more than current planning provisions. There are wider limitations to this PCR method[67], and for these reasons we consider the PCR approach does not offer a robust basis for interpreting urban markets.

It is noted that the PCR is less than 1.0 for a significant portion of the data series (1993 to 2004, 2013 to 2016, and 2018). This implies that dwellings cost more to construct than their value, with no residual value remaining for land. This is at odds with the Dashboard indicator on Land Value as a percentage of Capital Value which was at 41% in 2017, down from 48% in 2005.

Even when applied to examine only new residential properties, the PCR indicator has to be applied with care. This is because market preferences may see new dwellings added which have relatively high PCR values, even though the Plan provisions enable developments with much lower PCRs. For example, construction of standalone dwellings on larger lots sizes means the land value share may be around 40% of the final property value (PCR of 1.67). If standalone dwellings are being constructed on lots that are above the minimum size / implied density enabled in the Plan, and if a high share of the dwelling sales price is land (with the enabled densities adequately supported by local amenity/infrastructure), then this would indicate the land value share (and PCR) is higher as a result of factors outside of planning.

On the other hand, if new dwellings are being constructed at the highest densities enabled by the Plan, and the final land value share is deemed above the benchmark indicated by the PCR, and there is demand for smaller lots and/or higher built intensity, then this could indicate a planning constraint, which would directly affect dwelling prices.

However, a more fundamental matter is that where the PCR is high for an individual lot – the land value component of a residential lot is high compared with the improvement value – that generally indicates potential for redevelopment or intensification. This is because the market confers value on land according to its use potential, and if a property has potential to be utilised more intensively than currently, its land value share of total value will be relatively high – hence a high PCR.

[66] Based on the GDC projections.

[67] There are other significant limitations to this PCR method, including its core assumption of some 'ideal' land value share, but more fundamentally from its built-in assumptions that the current dwelling accounts for all of the value of land, and therefore that the current dwelling must represent the maximum development intensity possible on the land (otherwise there would be other factors, including potential for intensification which would influence land value. The consequent assumption that every residential lot in a city is already developed to its maximum potential causes substantial distortions, especially in relation to a city's growth potential if all growth must be greenfield. The research experience in New Zealand including for HBA work shows instead that well over 80% of already developed sites have potential for intensification.

In any case, the calculation of a housing PCR depends on the residential lot being already improved with a dwelling. The indicator is not appropriate for undeveloped lots (the PCR will approach infinity).

Accordingly, where the average PCR value is relatively high for a city, that is an indicator that its already developed sites have relatively high potential for further intensification. One important aspect is that land value is influenced directly by a site's development potential, so that zoning provisions which enable intensification can be expected to result in higher valuation for the land component of properties. In contrast, where developed land has limited potential for further intensification, this will also affect the property valuation, with land valued relatively lower if there is limited potential to intensify.

This means that while the Price Efficiency indicators contend that a high PCR value is an indicator of under-supply, the opposite is likely to be the case. Zone provisions which enable intensification can be expected to put upward pressure on the PCR indicator, such that a higher PCR indicates not a shortfall in supply, but rather a relatively high potential for more dwelling capacity through intensification. Hence our concerns about the use of the PCR at all, and about how the PCR indicator should be interpreted.

8.4 Housing Bottom Lines

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. Importantly, these requirements do not apply to tier 3 councils (like Gisborne). Regardless, the following Housing Bottom Lines have been calculated for Gisborne for the short, medium and long term. They are based on an estimated current (2020) estate, as informed by CoreLogic and the Council's rating data.

Table 8-2: Suggest housing bottom lines

	Housing Bottom lines*
Short term (2020-2023)	530
Medium term (2020-2030)	1,810
Long term (2020-2050)	4,610

* Demand plus Competitiveness margin. The demand shows the growth outlook, but excludes an allowance for housing deficits.

8.5 Conclusion

M.E have undertaken a detailed assessment of Gisborne's urban housing market to meet the key areas of technical assessment required under the NPS-UD. We have investigated the core areas of demand, calculated capacity for urban dwellings including estimating reasonably expected to be realised capacity, and assessed the balance between capacity and demand. The analysis is informed by a range of data sets and other housing market investigation (e.g., indicators, contextual analysis and assessment of developer information) to assess the potential impact of planning on housing affordability and supply.

There is a reasonable growth in demand for urban dwellings projected for Gisborne's main urban area across the assessment period. The urban area is anticipated to account for around four-fifths of the district's overall demand for dwellings. Demand for urban dwellings is projected to grow by 31% over the long-term. In addition to the base demand from the projected increase in households, there is sizeable existing latent demand for dwellings currently existing within Gisborne. This is estimated to amount to 750 dwellings and is likely to be concentrated into the lower value end of the market.

Once latent demand (750 dwellings) and NPS-UD competitiveness margins are applied, this amounts to demand for capacity to accommodate an additional 5,400 dwellings. These are significantly higher than previous projections for dwelling growth across Gisborne District and this reflects the adjusted population projections (from StatsNZ).

Dwelling demand in Gisborne is typically concentrated toward the lower value part of the dwelling market. The demand profile is characterised by a high share of smaller and lower income households, generating demand for smaller, cheaper dwellings.

Gisborne's existing dwelling estate contains an estimated 12,840 dwellings within the main urban area. Nearly two-thirds of the dwelling stock is within value bands below $500,000, with a high proportion characterised by older, lower value dwellings on full sites. Kainga Ora play an important role within the local market, owning or managing a relatively high share (equating to around 7% of the district's total households) of existing dwellings.

Historically, there have been relatively small volumes of building consents issued within Gisborne over the past decade, with some more recent activity. More recent consents have typically been focused into the higher value parts of the market as well as growth in the retirement dwellings sector. The value profile of new dwelling stock differs to the value profile of the existing dwelling estate, which is more oriented toward the lower value dwelling bands.

There is also a growing demand for larger higher value lifestyle dwellings within the wider Gisborne area. These typically occur within the semi-rural hinterland areas surrounding the main urban area and smaller settlements along the main north-western access route out of the district. These are non-urban areas that fall outside of the scope of the assessment and are dwellings that are unlikely to represent capacity substitutable for urban dwelling demand (due to price and location considerations).

The capacity assessment has found that there are currently large amounts of plan-enabled capacity within Gisborne's urban area relative to long-term demand. A substantial proportion of this capacity is also estimated to represent commercially feasible options for developers with market growth through time, although a large portion of the feasible options occur through higher density dwellings.

While the overall total capacity is substantial, most of this occurs within the existing urban area and there is only limited capacity for future greenfield urban growth. The main developable greenfield areas are limited to the Taruheru Block, the block adjacent to the hospital on the north-western edge of Gisborne and the Elmers Block on the south eastern urban edge. There are also some smaller scale areas of undeveloped land within the existing urban edge that could accommodate small scale developments.

The assessment has found that the limited greenfield land provision is likely to create constraints to dwelling supply, and consequent shortfalls, in the medium-term as the capacity of feasible land is reached. Indicated short-term shortfalls occur as much of the Taruheru Block is unable to be included in the assessment due to the NPS-UD requirements to include only capacity where infrastructure is already in place.

The shortfall is projected to increase in the long-term as no additional greenfield capacity is included within the assessment. Infrastructure constraints to dwelling supply are also projected to occur within the long-term as city-level infrastructure network capacity limits are reached (based on the infrastructure capacity limits included within the assessment).

Together, if not addressed, these factors are likely to create a constraint to dwelling supply growth within Gisborne's urban area, and place upward pressure on land prices. This is likely to adversely affect future housing affordability.

However, GDC is currently undergoing the development of a Future Development Strategy (FDS), which will immediately lead into substantial change to the Tairāwhiti Resource Management Plan (TRMP), which will respond to the demand projections by including further growth areas. This process was insufficiently advanced to include within the current assessment within the technical requirements of the NPS-UD.

The supply of additional zoned areas through this process is likely to increase development capacity and provide alternative opportunities for development. This will correspondingly reduce the effect of land prices being artificially inflated through scarcity and therefore this effect of planning on decreasing affordability.

The capacity and sufficiency assessment has identified limit constraints within Gisborne's existing urban area. The existing planning provisions provide for more intensive development options across a range of locations and dwelling typologies. These include options for the development of lower density, horizontally attached dwellings on smaller site sizes across the general suburban area, as well as the development of higher density apartment dwellings within the central and commercial areas. These are likely to provide the market with a range of different development options.

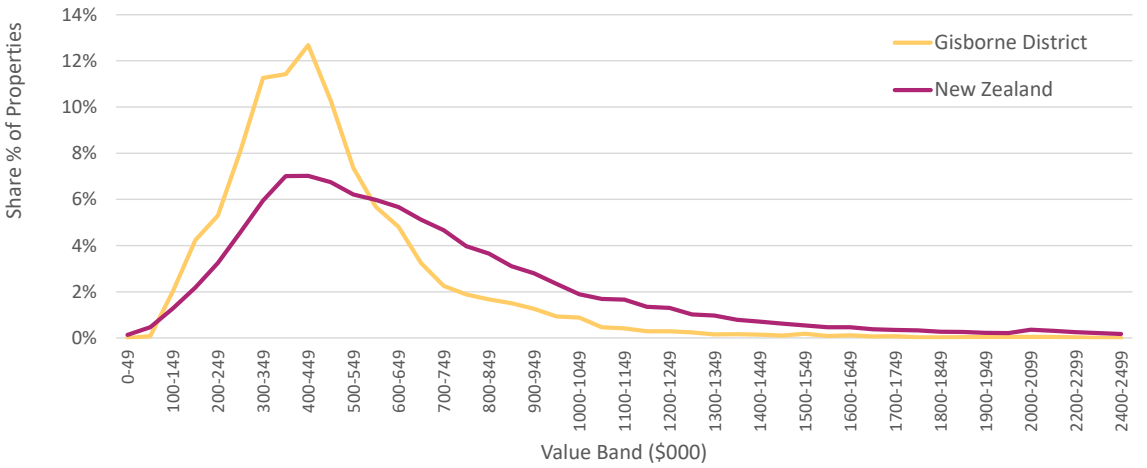
Although not yet well established, a larger proportion of these types of development are likely to become feasible with market growth through time. Households are likely to make future trade-offs between price, location, dwelling size and typology. There is some evidence of demand for attached dwellings starting to occur within the market.

Shortfalls in the lower dwelling value bands are a key issue for Gisborne if households want to achieve home ownership. The market is characterised by a high share of lower income households, with many unable to afford dwellings above the cost of their construction from the profit-driven developer market. It is likely that a high share of the demand from these households will be met through the rental sector of the market in dwellings in value bands above those able to be afforded within the ownership segment.

In accordance with the technical requirements of the NPS-UD, the assessment has focussed on the feasibility of dwelling supply from the profit-driven commercial developer segment of the market. Other parts of the market play an important role within Gisborne's dwelling supply; and may deliver dwellings under different models, including papakāinga housing, leasehold models or dwellings that are constructed to generate a rental income stream. The capacity delivered under these models can differ significantly to that estimated to be commercially feasible for a profit-driven developer and is more likely to be concentrated toward the lower end of the market. Iwi and Kāinga Ora are important examples of other parts of Gisborne's housing market and may provide a significant level of supply in the short-term relative to the existing latent demand.

Appendices

Appendix 1: Property values of Gisborne Urban Area Residential Estate vs New Zealand (2020)



Appendix 2: Additional information regarding Analysis of the Property Estate

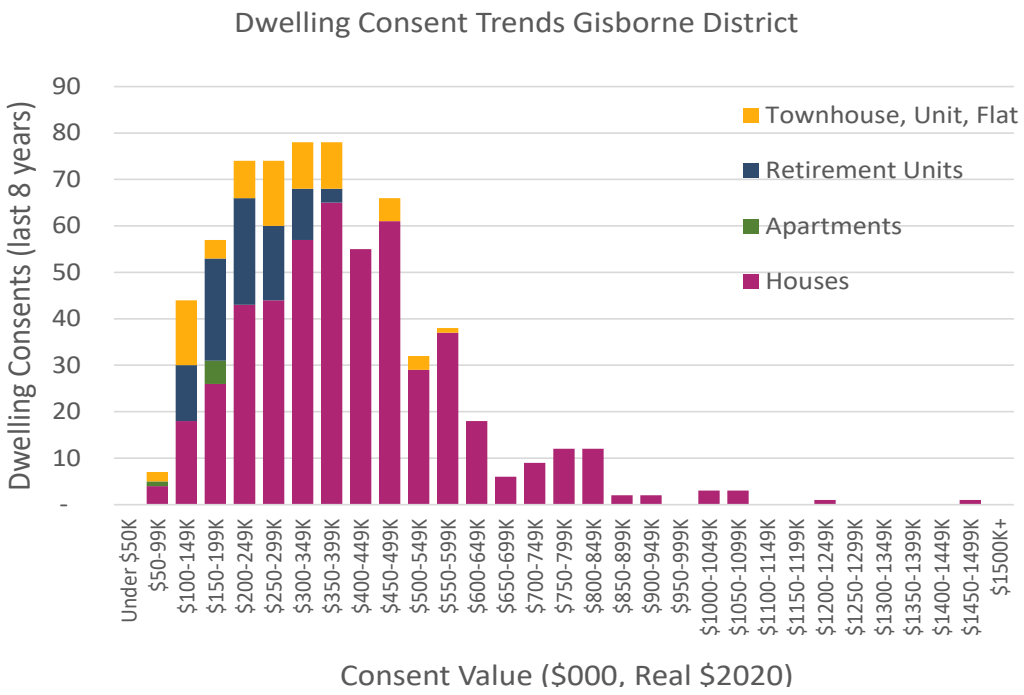
Property information is utilised together with detail on new residential properties and their value structure - Land value (LV), Improvement value (IV) making up Capital value (CV) – to estimate the total values (CVs) of consented dwellings. The analysis draws on the observed relationships between consent values, which account for most of the improvement value of new residential properties, and final property capital values taking into account land values. It offers robust information on current additions to housing supply, particularly where new dwelling supply is positioned in the market by value.

To test this, M.E apply market diagnostic tests using local, regional, and national comparators. The purpose is to understand the extent to which current patterns reflect the breadth of the market – notably the mix of dwelling types and values – and whether there is evidence of market concentration on segments such as larger or higher value houses instead of a broader mix.

The output from this analysis is the indicated supply of new dwellings ("new" defined as being 2020 and later) into the short, medium, and long terms. Note that there are two routes for this:

a. The high-level approach bases projected numbers on current trends and mix, applied to the total indicated land supply including greenfield and infill estimates. This provides a first approximation only of new dwelling supply, because it does not include detailed analysis of feasibility of new dwellings on greenfield and infill land. The recent trends in consenting are taken as a general indicator of feasibility, recognising that in most council areas a very high proportion of consented builds progress to completions, indicating feasibility. That said, it is a high-level approach which is useful for a starting indication but will usually be not sufficient for the full HBA.

b. The HBA-level approach. This also utilises the consent and property trends but includes more comprehensive assessment covering zoned and potentially zoned and serviced land area, plan-enabled capacity, and the market feasibility. The potential future supply of new dwellings is assessed consistent with the NPS-UD requirements.



Time Period	Houses	Town houses Flats Units	Apartments	Retirement Units	Total Dwellings	Residential Buildings
Number of Consents						
2016	49	5	-	14	68	68
2020	75	23	-	-	98	98
2016-2020	*26*	*18*	-	*-14*	*30*	*30*
Change 2016-2020 %	53%	360%	0%	-100%	44%	44%
Change 2016-2020 %pa	11.2%	46.5%	0.0%	-100.0%	9.6%	9.6%
Total Value of Consents ($m)						
2016	$ 16	$ 1	$ -	$ 2	$ 20	$ 20
2020	$ 35	$ 6	$ -	$ -	$ 41	$ 41
2016-2020	*$ 18*	*$ 5*	*$ -*	*-$ 2*	*$ 21*	*$ 21*
Change 2016-2020 %	112%	440%	0%	-100%	105%	105%
Change 2016-2020 %pa	20.6%	52.4%	0.0%	-100.0%	19.6%	19.6%
Total Value (Real $m) 2020						
2016	$ 18	$ 1	$ -	$ 3	$ 21	$ 21
2020	$ 35	$ 6	$ -	$ -	$ 41	$ 41
2016-2020	*$ 17*	*$ 5*	*$ -*	*-$ 3*	*$ 20*	*$ 20*
Change 2016-2020 %	98%	405%	0%	-100%	91%	91%
Change 2016-2020 %pa	18.6%	49.9%	0.0%	-100.0%	17.6%	17.6%
Mean Value of Consents ($000)						
2016	$ 336	$ 231	$ -	$ 176	$ 295	$ 295
2020	$ 465	$ 271	$ -	$ -	$ 420	$ 420
2016-2020	*$ 129*	*$ 40*	*$ -*	*-$ 176*	*$ 124*	*$ 124*
Change 2016-2020 %	38%	17%	0%	-100%	42%	42%
Change 2016-2020 %pa	8.5%	4.1%	0.0%	-100.0%	9.2%	9.2%
Mean Real Value of Consents ($000)						
2016	$ 360	$ 247	$ -	$ 188	$ 316	$ 316
2020	$ 465	$ 271	$ -	$ -	$ 420	$ 420
2016-2020	*$ 106*	*$ 24*	*$ -*	*-$ 188*	*$ 104*	*$ 104*
Change 2016-2020 %	29%	10%	0%	-100%	33%	33%
Change 2016-2020 %pa	6.6%	2.4%	0.0%	-100.0%	7.3%	7.3%
Mean Floor Area of Consents (sqm)						
2016	179	134	-	123	164	164
2020	189	130	-	-	175	175
2016-2020	*11*	*-4*	-	*-123*	*11*	*11*
Change 2016-2020 %	6%	-3%	0%	-100%	7%	7%
Change 2016-2020 %pa	1.4%	-0.7%	0.0%	-100.0%	1.7%	1.7%
Mean Real Value $2020 per Sqm						
2016	$ 2,013	$ 1,846	$ -	$ 1,525	$ 1,928	$ 1,928
2020	$ 2,460	$ 2,084	$ -	$ -	$ 2,394	$ 2,394
2016-2020	*$ 446*	*$ 238*	*$ -*	*-$ 1,525*	*$ 466*	*$ 466*
Change 2016-2020 %	22%	13%	0%	-100%	24%	24%
Change 2016-2020 %pa	5.1%	3.1%	0.0%	-100.0%	5.6%	5.6%

Appendix 3 - Non-ownership rates by household type, income, and ethnicity (2020)

This table offers a closer view of dwelling ownership and informs patterns of housing affordability. The table shows the dwelling ownership level (% of households who do not own a dwelling).

Household income Band	Household income Band									
	<$20,000	$20-30,000	$30-40,000	$40-50,000	$50-70,000	$70-100,000	$100-120,000	$120-150,000	$150,000+	Total
Total All Ethnicities										
One Person Hhld	51%	39%	38%	38%	36%	22%	25%	26%	24%	40%
Couple Hhld	31%	32%	21%	21%	23%	21%	16%	16%	12%	20%
2 Parents 1-2chn	62%	55%	49%	49%	47%	34%	23%	23%	13%	31%
2 Parents 3+chn	65%	65%	70%	70%	58%	42%	32%	33%	19%	43%
1 Parent Family	83%	73%	62%	62%	53%	45%	33%	32%	34%	62%
Multi-Family Hhld	70%	55%	54%	54%	58%	48%	40%	39%	22%	40%
Non-Family Hhld	64%	63%	54%	54%	59%	49%	47%	46%	80%	58%
Total	**59%**	**48%**	**42%**	**42%**	**41%**	**32%**	**25%**	**23%**	**18%**	**38%**
European and Other										
One Person Hhld	40%	30%	30%	30%	30%	19%	20%	25%	24%	32%
Couple Hhld	19%	25%	15%	15%	16%	15%	11%	11%	10%	14%
2 Parents 1-2chn	40%	37%	42%	42%	35%	25%	17%	17%	11%	23%
2 Parents 3+chn	43%	56%	57%	57%	44%	29%	22%	22%	13%	29%
1 Parent Family	72%	64%	51%	51%	41%	29%	22%	21%	20%	49%
Multi-Family Hhld	0%	0%	40%	40%	50%	35%	33%	33%	18%	27%
Non-Family Hhld	56%	61%	42%	42%	45%	43%	42%	38%	65%	48%
Total	**44%**	**35%**	**30%**	**30%**	**29%**	**23%**	**18%**	**17%**	**13%**	**27%**
Share %	*6%*	*7%*	*5%*	*5%*	*9%*	*9%*	*5%*	*5%*	*6%*	*58%*
Maori										
One Person Hhld	62%	55%	52%	52%	47%	30%	50%	50%	33%	55%
Couple Hhld	48%	46%	39%	39%	42%	32%	27%	27%	21%	34%
2 Parents 1-2chn	72%	75%	60%	60%	62%	46%	31%	31%	18%	44%
2 Parents 3+chn	64%	58%	75%	75%	69%	50%	38%	39%	33%	54%
1 Parent Family	83%	76%	68%	68%	59%	54%	43%	41%	58%	68%
Multi-Family Hhld	83%	50%	60%	60%	61%	51%	42%	40%	23%	41%
Non-Family Hhld	68%	63%	59%	59%	74%	54%	53%	43%	33%	62%
Total	**71%**	**64%**	**57%**	**57%**	**55%**	**43%**	**32%**	**31%**	**22%**	**53%**
Share %	*6%*	*5%*	*3%*	*3%*	*6%*	*6%*	*3%*	*3%*	*2%*	*37%*
Pacific										
One Person Hhld	73%	91%	67%	67%	0%	0%	0%	0%	0%	100%
Couple Hhld	0%	0%	25%	25%	50%	35%	25%	25%	0%	50%
2 Parents 1-2chn	75%	0%	25%	25%	69%	43%	40%	38%	38%	44%
2 Parents 3+chn	91%	73%	75%	75%	0%	73%	75%	86%	0%	67%
1 Parent Family	81%	82%	88%	88%	75%	72%	0%	0%	0%	75%
Multi-Family Hhld	0%	0%	0%	0%	0%	44%	0%	0%	31%	50%
Non-Family Hhld	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%
Total	**60%**	**67%**	**33%**	**33%**	**50%**	**38%**	**33%**	**33%**	**50%**	**65%**
Share %	*0%*	*0%*	*0%*	*0%*	*0%*	*1%*	*0%*	*0%*	*0%*	*3%*
Asian										
One Person Hhld	70%	85%	80%	80%	70%	0%	0%	0%	0%	75%
Couple Hhld	0%	0%	45%	45%	44%	50%	44%	44%	44%	50%
2 Parents 1-2chn	0%	0%	25%	25%	55%	41%	35%	33%	18%	33%
2 Parents 3+chn	0%	0%	0%	0%	67%	67%	0%	0%	0%	100%
1 Parent Family	0%	60%	57%	57%	63%	0%	0%	0%	0%	50%
Multi-Family Hhld	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Non-Family Hhld	0%	0%	0%	0%	0%	0%	0%	0%	106%	100%
Total	**100%**	**67%**	**33%**	**33%**	**43%**	**33%**	**33%**	**33%**	**40%**	**53%**
Share (%)	*0%*	*0%*	*0%*	*0%*	*1%*	*0%*	*0%*	*0%*	*0%*	*3%*
Total All Ethnicities	**890**	**760**	**470**	**470**	**810**	**650**	**260**	**220**	**200**	**4,880**

Appendix 4 - Relative incidence of home non-ownership (2020)

The table shows the relative incidence of ownership for each segment according to household ethnicity, compared with the 2020 district average for each segment. A value of 1.0 indicates the ownership level for households of that ethnicity (for that type and income) is the same as the Tairāwhiti average. Values below 1.0 indicate relatively lower levels of ownership for that ethnicity, with highlighted red numbers being substantially lower. Values greater than 1.0 show relatively higher levels of ownership for that ethnicity, with blue highlighted numbers showing ownership is substantially higher than average (+15%). The un-shaded cells indicate an ownership rate which is broadly close to the district's average for that household type and income combination. The individual numbers are informative, however given the level of detail it is the overall pattern which is most useful.

Household income Band	Household income Band									
	<$20,000	$20-30,000	$30-40,000	$40-50,000	$50-70,000	$70-100,000	$100-120,000	$120-150,000	$150,000+	Total
Total All Ethnicities										
One Person Hhld	1.34	1.02	1.00	1.00	0.96	0.59	0.65	0.68	0.64	1.06
Couple Hhld	0.80	0.83	0.55	0.55	0.61	0.56	0.41	0.41	0.32	0.52
2 Parents 1-2chn	1.63	1.45	1.30	1.30	1.24	0.90	0.60	0.60	0.35	0.82
2 Parents 3+chn	1.71	1.71	1.84	1.84	1.53	1.11	0.84	0.86	0.50	1.13
1 Parent Family	2.18	1.93	1.63	1.63	1.40	1.19	0.86	0.85	0.90	1.62
Multi-Family Hhld	1.85	1.44	1.43	1.43	1.53	1.26	1.04	1.03	0.59	1.04
Non-Family Hhld	1.69	1.67	1.41	1.41	1.54	1.30	1.23	1.20	2.11	1.52
Total	1.56	1.25	1.09	1.09	1.09	0.85	0.65	0.61	0.49	1.00
European and Other										
One Person Hhld	0.79	0.78	0.79	0.79	0.83	0.85	0.81	0.97	0.99	0.79
Couple Hhld	0.63	0.80	0.71	0.71	0.67	0.72	0.71	0.72	0.84	0.71
2 Parents 1-2chn	0.65	0.67	0.84	0.84	0.75	0.75	0.73	0.73	0.80	0.73
2 Parents 3+chn	0.66	0.86	0.82	0.82	0.75	0.68	0.70	0.68	0.68	0.67
1 Parent Family	0.87	0.87	0.82	0.82	0.78	0.65	0.68	0.67	0.59	0.79
Multi-Family Hhld	-	-	0.74	0.74	0.86	0.73	0.84	0.85	0.80	0.67
Non-Family Hhld	0.87	0.96	0.78	0.78	0.77	0.87	0.90	0.85	0.81	0.84
Total	0.74	0.74	0.72	0.72	0.70	0.69	0.73	0.74	0.70	0.71
Maori										
One Person Hhld	1.22	1.42	1.36	1.36	1.29	1.35	2.03	1.94	1.38	1.36
Couple Hhld	1.58	1.45	1.86	1.86	1.81	1.50	1.71	1.70	1.74	1.72
2 Parents 1-2chn	1.17	1.36	1.22	1.22	1.31	1.36	1.34	1.35	1.36	1.43
2 Parents 3+chn	0.99	0.90	1.07	1.07	1.19	1.18	1.20	1.19	1.74	1.25
1 Parent Family	1.01	1.03	1.09	1.09	1.10	1.21	1.33	1.28	1.71	1.11
Multi-Family Hhld	1.19	0.91	1.11	1.11	1.05	1.07	1.05	1.03	1.02	1.03
Non-Family Hhld	1.05	0.99	1.10	1.10	1.26	1.10	1.14	0.94	0.42	1.08
Total	1.20	1.35	1.37	1.37	1.33	1.34	1.31	1.35	1.21	1.39
Pacific										
One Person Hhld	1.42	2.35	1.75	1.75	-	-	-	-	-	2.48
Couple Hhld	-	-	1.21	1.21	2.15	1.66	1.60	1.60	-	2.52
2 Parents 1-2chn	1.21	-	0.51	0.51	1.46	1.28	1.75	1.66	2.85	1.43
2 Parents 3+chn	1.40	1.12	1.07	1.07	-	1.73	2.37	2.63	-	1.55
1 Parent Family	0.98	1.11	1.42	1.42	1.41	1.60	-	-	-	1.22
Multi-Family Hhld	-	-	-	-	-	0.93	-	-	1.37	1.26
Non-Family Hhld	-	-	-	-	-	-	-	-	1.25	1.74
Total	1.01	1.40	0.80	0.80	1.21	1.16	1.35	1.44	2.71	1.70
Asian										
One Person Hhld	1.37	2.18	2.10	2.10	1.92	-	-	-	-	1.86
Couple Hhld	-	-	2.20	2.20	1.88	2.37	2.84	2.84	3.69	2.52
2 Parents 1-2chn	-	-	0.51	0.51	1.16	1.21	1.54	1.48	1.38	1.07
2 Parents 3+chn	-	-	-	-	1.15	1.59	-	-	-	2.33
1 Parent Family	-	0.82	0.92	0.92	1.17	-	-	-	-	0.81
Multi-Family Hhld	-	-	-	-	-	-	-	-	-	-
Non-Family Hhld	-	-	-	-	-	-	-	-	1.32	1.74
Total	1.69	1.40	0.80	0.80	1.03	1.03	1.35	1.44	2.17	1.40
Total All Ethnicities	890	760	470	470	810	650	260	220	200	4,880

Appendix 5: Commercial Feasibility Approach

The model operates at a property parcel level to estimate commercial feasibility of each of the three development typologies - standalone dwellings, duplex, apartments - on each parcel. It uses base parcel information, sourced from the rating data and a GIS process, to calculate the section and dwelling capacity. Floor area ratios were used to estimate the size of the dwelling that could be built. To prevent dwellings from becoming non-sensical on large sites, an upper limit of 300sqm was set.

First, the Model estimates the costs associated with each potential dwelling development option and size, as well as the expected sales price. The difference between building costs and sales prices are compared, relative to a set required profit margin. The required profit margin for commercial feasibility is currently set at 20% to be consistent with the feasibility tool provided as part of the NPS-UD technical guidance. In other words, a development option on a parcel is considered financially feasible if the sale price exceeds the costs by at least the set profit margin. If a higher margin is applied, then a smaller number of dwellings will be feasible, and vice versa.

The Model uses costs associated with the dwelling construction process, and includes:

- Value of land,
- Construction cost per square metre (adjusted for slopes),
- Site preparation cost (e.g., Demolition costs where applicable, site clearing, fencing, etc.)
- Professional fees (Planning, Design, Legal, Contingency, Surveying, Management),
- Development/Financial Contributions (city wide and local), and
- Other costs (e.g., utility connection fees, contingency, landscaping, etc.).

It is assumed that land is purchased once it is ready for development – i.e., it is serviced by infrastructure, has had bulk earthworks completed and has the final property parcel boundaries established.

Secondly, the model estimates the sales price of each of the three development options. The sale price is determined from a combination of dwelling size, type, and location.

While this data set was useful, it had several short comings and gaps, and other property information, both publicly available and M.E's proprietary data, was used to supplement the data. From this, corresponding matrices of sales values by dwelling size and location were produced. The variables within this database also enabled factors to be established to differentiate sales prices between older and new floorspace, where newly constructed floorspace has a higher sales value. Further analysis of current property sales listed on the market was then undertaken to verify and calibrate the matrices.

Appendix 6: Sectoral Employment (MECs)

MEC	2020	2023	2030	2050
Horticulture and fruit growing	1,280	1,286	1,283	1,288
Sheep, beef cattle and grain farming	2,490	2,471	2,391	2,304
Dairy cattle farming	30	30	29	27
Poultry, deer and other livestock farming	120	120	117	113
Forestry and logging	500	502	496	484
Fishing and aquaculture	60	65	65	64
Agriculture, forestry and fishing support services	1,690	1,713	1,769	1,812
Mining, quarrying, exploration and other mining support services	20	17	17	18
Oil and gas extraction	-	-	-	-
Meat and meat product manufacturing	230	235	235	237
Dairy product manufacturing	-	-	-	-
Other food manufacturing	700	708	682	649
Beverage and tobacco product manufacturing	140	136	132	127
Textile, leather, clothing and footwear manufacturing	100	100	97	93
Wood product manufacturing	260	266	268	265
Pulp, paper and converted paper product manufacturing	-	-	-	-
Printing	80	84	84	83
Petroleum and coal product manufacturing	-	-	-	-
Chemical, polymer and rubber product manufacturing	110	111	107	103
Non-metallic mineral product manufacturing	40	39	40	41
Primary metal and metal product manufacturing	-	-	-	-
Fabricated metal product manufacturing	110	108	112	113
Transport equipment manufacturing	30	26	27	28
Machinery and equipment manufacturing	120	128	139	146
Furniture and other manufacturing	30	35	36	36
Electricity generation and supply	-	1	1	1
Gas supply	-	-	-	-
Water, sewerage, drainage and waste services	70	71	74	76
Construction	1,510	1,565	1,701	1,774
Wholesale trade	560	563	569	568
Retail Trade	2,020	2,062	2,113	2,128
Accommodation and food services	1,150	1,175	1,176	1,169
Road transport	530	530	529	521
Other transport, postal, courier, transport support and warehousing services.	270	274	268	260
Air and space transport	20	24	22	21
Information media and telecommunications	340	339	327	307
Finance	130	135	135	133
Insurance and superannuation funds	20	20	20	21
Auxiliary finance and insurance services	80	84	86	86
Rental, hiring and real estate services	410	423	438	447
Ownership of owner-occupied dwellings	-	-	-	-
Professional, scientific, technical, administrative and support services	2,400	2,434	2,461	2,472
Central government administration, defence and public safety	600	604	607	596
Local government administration	220	226	235	243
Education and training	2,110	2,144	2,231	2,275
Health care and social assistance	2,590	2,641	2,782	2,875
Arts and recreation services	370	376	380	379
Personal and other services	700	703	717	725
SUM	**24,240**	**24,576**	**24,997**	**25,108**

Appendix 7: Spatial patterns – area by zone and location

Total Area

	Gisborne Airport - Awapuni	Gisborne Central	Kaiti North	Kaiti South	Makaraka - Matokitoki	Mangapapa	Riverdale	Tamarau	Tarndale - Rakauroa - Te Karaka	Te Hapara	Tiniroto - Patutahi - Manutuke	Tokomaru Bay - Ruatoria - East Cape	Wainui - Okitu	Wharekaka - Tolaga Bay	Whataupoko
Amenity Commercial	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Amenity Reserve	31	10	3	-	26	-	2	-	6	2	52	12	26	157	6
Aviation Commercial	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-
Cemetery Reserve	-	-	-	-	20	-	-	-	7	-	9	7	1	11	-
Fringe Commercial	-	38	-	-	-	-	-	-	-	-	-	-	-	-	-
General Residential	86	78	153	86	66	184	169	71	76	161	33	318	79	67	205
Heritage Reserve	6	1	-	77	3	0	1	-	5	0	-	-	20	1	-
Industrial	73	-	-	-	12	-	-	-	-	-	-	-	-	3	-
Inner City Residential	15	2	-	2	-	-	-	-	-	-	-	-	-	-	-
Inner Commercial	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-
Neighbourhood Reserve	3	-	1	1	-	4	1	2	-	2	-	0	1	1	2
Outer Commercial	17	21	-	-	-	-	-	-	-	-	-	-	-	-	-
Port	-	32	-	5	-	-	-	-	-	-	-	-	-	-	-
Recreation Reserve	34	20	14	1	77	2	17	5	11	9	66	23	2	72	-
Residential Lifestyle	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-
Residential Protection	0	1	4	1	-	0	-	0	-	0	-	0	-	0	4
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural Commercial	-	-	-	-	-	-	-	-	6	-	-	18	-	1	-
Rural General	-	-	-	-	663	-	-	-	233,022	-	151,518	261,382	0	131,734	-
Rural Industrial	19	-	-	-	7	-	-	-	-	-	405	-	-	-	-
Rural Lifestyle	-	-	-	-	145	-	-	-	-	-	24	-	21	9	-
Rural Production	-	-	-	-	1,376	-	-	-	-	-	8,109	-	-	1,990	-
Rural Residential	244	-	106	113	2,058	69	-	8	67	-	437	-	974	184	63
Suburban Commercial	-	-	0	2	3	1	3	-	-	1	-	-	1	-	-

Developed Area

Developed land (Ha)	Gisborne Airport - Awapuni	Gisborne Central	Kaiti North	Kaiti South	Makaraka - Matokitoki	Mangapapa	Riverdale	Tamarau	Tarndale - Rakauroa - Te Karaka	Te Hapara	Tiniroto - Patutahi - Manutuke	Tokomaru Bay - Ruatoria - East Cape	Wainui - Okitu	Wharekaka - Tolaga Bay	Whataupoko
Amenity Commercial	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Amenity Reserve	8	5	-	-	-	-	-	-	2	2	-	-	9	-	2
Aviation Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cemetery Reserve	-	-	-	-	20	-	-	-	-	-	-	0	-	-	-
Fringe Commercial	-	36	-	-	-	-	-	-	-	-	-	-	-	-	-
General Residential	83	74	150	83	26	165	131	66	49	155	26	160	72	46	178
Heritage Reserve	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-
Industrial	63	-	-	-	9	-	-	-	-	-	-	-	-	2	-
Inner City Residential	12	2	-	2	-	-	-	-	-	-	-	-	-	-	-
Inner Commercial	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Neighbourhood Reserve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Outer Commercial	16	19	-	-	-	-	-	-	-	-	-	-	-	-	-
Port	-	17	-	1	-	-	-	-	-	-	-	-	-	-	-
Recreation Reserve	12	17	5	-	71	-	14	5	4	9	32	11	0	18	-
Residential Lifestyle	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-
Residential Protection	0	1	4	1	-	0	-	0	-	0	-	0	-	0	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural Commercial	-	-	-	-	-	-	-	-	5	-	-	12	-	1	-
Rural General	-	-	-	-	620	-	-	-	149,626	-	99,767	120,091	0	88,987	-
Rural Industrial	12	-	-	-	5	-	-	-	-	-	181	-	-	-	-
Rural Lifestyle	-	-	-	-	112	-	-	-	-	-	15	-	18	7	-
Rural Production	-	-	-	-	781	-	-	-	-	-	4,174	-	-	1,255	-
Rural Residential	55	-	12	32	1,077	61	-	8	14	-	338	-	727	117	-
Suburban Commercial	-	-	0	2	3	1	2	-	-	1	-	-	1	-	-

Vacant Area

Vacant land (Ha)	Gisborne Airport - Awapuni	Gisborne Central	Kaiti North	Kaiti South	Makaraka - Matokitoki	Mangapapa	Riverdale	Tamarau	Tarndale - Rakauroa - Te Karaka	Te Hapara	Tiniroto - Patutahi - Manutuke	Tokomaru Bay - Ruatoria - East Cape	Wainui - Okitu	Wharekaka - Tolaga Bay	Whataupoko
Amenity Commercial	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Amenity Reserve	22	6	3	-	26	-	2	-	4	-	52	12	17	157	4
Aviation Commercial	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-
Cemetery Reserve	-	-	-	-	0	-	-	-	7	-	9	7	1	11	-
Fringe Commercial	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
General Residential	2	4	4	3	41	19	38	5	27	6	7	158	7	21	26
Heritage Reserve	6	1	-	77	3	0	1	-	5	0	-	-	20	1	-
Industrial	8	-	-	-	3	-	-	-	-	-	-	-	-	1	-
Inner City Residential	3	0	-	0	-	-	-	-	-	-	-	-	-	-	-
Inner Commercial	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Neighbourhood Reserve	3	-	1	1	-	4	1	2	-	2	-	0	1	1	-
Outer Commercial	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Port	-	15	-	5	-	-	-	-	-	-	-	-	-	-	-
Recreation Reserve	22	3	9	1	6	2	1	0	7	0	34	12	0	54	-
Residential Lifestyle	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-
Residential Protection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural Commercial	-	-	-	-	-	-	-	-	1	-	-	5	-	0	-
Rural General	-	-	-	-	43	-	-	-	83,395	-	51,662	141,277	-	42,716	-
Rural Industrial	8	-	-	-	1	-	-	-	-	-	208	-	-	-	-
Rural Lifestyle	-	-	-	-	31	-	-	-	-	-	9	-	3	1	-
Rural Production	-	-	-	-	580	-	-	-	-	-	3,870	-	-	735	-
Rural Residential	118	-	94	82	963	7	-	-	54	-	98	-	244	65	-
Suburban Commercial	-	-	-	-	0	-	1	-	-	0	-	-	-	-	-

Underdeveloped area

Undeveloped Land (Ha)	Gisborne Airport - Awapuni	Gisborne Central	Kaiti North	Kaiti South	Makaraka - Matokitoki	Mangapapa	Riverdale	Tamarau	Tarndale - Rakauroa - Te Karaka	Te Hapara	Tiniroto - Patutahi - Manutuke	Tokomaru Bay - Ruatoria - East Cape	Wainui - Okitu	Wharekaka - Tolaga Bay	Whataupoko
Amenity Commercial	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Amenity Reserve	8	5	-	-	-	-	-	-	2	2	-	-	9	-	2
Aviation Commercial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cemetery Reserve	-	-	-	-	20	-	-	-	-	-	-	0	-	-	-
Fringe Commercial	-	36	-	-	-	-	-	-	-	-	-	-	-	-	-
General Residential	83	74	150	83	26	165	131	66	49	155	26	160	72	46	178
Heritage Reserve	-	-	-	0	-	-	-	-	-	-	-	-	-	-	-
Industrial	63	-	-	-	9	-	-	-	-	-	-	-	-	2	-
Inner City Residential	12	2	-	2	-	-	-	-	-	-	-	-	-	-	-
Inner Commercial	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Neighbourhood Reserve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Outer Commercial	16	19	-	-	-	-	-	-	-	-	-	-	-	-	-
Port	-	17	-	1	-	-	-	-	-	-	-	-	-	-	-
Recreation Reserve	12	17	5	-	71	-	14	5	4	9	32	11	0	18	-
Residential Lifestyle	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-
Residential Protection	0	1	4	1	-	0	-	0	-	0	-	0	-	0	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural Commercial	-	-	-	-	-	-	-	-	5	-	-	12	-	1	-
Rural General	-	-	-	-	620	-	-	-	149,626	-	99,767	120,091	0	88,987	-
Rural Industrial	12	-	-	-	5	-	-	-	-	-	181	-	-	-	-
Rural Lifestyle	-	-	-	-	112	-	-	-	-	-	15	-	18	7	-
Rural Production	-	-	-	-	781	-	-	-	-	-	4,174	-	-	1,255	-
Rural Residential	55	-	12	32	1,077	61	-	8	14	-	338	-	727	117	-
Suburban Commercial	-	-	0	2	3	1	2	-	-	1	-	-	1	-	-

Rounded

Appendix 8: Summary of planning rules for Industrial and Commercial zones

Planning Zone	Max Height (m)	Min Height (m)	Setback Front (m)	Setback Side/Rear (m)	Setback in situations (m)	Recession Angle (deg)	Recession Plane Height (m)	Story height (m)
Industrial	20		800		4.5			max build height
Rural Industrial A	12		1000	70	20			max build height
Rural Industrial B	20				10			max build height
Amenity Commercial	12		4.5	4.5		35-55	2.7	3.2
Fringe Commercial	12		4.5	4.5	20	35-55	2.7	3.2
Inner Commercial	14	8				35-55	2.7	3.2
Outer Commercial	12		4.5	4.5	20	35-55	2.7	3.2
Rural Commercial	10		4.5	4.5		35-55	2.7	3.2
Suburban Commercial	10		4.5	4.5		35-55	2.7	3.2

Appendix 9: Development potential by location and zone (excl. Residential zones)

Area	Planning Zone	Vacant			Redevelopment			Total		
		Land area (ha)	Potential Building floor area	Empl	Land area (ha)	Potential Building floor area	Empl	Land area (ha)	Potential Building floor area	Empl
Gisborne Airport - Awapuni	Industrial	7.6	34,228	311	11.9	53,214	484	19.5	87,442	795
Gisborne Airport - Awapuni	Outer Commercial	1.4	6,353	41	4.3	20,453	133	5.7	26,807	175
Gisborne Airport - Awapuni	Rural Industrial	7.7	27,489	250	4.3	15,237	139	11.9	42,726	388
Gisborne Central	Amenity Commercial	1.7	24,259	157	0.2	2,834	18	2.0	27,093	175
Gisborne Central	Fringe Commercial	1.4	10,259	174	6.4	46,747	792	7.7	57,006	966
Gisborne Central	Inner Commercial	0.9	12,737	250	1.2	18,942	371	2.2	31,679	621
Gisborne Central	Outer Commercial	2.0	11,678	76	2.8	16,121	105	4.9	27,799	181
Kaiti North	Subu. Comm	-	-	-	0.0	151	4	0.0	151	4
Kaiti South	Subu. Comm	-	-	-	0.3	1,702	43	0.3	1,702	43
Makaraka - Matokitoki	Industrial	3.0	5,183	26	1.1	2,052	10	4.1	7,235	36
Makaraka - Matokitoki	Rural Industrial	8.3	11,181	45	2.7	3,658	15	11.0	14,839	59
Makaraka - Matokitoki	Subu. Comm	0.2	223	6	0.1	170	4	0.3	393	10
Mangapapa	Subu. Comm	-	-	-	0.1	640	16	0.1	640	16
Riverdale	Subu. Comm	1.2	4,497	112	0.2	640	16	1.4	5,136	128
Tamarau	Subu. Comm	-	-	-	-	-	-	-	-	-
Tarndale - Rakauroa - Te Karaka	Rural Commercial	0.9	2,020	9	1.0	2,108	9	1.9	4,127	18
Te Hapara	Subu. Comm	0.2	785	20	0.1	475	12	0.3	1,259	31
Tiniroto - Patutahi - Manutuke	Rural Industrial	180.2	103,425	1,034	39.6	22,733	227	219.8	126,158	1,262
Tokomaru Bay - Ruatoria - East Cape	Rural Commercial	4.9	13,204	57	2.8	7,558	33	7.7	20,761	90
Wharekaka - Tolaga Bay	Industrial	1.2	2,284	9	0.3	521	2	1.5	2,805	11
Wharekaka - Tolaga Bay	Rural Commercial	0.2	673	3	0.1	325	1	0.3	999	4
Whataupoko	Subu. Comm	-	-	-	0.1	711	18	0.1	711	18
Total		223.1	270,478	2,579	79.6	216,991	2,453	302.7	487,468	5,032

Appendix 10: Discussion of Clause 3.23 requirements

The assessment for this HBA is necessarily forward looking – while planning decisions and the provision of infrastructure have affected market conditions in the past, none of that can be changed now. At issue is how, from the current situation and moving forward, planning decisions and infrastructure can be expected to influence affordability into the future.

To minimise the complexity arising from a need to examine the long-term outlook for key aspects of the national economy and each regional economy, the focus here is on housing affordability and competitiveness, and the influence of planning decisions and infrastructure – but it is only on those matters. Ideally, all the other key influences on affordability and competitiveness would be held constant, to be able to address the question:

> *"What is the likely effect on affordability and competitiveness of planning and infrastructure decisions* ***in and of themselves****."*

Otherwise, the impacts of planning and infrastructure will inevitably become conflated, as other core influences including interest rates, availability of finance, investment from overseas, migration, labour supply, materials costs, central government regulations and so on will inevitably have significant influence on housing prices.

Much of the analysis required for clause 3.23 is therefore addressed in the assessment of sufficiency of capacity (refer Section 6). As identified in the Randerson Review[68], the main impact of planning is through 'regulatory stringency' if the supply of housing to meet market demands is constrained by planning provisions. The most common paths are first, where there has not been sufficient land area provided for in appropriate locations and at appropriate times – predominantly through not zoning enough infrastructure ready land in suitable locations in time for its release and development to provide enough opportunity for the construction sector to produce housing capacity in time to meet demands – and second, where zoning provisions for the land are not sufficiently encompassing to enable the range of dwelling typologies and sizes which the housing market demands.

If the assessment of sufficiency does show that there is or will be sufficient capacity for housing growth, including the provision for additional land for the competitiveness margins, then *a priori* it is to be expected that the key planning decisions – provision for sufficient land area serviced by infrastructure, and provision for a range of dwelling typologies and size – will have a largely neutral or net positive impact on housing affordability and competitiveness of the land market.

In this regard, one key indicator of the potential effect of planning on affordability is the level of price increase which is required for there to be sufficient feasible and reasonably expected to be realised capacity to meet future housing needs. In conditions where there is sufficient land area provided for, and sufficient range of dwelling typology and size enabled in the Plan (including the LTP, Infrastructure Strategy and long-term urban growth strategies), then such future price increase would indicate the maximum or upper limit of the effect of planning and infrastructure by itself on future affordability. This approach is appropriate to help ensure that planning decisions and infrastructure do not materially reduce housing affordability and market competitiveness.

There is also potential for planning decisions and infrastructure to have a positive impact on affordability. This is predominantly where the Plan provides for dwellings which are relatively land-efficient, including smaller

[68] https://environment.govt.nz/publications/new-directions-for-resource-management-in-new-zealand/

site sizes or land area per dwelling, leading to potentially lower land values per dwelling, and where dwelling sizes may be smaller and less costly than the average in the current market.

That said, it is important also to not expect that planning decisions and provision of infrastructure will necessarily bring material improvement to the established housing affordability and competitiveness conditions in Gisborne. That is because the current affordability conditions have arisen from a range of influences, including national and international economic conditions and trends, which are likely to have had significantly greater impact on housing prices than have planning decisions and infrastructure. While there is some literature which advances the view that planning and regulation have been a principal or even *the* principal cause of the growth in housing prices world-wide, and in New Zealand, there is also substantial research to show the effects of planning have been much less than has been promoted – including in studies relating to the development of the NPS-UDC.

Consequently, there is not a requirement to demonstrate that GDC planning decisions and infrastructure provision will **by themselves** have sufficient influence to offset those accumulated effects.

The appropriate focus is to ensure that planning decisions and infrastructure provision going forward are unlikely to have negative impacts on affordability and competitiveness.

An important aspect is to examine the concept of the Competitive Land Market ("CLM"), or as it is being referred to in relation to Resource Management reforms, the Competitive Urban Land Market ("CULM"), and to consider how planning decisions may have impact on this. That consideration is to help identify a suitable evaluation framework, to show whether negative impacts on affordability and competitiveness are likely.

Competitive Land and Development Markets (CULM)

NPS-UD Provisions

A fundamental part of the NPS-UD is to support and contribute to "*competitive land and development markets*". That is set out at objective and policy level, and is referenced in various clauses:

> ***Objective 2:*** *Planning decisions improve housing affordability by supporting competitive land and development markets.*
>
> ***Policy 1:*** *Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum:*
>
> *d. support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets;*

These aspects underpin the requirements set out in ***clause 3.23 Analysis of housing market and impact of planning***, under which:

> *1. Every HBA must include analysis of how the relevant local authority's planning decisions and provision of infrastructure affects the affordability and competitiveness of the local housing market.*
>
> *3. The analysis must be informed by:*
>
> *a. market indicators, including:*
>
> *i. indicators of housing affordability, housing demand, and housing supply; and*
>
> *ii. information about household incomes, housing prices, and rents; and*
>
> *b. price efficiency indicators.*

Objective 2 sits at the highest level and has two main elements – the expectation that planning decisions can contribute to improving the affordability of housing, and the related expectation that this will be through supporting land and development markets to be "competitive". The NPS-UD wording appears to imply that the main apparent route through which planning decisions may improve housing affordability is by supporting[69] markets to be competitive.

However, as noted there are many influences on housing affordability, which include but are not limited to competition within the market.

Defining a Competitive Urban Land Market (CULM)

The NPS-UD itself does not contain a definition of competitive land markets, nor is there definition in the documents which support the NPS. However, the review of the Resource Management Act (the Randerson Review) does offer a useful definition, as follows:

> *Defining a competitive urban land market*
>
> *126. Competitive land markets should not be thought of as a laissez-faire regulatory approach to urban areas. In our view, a competitive urban land market is a well-planned and well-regulated built environment:*
>
> *• by 'competitive', we mean there is ample supply of alternative opportunities for development with the result that the price of land is not artificially inflated through scarcity*
>
> *• by 'well-planned' we mean that infrastructure and land use provision is aligned and timely provision of infrastructure avoids unnecessary costs*
>
> *• by 'well-regulated' we mean that the positive and negative external effects of land and resource use are considered in decision-making, and the costs of regulation are minimised and commensurate with the benefits. Positive effects include economies of agglomeration*, and the benefits of proximity and access to urban amenities. Negative effects include pollution and effects from industry, effects of development on heritage and character features, traffic congestion, and infrastructure costs (where they are not covered by development or user charges).*
>
> **This concept of agglomeration relates to the productivity gains of economies of scale, clustering and network effects.*

We have examined carefully the definition in the Randerson review, and we consider that it offers a sound basis for this HBA. That definition is adopted here for the assessment.

That Review acknowledges generally how urban economies function, and how council planning may affect competition within the market, and that this is appropriate where the benefits of doing so are articulated and exceed the costs. Of particular note, it acknowledges that competition within markets is an important aspect, but it does not seek to place reliance for urban planning on the operation of competitive markets alone[70].

Importantly, it offers a straightforward definition of the term competitive - *"by 'competitive', we mean there is ample supply of alternative opportunities for development with the result that the price of land is not artificially inflated through scarcity."* That indicates the key condition to be met – *"..ample supply of alternative*

[69] The term ***supporting*** is not defined, although it presumably equates with 'contributing positively to', or 'having a positive effect on'.
[70] The Randerson Review acknowledges there are some key challenges for the NPS-UD around competitive markets, noting (para 134) that *it "…addresses these issues to some extent. In our view, this work should be further developed and refined through national direction under our proposed Natural and Built Environments Act."* (p354)

opportunities for development..” – and the key effect to be avoided – *“..the price of land is not artificially inflated through scarcity.”*

The Review also offers guidance on how councils’ planning and infrastructure are most likely to have direct effect on housing and land prices, which it identifies as “*regulatory stringency*”.

> *“Data and analysis of land prices can be used to measure the extent to which local regulations impact the type of development that is occurring. This is sometimes referred to in urban economics as regulatory stringency.”*[71]

While somewhat simplified, since it can be difficult to separate out the effects of regulatory stringency from other effects on supply and development, that approach offers a useful and practical basis for meeting the requirements of clause 3.23. It allows focus on the extent to which regulations affect the type and scale of housing development, and land prices are seen as an indication of this. And it helps place attention on local (district level) conditions within the control (or potential influence) of the Council in the first instance.

Importantly, the definition in the Randerson Review is consistent with the Cabinet Minute on Objectives for the housing market[72] which confirm the government’s overarching objectives for the housing market include to:

> *“4.3 Create a housing and urban land market that credibly responds to population growth and changing house preferences, that is competitive and affordable for renters, and homeowners, and is well planned and well-regulated.”*

These documents impose a more nuanced view of competitive land markets than has been evident in earlier reports such as the *Signals of Under Capacity* report which was very influential in the evolution of the NPS-UDC and indicated a closer adherence to perfectly competitive markets.

A key feature of the definitions in both the Randerson Review and the Cabinet Minute is the expectation of well-planned and well-regulated markets, within which the competitive aspects of land markets would function.

Framework for Assessing Competitive Markets

Drawing from the above guidance, we may identify the two main arms of the CULM requirement:

1. first, that there is “*..ample supply of alternative opportunities for development..”*; and
2. second, that *“..the price of land is not artificially inflated through scarcity.”*

The first arm is informed by the assessment of sufficiency, to show whether there is adequate feasible capacity for future growth with the substantial margins which are built in as the Competitiveness Margin (which increases the estimated demand) and the RER concept (which reduced the estimated supply).

The second arm can be informed by both sufficiency and the degree of choice in the market. If the assessment shows there is sufficient capacity, and it further demonstrates that the sufficient capacity includes a range of choices as to location and to dwelling type and to dwelling value, then it may be concluded that the price of land is unlikely to be ”*artificially inflated through scarcity*” which can be attributed to planning decisions or infrastructure. In this, it is important to consider the effects of the Competitiveness Margin which builds in a 2-year margin in the medium term (20% of 10 years) and a 3 year margin in the long term (15% of the final 20

[71] Randerson Report, para 130, p353.
[72] CAB-21-MIN-0045

year period); and the RER filter which in most instances adds a buffer of at least those margins again. Taking account of the time lag between identifying land for urbanisation, and having it serviced and development ready, demonstration of sufficiency is taken here to show that the price of land will not be *"..artificially inflated through scarcity."*

We note that there are potentially other conditions which may contribute to scarcity which lie outside matters which Council can influence – for example, constraints in construction capacity or labour, or landowners' or developers' decisions on land release.

It is also important to note that competitive conditions vary through time, as the urban economy develops, and some opportunities become fully taken up and others emerge (especially more land for development). At the same time, the level of active demand also varies through time as new households arrive as incremental growth, their demands for housing arising and being met progressively. Moreover, the housing market includes existing and new dwellings, with already resident households and new arrivals having choice across both aspects.

On that basis, the assessment here is informed primarily by those two arms identified in the Randerson definition.