Business Land Capacity Assessment

Urban environments: Hastings District and Napier City

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m.e consulting

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Executive Summary

Napier and Hastings are the two main economic centres of the Hawke's Bay region. Under the National Policy Statement for Urban Development (NPS-UD), the Councils have to assess the availability of business land to ensure that there is sufficient capacity to support, and enable economic functioning. The Councils have engaged Market Economics (M.E.) to assist them with the Business Capacity Assessment (BCA). M.E. have developed modelling capability that is used by Councils to understand the economic growth outlook, and this informs the business capacity assessments, and the business land planning elements. The business land assessment is based on different growth scenarios that form the building blocks of the business land assessment. The outlook (scenarios) report high-level projection for the two Council's over the short (2021-2024), medium (2024-2031), and long term (2031-2051). The scenarios show the economic growth in Value Added and employment terms. In turn, the change in employment is then linked to changes in business land use requirements. As with all models, there are several limitations and caveats that should be kept in mind when using the results.

Economic Situation and Outlook

Napier

The base economic outlook for Napier suggests that the employment will change as follows:

- Short term (3 year), 1,520 MECs[1],
- Medium term (next 7 years), 3,270 MECs,
- Long term (next 20 years), 9,480 MECs, and
- **Total shift (over 30 years) 14,270 MECs.**

The sectoral distribution of employment is expected to remain stable over the next 30 years. However, there are core trends to consider as part of the land and capacity planning process. Sectors that will see the most employment growth in absolute terms over the long term are:

- Professional services 2,140 MECs,
- Retail trade 1,610 MECs, and
- Health care and social assistance 1,610 MECs.

The base scenario takes a conservative position, and high(er) growth pathway is included to show the upper threshold of stronger growth. The stronger growth pathway reflects higher population projections, as well as improved export performance with a performance premium across all exports. The modelling suggests that the difference between two scenarios is 1,320 MECs over the assessment period.

Hastings

Looking forward, the shift in employment in Hastings is estimated as follows:

- Short term (3 year), 2,200 MECs,

[1] MEC or modified employee count is a measure of employment and it includes a headcount of employees, as well as working proprietors.

- Medium term (next 7 years), 4,530 MECs,
- Long term (next 20 years), 11,340 MECs, and
- **Total shift (over 30 years) 18,070 MECs.**

The primary sector (which includes agriculture) is the largest employer, engaging 10,710 MECs (2021), equal to one fifth of total employment. This reflects the high quality of local soils, and the favourable climate which supports horticulture activities. The district also shows high proportions of employment in:

- Professional services 6,630 MECs (13%),
- Manufacturing 6,460 MECs (12%), and
- Health care and social assistance 6,180 MECs (12%).

In terms of the growth trends, the local economies saw flat employment over the decade to 2006-2016. However, the past 5 years or so have seen strong growth. These cyclical movements add complexity to estimating outlook because recent trends have been very strong, and the Covid-pandemic and the recent tightening of the business cycle add are resulting in unique growth conditions. From a planning perspective, the uncertainties mean that the actual development trends and land uptake will need to be carefully monitored.

The growth outlook integrates information and insights received during engagements with a selection of local businesspeople, and the local economic development practitioners. The insights were combined with recent economic commentary around the state of the economy. Broad indications are that the economic outlook in both Napier and Hastings remain positive, but there are growth challenges. Some challenges are existing, and others are emerging.

LAND AND FLOORSPACE DEMAND

Land demand is a function of economic growth. At the core, the approach starts with employment estimates, and then translates these into land and floorspace requirements. Three core categories were defined:

- **Industrial**: This covers heavy and light industrial activities, with the type and nature of emissions into the wider environment normally driving the difference.
- **Commercial**: The commercial spaces generally relate to office activities and public administration.
- **Retail**: This captures all forms of retail activity and retail-based services such as repairs and maintenance of household goods, hairdressing, and other personal services plus categories of commercial activity including real estate agencies, dentists, and optometrists.

The categories are discussed individually.

Industrial - Demand

In Napier, demand for industrial land, over the long term (in total) is estimated at 47.0ha. Most of the industrial land demand is expected to be in the Main Industrial zone, with this zone accounting for 70% of

demand. Importantly the distribution of demand across the zones is a function of currently occupied land by different economic sectors.[2]

As outlined in the NPSUD Part 3 (in 3.26), Councils are required to include a competitiveness margin. Adding the competitiveness margin across the different timeframes lifts the additional area to include in the assessment by between 7.9ha and 9.3ha over the assessment period.

Based on historical building consent information, the annual average demand levels in Napier have been relatively stable (between 1.3ha and 1.8ha). However, 2021 was an exceptionally strong year in terms of industrial building activity.

Napier: Industrial Land Demand - (ha)

Zone	3Y	7Y	20Y	SUM
Main Industrial	3.4	7.8	22.0	33.2
Business Park Zone	0.4	0.8	1.9	3.1
Airport Zone	0.4	1.0	2.8	4.2
Deferred Airport Zone	0.0	0.0	0.1	0.1
Suburban Industrial Zone	0.1	0.3	0.8	1.2
Mixed Use and West Quay Waterfront Zones	0.5	1.1	3.0	4.6
Port and Marine Zones	0.0	0.0	0.2	0.2
Wastewater Treatment Zone	0.0	0.1	0.2	0.4
SUM	**4.9**	**11.1**	**31.0**	**47.0**
Average per year (sum divided by number of years)	*1.6*	*1.6*	*1.6*	

Hastings: Industrial Land Demand - (ha)

Zone	3Y	7Y	20Y	SUM
General Industrial	10.9	25.7	58.2	94.8
Tomoana Food Industry	0.2	0.5	1.3	2.0
Havelock North Village: Industrial and Business	0.2	0.5	1.0	1.6
Light Industrial	0.7	1.6	3.9	6.2
Whirinaki Industrial	2.1	4.5	9.4	16.1
Deferred General Industrial	-	-	-	-
SUM	14.1	32.7	73.9	120.7
Annual Average	*4.7*	*4.7*	*3.7*	

Over the long term (30 years) the total demand for industrial land across Hastings, is estimated at 120.7 hectares. More than three quarters (79%) of this is expected within the General Industrial zone, with this share remaining fairly stable over the different timeframes, but this is subject to the availability of land as well as the supporting infrastructure. Adding the competitiveness margin, lifts demand by between 20.4ha and 25.4ha over the assessment period.

Historic building consent data shows average annual demand for industrial floor space. The analysis revealed that industrial land required across Hastings industrial zones over the past 16 years, ranges from 4.5 to 6.0 hectares, but there are large variations and sensitivities.

[2] The Councils classified the local businesses to economic sectors (ANZSIC)

Commercial and Retail

Demand for retail and commercial floor is reported individually, and at a total level by using Gross Floor Area (GFA) as metric. These two categories (sector groups) cover large parts of the services economy, but there is an 'other' category that is also report. The different categories are combined, because the planning provisions, and local spatial patterns, suggest a high degree of spatial integration. The following tables highlight the demand outlook of Napier and Hastings.

In Napier, the combined demand (over the assessment period) for commercial, retail and other floor space across is estimated at 21.4ha. In Hastings, the demand is estimated at approximately 13ha to accommodate employment growth typically located in retail and commercial zones.

Floor Space Demand in Napier (excl. Industrial) – Medium Outlook (ha)

	Ha			
	Commercial	Retail	Other	SUM
3 YEARS				
SUM	1.1	0.4	1.0	2.5
Annual Average	0.4	0.1	0.3	0.8
7 YEARS				
SUM	2.5	0.9	2.1	5.5
Annual Average	*0.4*	*0.1*	*0.3*	*0.8*
20 YEARS				
SUM	6.1	1.9	5.4	13.4
Annual Average	*0.3*	*0.1*	*0.3*	*0.7*

Additional Floor Space Demand (excl. Industrial) in Hastings – Medium Outlook (ha)

	Commercial	Retail	Other	SUM
3 YEARS		Ha		
SUM	0.7	0.3	0.7	1.7
Annual Average	*0.2*	*0.1*	*0.2*	*0.6*
7 YEARS				
SUM	1.5	0.5	1.5	3.5
Annual Average	*0.2*	*0.1*	*0.2*	*0.5*
20 YEARS				
SUM	3.4	0.8	3.9	8.0
Annual Average	*0.2*	*0.0*	*0.2*	*0.4*

PLAN ENABLED CAPACITY

Using Council information, the analysis suggests that available industrial capacity across the two areas (and in the urban areas, so excluding the rural areas) is:

- **Napier** – 62ha currently available and another 10ha becoming available over the medium term, followed by a further 30ha over the long term.
- **Hastings** District – 207ha currently available, with another 50ha available to accommodate future growth (especially around the Tomoana food hub location) over the long term.

In Napier, the capacity is concentrated in the Deferred Airport Zone (42ha) and, the main industrial zone across Pandora, Awatoto and Onekawa account for a quarter of the available capacity. In Hastings, the industrial capacity is spread over Irongate, Omahu Road, and Whakatu. Combined, these three areas have 195ha area.

Plan enabled capacity for retail and commercial areas is more nuanced, because a vertical element applies. PEC for the commercial and retail zones is reported in terms of floor space, segmented by:

- *Vacant Capacity* refers to bare land in the relevant zones.
- *Net additional Redevelopment Capacity* refers to the additional capacity that can theoretically be added to the existing floor space by redeveloping the parcel up to the maximum under plan provisions.
- *Unoccupied Capacity* refers to the floor space reported by the property review as being unoccupied at the time of the survey[3].

The modelling suggests that in **Napier,** 127ha of floor space could be developed within the provisions of the operative City Plan, across the commercial and retail zones. The net additional redevelopment capacity accounts for almost three quarters (84%) of the plan enabled capacity. Excluding this component, leaves approximately 20ha of floor space to accommodate growth.

The analysis suggests that across **Hastings,** around 87.2ha GFA could be developed within the provisions of the ODP. In Hastings, zones with the greatest estimated GFA capacity are:

- Central Commercial 45.8ha,
- Commercial Service 12.6ha, and
- Large Format Retail 10.9ha.

The net additional redevelopment capacity (82.5ha) account for nearly all (95%) of plan enabled capacity in Hastings. Excluding this, suggests that only 4.6ha of floor space is available to accommodate future growth in these zones.

Infrastructure Ready Capacity

The NPSUD requires the available capacity to be assessed in terms of infrastructure readiness, and infrastructure availability (to support development). Water infrastructure as well as the availability of water for use are known issues in the Napier and Hastings contexts. The team engaged with the councils' infrastructure teams to ascertain the degree to which additional development could be accommodated in industrial areas. Similar information was not available across the commercial and retail zones. Additional work is needed to develop a firm understanding of the infrastructure availability and/or deficits.

[3] This information was only available for Hastings urban area and was provided by Logan Stone Ltd.

Sufficiency Assessment

The sufficiency assessment integrates the demand outlook and the supply (capacity assessments). It includes the competitiveness margin as stipulated by the NPSUD. The forward-looking demand is based on broad, trend-growth continuing and that the recent (very) strong lift in activity over the recent past will be tempered over the short and medium term. For the short-term outlook, the growth is expected to be tempered by rising interest rates, supply chain constraints, declining confidence levels and global geo-political uncertainties. These uncertainties are factored into the assessment and the short-term outlook, and growth pathway over the next 3-5 years. Based on historic trends, a rebound could be expected after a slowdown, and **we strongly advise the Councils to continue to monitor development activity over the short-medium timeframe.**

The sufficiency assessment revealed that:

- Napier
    - At a city-wide level, there is sufficient industrial (plan enabled) capacity to accommodate the growth (demand). This allows for a transfer/relocation of demand from zones without capacity to other zones with capacity. A critical assumption is that the Deferred Airport zone will be available for development[4]. The sufficiency assessment returns materially different outcomes if this piece of land is excluded.
    - In terms of the commercial and retail capacity, if only the vacant land is considered, then capacity constraints emerge over the long term. However there is considerable redevelopment capacity (vertical development) that could assist in addressing shortfalls. If around 10% of the redevelopment capacity is taken up, then there would be sufficient capacity to accommodate the growth.
    - Importantly, around 60% of vacant capacity is in the Large Format Retail zone. Considering the nature of this land use, its location and the relationship with other activities (e.g. commercial and retail), means that this zone's vacant capacity is masking the true available capacity. Excluding this vacant capacity (i.e., retaining it for LFR-type development) shows that 21% of redevelopment capacity needs to be taken up otherwise there will be adverse effects on the commercial and retail environments (the spatial distribution of growth patterns will also need to factor into the monitoring).
- Hastings
    - At a district-wide, level there is sufficient industrial (plan enabled) capacity to accommodate the employment growth (demand) even if higher than expected growth eventuates. However, this would need to be viewed against infrastructure readiness as well as other considerations like water availability (ability to secure consents).
    - At a finer zone level, there are capacity constraints. The short to medium growth patterns and uptake of land demand would need to be monitored to ensure that above trend growth is identified. The analysis suggests that above trend growth over the short term will put pressure on the land supply over medium and long term.

[4] Based on capacity information supplied by Napier City Council.

- There is sufficient commercial and retail plan enabled GFA (vacant capacity) over the short term (including the competitiveness margin), but shortfalls emerge over the medium and long term.
- Sensitivity testing showed, ~21% of redevelopment capacity would need to be developed in order to ensure sufficient commercial and retail GFA over the long term (including the competitiveness margin).

The modelling suggests that the Councils have sufficient plan enabled business land capacity to meet the 10-year growth requirements. However, some localised insufficiencies (at a zone level) will appear, and it will be important to monitor the uptake of land to ensure that the subsegments (of demand) are not displaced. The limited information about infrastructure capacity across the different locations, and potential ability to accommodate growth from an infrastructure capacity perspective will need to be addressed through additional work.

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1 Introduction

Napier and Hastings are the two major urban areas in Hawke's Bay, located on the east coast of the North Island. These centres have been identified as tier 2 urban environments and are required to complete a Housing and Business Development Capacity Assessment (HBA) according to the 2020 National Policy Statement for Urban Development[5] (NPS-UD). The two Councils (with assistance from Hawke's Bay Regional Council) recently completed the Housing Capacity Assessment (a separate process and report) and this report presents the Business Capacity Assessment (BCA).

Business land is an important part of the local economic landscape, and sufficient and well-located business land is needed to support economic functioning. Business land includes a range of different land uses, but is normally associated with commercial/office, retail and industrial uses. Market Economics (M.E) has been commissioned to assist the Councils with the Business Capacity Assessment (BCA), including:

- the demand analysis,
- the supply analysis, and
- interpreting the results and then drawing conclusions about sufficiency.

This BCA focuses on the development capacity within the urban environments of each council, as required by the NPS-UD.

1.1 Objectives and Aim

The National Policy Statement on Urban Development (NPSUD) requires local authorities to ensure there is sufficient housing and business land to meet expected demands over a thirty-year planning horizon. Ensuring that there is sufficient land capacity will support the local market to deliver the required business space. This is key because it contributes to community wellbeing through enabling employment. Assessing sufficiency, i.e., identifying a surplus or deficiency of land capacity is subject to understanding the local growth drivers and dynamics in the local economy. Estimating the supply of, and demand for, business land is completed using a staged assessment process. The process delivers a fine-grained understanding of the economic influences on capacity and demand, and in turn this can contribute to improved planning for growth.

Understanding the local growth drivers, and how the changes manifest in the urban environment is key. The drivers include population trends as well as economic growth. The NPS-UD requires a focus on the urban environment, meaning that the nearby peri-urban and rural areas are not a focus. However, the economic modelling integrates the linkages between the urban and rural economies.

Within the urban environment, business land also reflects the urban structures of town centres, the role of an efficient transport and infrastructure planning, and how changes could support sustainable growth.

The aim of the BCA is to assist the Councils to achieve compliance with the NPS-UD (see Appendix 1 for a summary of the policy framework). With respect to business land, it requires that local authorities provide (at

[5] http://www.mfe.govt.nz/sites/default/files/media/Towns%20and%20cities/National_Policy_Statement_on_Urban_Development_Capacity_2016-final.pdf

least) sufficient development capacity, to meet expected demand for business land over the short term, medium term, and long term. Therefore, the project seeks to estimate the business land capacity in terms of the NPS-UD requirements i.e. expressed in hectares or floor area with a competitiveness margin added. The capacity analysis must show the development capacity that is:

- plan-enabled; and
- plan-enabled and infrastructure-ready; and
- plan-enabled, infrastructure-ready, and suitable for each business sector.

As tier 2 urban areas, the Councils are required to complete a business[6] capacity assessment every three years. The Housing Assessment (HA) was completed in 2021 with assistance from Barker and Associates and M.E. It is important to note that the BCA is linked to economic performance and outlook, which in turn is influenced by national and international factors. In addition, economic linkages, and the dynamics between sectors must be reflected. Other factors, like the growth drivers and export trends are also key.

Drawing from the request for service (22 December 2021), the following project objectives guided the work programme:

- To develop a model to estimate the demand, supply, and sufficiency of business land over the short, medium, and long terms, and to summarise the findings in a way that would assist the Councils to monitor available capacity (e.g. uptake of capacity), and
- To prepare a concise BCA report, summarising the key aspects of the process, and reporting the results i.e.,
    - the projected demand for business land,
    - the projected supply of business land in Napier and Hastings.

The BCA draws on existing studies and earlier assessments.

This report does not repeat the policy requirements outlined in the BCA (Subpart 3 clause 3.10, Subpart 5 clause 3.19), together with a range of requirements in the Policies[7]. The different parts all need sound analysis and good supporting information to demonstrate compliance.

1.2 Data Sources

The BCA modelling draws on a range of datasets. Some of these were supplied to M.E by the councils, and others are publicly available[8], and official information[9]. The key sources used in the assessment include:

- Rating databases – containing information relating to land uses, development patterns (e.g. floorspace), and value (Capital Value, Improvement Value, Land Value),
- Published District Plans – contain information relating to activity status of development types and development rules (site coverages, heights, floor-area ratios, etc),
- Several spatial datasets and reports were also incorporated into the modelling, including:
    - LINZ Primary Parcels[10] – capacities were modelled at the LINZ Primary Parcel level
    - District Plan Zoning – provided by each council, including overlays, subzones, and natural hazards

[6] The housing capacity assessments were completed by M.E and Barkers and Associates in 2021.
[7] Available for download from https://environment.govt.nz/assets/Publications/Files/AA-Gazetted-NPSUD-17.07.2020-pdf.pdf
[8] Such as media reports and reports commissioned and published by the councils.
[9] Like data from StatsNZ
[10] https://data.linz.govt.nz/layer/50772-nz-primary-parcels/

- Work completed for the Councils to assess developers and landowners' intentions over the short and medium term,
- Land vacancy register – work completed by Councils assessing the potential development capacity and the vacant land that could be developed for business use activities.

- Datasets from StatsNZ and MBIE. These include datasets like the Business Demography Survey which outlines the spatial distribution of employment, by sector over time, and population projections, as well as regional (Territorial Authority) Gross Domestic Product (GDP) as well as price deflators and productivity growth information.
- With reference to the economic outlook (forward looking), Market Economics' in-house models were used to show the potential growth pathways. M.E's Economic Futures Model (EFM) was the primary tool used for this part of the analysis and it was calibrated to recent economic data released by the likes of MBIE and StatsNZ. Appendix 2 introduces the EFM.
- The project process included a high-level survey and industry engagement. A small sample was used (with the respondents identified by the councils) and these businesses were invited to complete the survey. A by-product of using local businesspeople to inform the process is that it gives insight into the local dynamics and perspectives that are then factored into the assessment.
- The councils provided information about the vacant capacity for industrial and commercial areas. This information also included information regarding the greenfield capacity and the associated timing. Work completed for Councils regarding landowners' development intentions (for Hastings) was also considered.

1.3 Approach

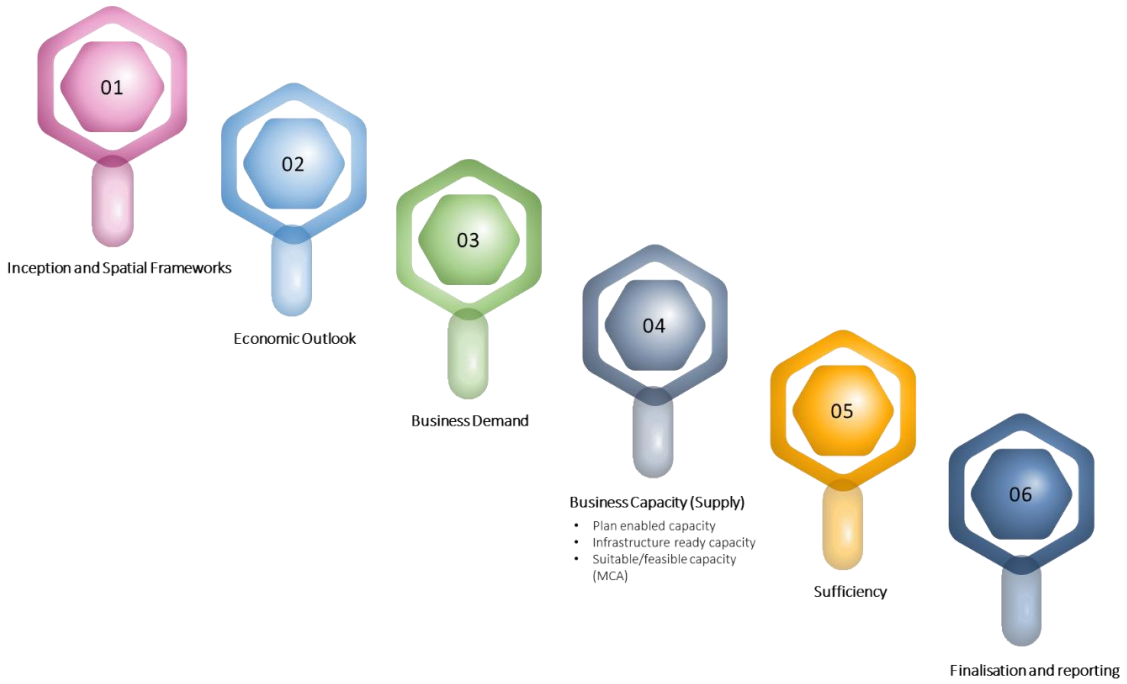
The BCA was completed using a staged approach (see Figure 1-1) and the different steps are summarised below.

Step 1: Inception and spatial frameworks: During the initial project step, the project was set-up and the available information was collected. The spatial frameworks, and other decisions about the projects were made during this stage. The councils have suggested a spatial framework, and this has been used in the overall assessment, with refinements to reflect practical considerations. The planning zones formed the basis for the spatial frameworks.

Step 2: Economic Outlook: The second step delivered the economic outlook and described it in terms of the Value Added (like GDP) and employment outlook over time. A scenario approach is used to reflect different growth rates, which are in turn associated with uncertainty. The outlook reports the short, medium and long term development pathways and reports the economic outlook over 30-years, across 48 sectors and in terms of Value Added (like GDP) as well as employment after accounting for productivity.

Step 3: Business Demand: The third step dealt with the demand side, using the employment projections developed in Step 2 (Economic Outlook), and associating it with land use patterns based on the current revealed patterns. The spatial distribution of employment, the urban-rural splits and co-location patterns are estimated. While the focus is on the urban environment, this step provides important ratios informing the distribution of growth. Current employment levels (for 2021) were linked to existing zones (and spatial areas) to reflect the existing patterns. The identified spatial framework is applied to reflect the spatial patterns. Local and NZ-wide land-density ratios are applied to convert the estimated employment growth into demand (for land and floor area). The step included an allowance for the competitiveness margins as per the NPS-UD.

Figure 1-1: Approach



Step 4: Business Capacity (Supply): The next step related to estimating the business capacity. The approach is designed as a total economy model and considers all sectors concurrently. The NPS-UD indicates that business demand and capacity needs to be evaluated at the location level, so the spatial framework is applicable. The BCA needs to assess whether business zoning (or planned in a PDP or FDS) is sufficient to at least meet long-term demand, when assessed as an integrated whole (i.e., has the plan got the balance broadly right in terms of the allocation of land). The sufficiency is qualified insofar as the capacity needs to be "suitable" (at a minimum include suitability in terms of location and site size. This step delivers the capacity (supply) assessment, in terms of:

- Plan enabled capacity,
- Infrastructure ready capacity, and
- Suitable/feasible capacity (using a multi-criteria assessment structure, MCA).

The results of the sector (developer) engagement are integrated into the capacity assessment as well as the MCA element.

Step 5: Sufficiency: The penultimate step covered the sufficiency testing. It compared combinations of different growth outlooks, reported different metrics (land area and floor area), and expressed the demand relative to vacant areas over the short, medium, and long term. Shortfalls and surpluses are identified and highlighted.

Step 6: Finalisation and reporting: The project process concluded with documenting the findings and completing the report. Supporting information is included in the appendices.

1.4 Limitations and Caveats

As with all models, there are several limitations and caveats that should be kept in mind when using the results and these are outlined below:

- The employment projections cover a long timeframe and there are a number of factors that will change them going forward. They are not 'predictions' but show one potential outcome. It will be necessary to continually refine and update the information (i.e. the base figures and the growth rates) as new information becomes available. This is especially the case for the industrial activities where the post-Covid environment has seen above trend growth and the more recent lift in the economic risks facing NZ. There is considerable uncertainty around the short-term growth pathway.
- The modelling builds on, and uses, existing research and we did not audit, or peer review the existing research.
- The employment projections (and allocation) are based on information about the timing and scale (ha area) of greenfield locations. Changing the time or scale will affect the spatial patterns of employment.
- The modelling incorporates local information sourced from the Council and we have relied on this information on an 'as is basis'.
- A part of the NPSUD compliance requires an assessment of the infrastructure readiness and ability to accommodate growth. Only high-level information about infrastructure capacity, and the ability to accommodate growth was available at the time of this assessment. We understand that the Councils are evaluating/assessing the infrastructure capacity.
- Climate change and the flow-on effects will impact Napier and Hastings. The potential impacts will manifest through extreme weather events (droughts and flooding) that will also impact the local business base. The modelling does not specifically integrate these matters. Councils' potential responses and ways of dealing with the risks/consequences will need to be integrated into future assessments.
- The assessment relies on the information and data received from the Councils. The information includes the rating data, which is a snapshot in time. The economic environment is fluid and the work was delivered over an extended timeframe (due to Covid-related delays and capacity constraints). Therefore, this is potential for some key variables (e.g. land use, improvement values, built floor area, etc.) to be marginally out of date. M.E did not verify the data accuracy.
- With reference to the redevelopment capacity in commercial and retail-type zones, the analysis does not integrate this aspect and additional research is needed to understand the potential implications of the parking requirements on available capacity. In general, if parking is to be provided on-site then there will be a trade-off between the area used for parking and that used as business space (i.e., GFA).

1.5 Spatial areas

The following business zones were included in the capacity assessment for Napier and Hastings, respectively (see Figure 1-2).

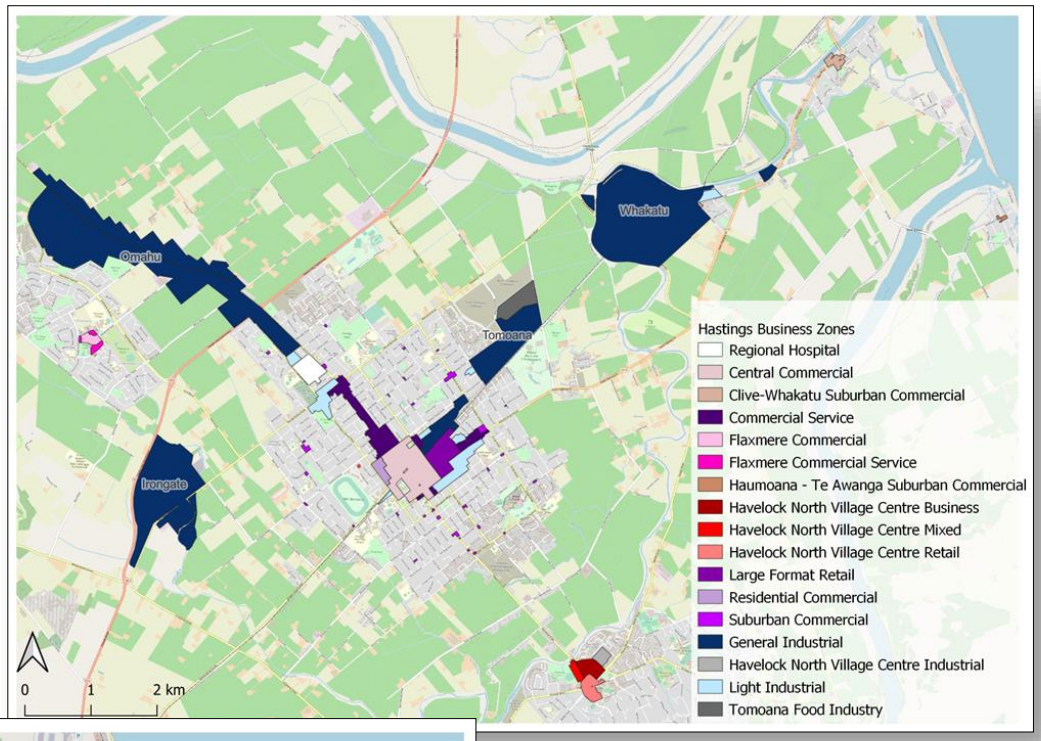
Napier	Hastings
• Main Industrial	• General Industrial
• Business Park Zone	• Light Industrial
• Airport Zone	• Tomoana Food Industry
• Deferred Airport Zone	• Havelock North Village: Industrial and Business
• Suburban Industrial Zone	• Whirinaki Industrial
• Mixed Use and West Quay Waterfront Zones	• Central Commercial
• Port and Marine Zones	• Commercial Service
• Wastewater Treatment Zone	• Suburban Commercial
• Art Deco Quarter	• Residential Commercial
• Fringe Commercial	• Large format retail
• Suburban Commercial	• Flaxmere Commercial
• Foreshore Commercial	• Flaxmere Commercial Service
• Large Format Retail	• Havelock North Village Centre Retail
• Mixed Use	• Clive-Whakatu Suburban Commercial
• Inner City Commercial	• Haumoana - Te Aawanga Suburban Commercial
	• Waimarama Suburban Commercial

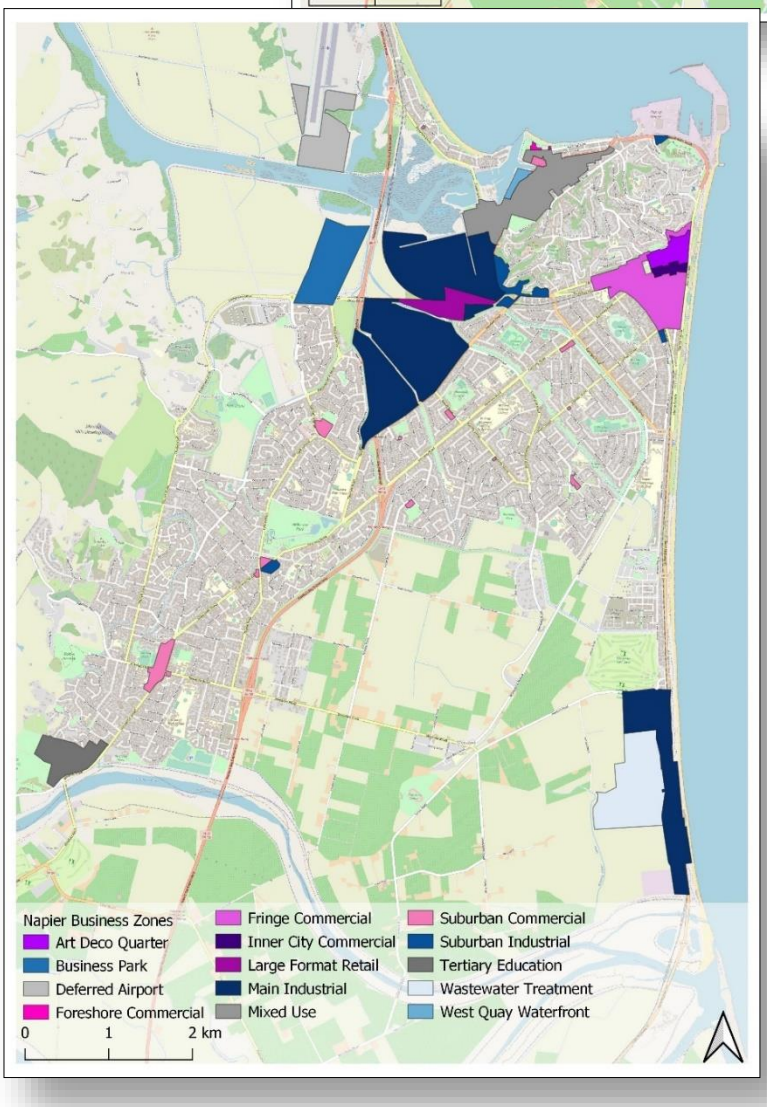
1.6 Report structure

The report is structured as follows:

- Section 2 presents the current economic situation and outlook for the two areas. Summary data is presented for the sectoral outlook. A high growth outlook is also included.
- Section 3 deals with the land and floor space demand and the short, medium and long term outlooks are presented for retail, industrial and commercial sectors.
- Section 4 presents the capacity across the different sectors and commentary regarding the suitability of the zones/locations are included.
- Section 5 combines the previous parts, to estimate the relative sufficiency of capacity. The competitiveness margins are included where appropriate.
- Section 6 concludes the report.

Figure 1-2: Location of zones





2 Economic Situation and Outlook

In this section a broad overview of Napier City and Hastings District economy is provided. The structure and make-up of the current economy and broad trends are discussed separately for the two areas, Napier City and Hastings District. The economic outlook, and anticipated sectoral shifts are key building blocks of the business land assessment. The purpose is to provide high level commentary about the recent employment shifts, and to highlight the growth outlook. The uncertainty associated with the Covid-19 recovery pathway and the potential effects of the current inflationary environment are highlighted.

The section deals with Napier and Hastings separately, but it is acknowledged that these two urban areas have economic linkages and form the main economic centres of the Hawke's Bay region. The main trends and movements in the economy over the past two decades are highlighted and the historic patterns inform the growth outlook. It is however important to look through the volatility associated with the Covid-period (i.e., lockdowns and the above-normal activity in the immediate aftermath of the lockdowns).

The NPS-UD requires Councils to understand the growth pressures they are likely to face over the:

- short (2021-2024),
- medium (2024-2031), and
- long term (2031-2051).

The economic growth scenarios are used to estimate Value Added and employment levels, over time. In turn these are translated into Gross Floor Area (GFA) or land area requirements to accommodate the growth (the translation process is presented in the next section).

We have relied on M.E's proprietary model, the Economic Futures Model (EFM)[11], to generate the economic metrics. Two economic models were developed, one for the Hastings economy, and another for the Napier economy. For both areas the base scenario reflects the medium-high population and a range of assumptions around export, capital formation and productivity growth rates. These assumptions are informed by official and unofficial data. A high growth scenario has included in the assessment (again one for each Council area) to provide an indication of the potential sensitivities (spread of outcomes) with a focus on the long term. The high scenarios use the high population projections for the household aspects (which determine the labour force size). Additionally, the high scenario also increases overall economic activity (e.g., through lifting exports) to reflect a higher growth pathway with the view of showing upside risks. The diverse natures of the two economies were considered in the higher growth pathways and how these were framed. For example, the Hastings economy has as large rural component, and these linkages are integrated by considering the relationships with suppliers, like services to agriculture[12] and higher export performance. The high scenarios necessitated a relaxation of economic constraints around labour availability.

Each area is discussed under separate headings with three sub-sections. These subsections show the current situation and recent trends, the growth outlook, and the variation in outcomes under the higher growth pathway. Employment is used as a core metric and is based on modified employee counts (MEC).[13] The link

[11] Introduced in Section 1.
[12] These relationships are embedded
[13] A Modified Employee Count (MEC) is a headcount of employees and included working proprietors.

between employment levels and land use (or GFA) requirements is well established and is normally used to translate economic growth into land requirements because it is highly transparent process.

2.1 Napier City

Napier City is one part of the local economy, and important regional economic assets are located within the City's boundaries. These include Napier Port and the Hawke's Bay Airport. The employment trends and shifts across the different sectors are outlined below. The analysis included a long timeframe overview of the past two decades (to 2001), and different timeframes are used to reveal how different sectors have performed over the business cycle.

2.1.1 Current situation and recent trends

Napier City has a workforce of 30,790 MECs in 2021 (Table 2-1). The sectoral distribution is fairly diverse but highlights the role of Napier as an urban centre and its role as a service hub for the wider Hawke's Bay. Since 2001, the workforce of Napier City has grown by 6,100 MECs or 25%. Over half this growth occurred over the last five years with an increase in employment of 3,340 MECs. This was preceded by a 10-year period of flat economic performance (2006-2016), with some sectors declining, and shedding employment. Although, the five years between 2001 and 2006 experienced growth at a level similar to the most recent five years.

Table 2-1: Napier City Employment (MECs), 2001-2021

Sector	MECs				
	2001	2006	2011	2016	2021
Primary Sector	1,490	1,710	1,630	1,350	1,560
Mining and Quarry	-	10	10	20	10
Manufacturing	3,270	3,160	2,680	2,670	3,000
Utilities	60	20	200	70	90
Construction	1,790	2,550	2,310	1,970	2,740
Wholesale trade	1,120	1,030	930	1,070	970
Retail Trade	3,210	3,690	3,620	3,110	3,390
Accommodation and food services	2,070	2,520	2,410	2,370	2,590
Road transport	1,420	1,400	1,370	1,480	1,720
Information media and teleco	230	200	160	240	190
Finance	190	280	320	260	200
Insurance and funds	260	230	210	180	180
Rental, hiring and real estate services	710	770	700	610	840
Professional Services	2,500	2,620	3,370	3,470	3,800
Government Admin (local and central)	1,160	1,450	1,260	1,540	1,910
Education and training	1,930	2,060	2,430	2,400	2,620
Health care and social assistance	1,950	2,190	2,460	2,990	3,260
Arts, Rec., Personal & Other services	1,330	1,760	1,690	1,640	1,740
Total	**24,690**	**27,660**	**27,740**	**27,450**	**30,790**

Professional services engage 3,800 MECs (12% of total employment within Napier City). This is the largest concentration of employment (per sector) and is followed by:

- Retail with 3,390 MECs (11%),
- Health care and social assistance with 3,260 MECs (11%),

- Manufacturing with 3,000 MECs (10%).

Combined, these four sectors account for 44% of the City's employment base. Other noteworthy sectors i.e., sectors with more than 8% of the employment, include:

- Construction (2,740 MECs),
- Education and training (2,620), and
- Accommodation and food services (2,590).

These concentrations underscores Napier's urban centre role and meeting the needs of the wider population across the Hawke's Bay and beyond. The concentration in professional services highlight the service-nature of the economy, but the role of manufacturing and population driven activities are also key. The growth in employment confirms this important role. Table 2-2 shows the change in MECs over different timeframes.

Table 2-2: Napier City Employment Changes (MECs), 2001-2021

Sector	Change in MECs				
	2001-06	2006-11	2011-16	2016-21	2001-2021
Primary Sector	220	-80	-280	210	70
Mining and Quarry	10	-	10	-10	10
Manufacturing	-110	-490	-10	330	-280
Utilities	-40	170	-130	20	30
Construction	760	-250	-330	770	950
Wholesale trade	-90	-90	140	-100	-150
Retail Trade	480	-70	-510	280	180
Accommodation and food services	450	-110	-40	220	520
Road transport	-20	-30	110	240	310
Information media and teleco	-30	-40	80	-50	-50
Finance	80	50	-60	-60	-
Insurance and funds	-20	-30	-30	-	-80
Rental, hiring and real estate services	60	-70	-90	240	130
Professional Services	120	750	100	330	1,300
Government Admin (local and central)	300	-200	290	360	750
Education and training	140	360	-20	210	690
Health care and social assistance	240	270	530	260	1,310
Arts, Rec., Personal & Other services	430	-80	-50	100	410
Total	**2,970**	**80**	**-290**	**3,340**	**6,100**

Health care and social assistance (+1,310 MECs), Professional services (+1,300), and Construction (+950) have seen the largest increases in actual employment since 2001. These three sectors represent 59% of employment growth. Similarly, the sectors that have seen the largest positive percentage change in employment (>50%) are:

- Health care and social assistance +67%,
- Government admin +65%,
- Construction +53% and,
- Professional services +52%.

However, some parts of the economy did not see continued upward momentum and have shed employment. Over the long term (2001-2021) these sectors include manufacturing (-280 MECs), wholesale trade (-150 MECs) as well as insurance (-80 MECs), and information media and telecommunications (-50 MECs). These long-term trends are however influenced by large movements in during the Global Financial Crisis and the

sectors have recovered/seen solid expansion in the short term (past 5 years). Manufacturing has rebounded adding 330 MECs. Other sectors that have seen declining, or flat, trends following the trend of employment in several industries declining between 2006 and 2016 before picking back up in the years since 2016. The biggest percentage declines in employment have been in Insurance and funds (-31%), Information media and telecommunications (-20%) and Wholesale trade (-13%).

The data suggests that the economy has experienced three distinct phases, with strong employment growth between the 2001-2006 period, followed by a decade with reasonably flat employment movements. This decade included the GFC period and covers the 2006-2016 timeframe. The third timeframe is the post 2016-period during which strong employment growth was recorded. This growth was generally broad-based, across the economy. **The implication of these three timeframes is that the local economy appears to be cyclical, with surge periods driving substantial change. These patterns make planning for the future difficult, because the development pathway is unlikely to be smooth, but will be uneven.**

2.1.1 Outlook – 48 Sectors Employment

The economic outlook for Napier is based on the base scenario as modelled using the EFM. The EFM models the outlook across 48 sectors, and the results are summarised to 1-Digit ANZSIC sectors. With reference to Value Added shifts, the economy is expected to grow linearly, increasing:

- 2021-2024 1.7%,
- 2024-2031 1.5%,
- 2031-2051 1.3%.

These compound growth rates are based on the economy growing from $2.5bn to approaching $3.8bn by 2051. A conservative position is maintained in the scenario modelling and a slightly higher (less conservative) growth pathway is presented in section 2.1.2. Table 2-3 summarises the outlook across the different sectors, and presents the employment outlook over the short, medium and long term.

Table 2-3: Napier City Employment Growth (MECs), 2021-2051

Sector	Projected MECs				Growth		
	2021	2024	2031	2051	2021-2024	2024-2031	2031-2051
Primary Sector	1,560	1,670	1,930	2,740	110	260	810
Mining and Quarry	10	10	10	30	-	-	10
Manufacturing	3,000	3,120	3,400	4,300	120	280	900
Utilities	90	90	100	120	-	10	20
Construction	2,740	2,900	3,250	4,170	160	340	930
Wholesale trade	970	1,020	1,110	1,410	50	100	300
Retail Trade	3,390	3,570	3,950	5,000	180	380	1,050
Accommodation and food services	2,590	2,690	2,880	3,390	90	200	510
Road transport	1,720	1,810	2,010	2,700	90	200	690
Information media and teleco	190	200	220	280	10	20	60
Finance	200	210	230	300	10	20	60
Insurance and funds	180	190	210	260	10	20	60
Rental, hiring and real estate services	840	890	1,000	1,280	50	110	290
Professional Services	3,800	4,010	4,480	5,940	210	470	1,460
Government Admin (local and central)	1,910	2,000	2,210	2,750	100	210	540
Education and training	2,620	2,670	2,730	2,980	60	60	250
Health care and social assistance	3,260	3,450	3,850	4,870	190	410	1,020
Arts, Rec., Personal & Other services	1,740	1,820	2,010	2,540	90	190	530
Total	**30,790**	**32,310**	**35,580**	**45,050**	**1,520**	**3,270**	**9,480**

The base scenario suggests that, over the short term, the overall growth will remain reasonably muted. This reflects economic uncertainties around the Covid-recovery, rising interest rates (and inflation) as well as the global geo-political environment and supply chain issues. Total employment levels are expected to slow from 2.3% p.a. between 2016-2021 to 1.6% p.a. from 2021-2024. This declines further to 1.4% p.a. from 2024-3021 and again to 1.2% from 2031-2051. The difference between the Value Added (VA) and employment growth rates are due to improvements in labour productivity[14].

These projected annual growth rates, albeit lower than experienced in the last five years, are an improvement from the period between 2006-2011 when the economy underwent negative (-0.1% p.a.) growth. This long-term growth decline is in line with national trends and reflect dynamics like aging populations and the impacts of technology.

Overall, the shift in employment in Napier is estimated as follows:

- In the short term, 1,520 MECs,
- Medium term 3,270 MECs,
- Long term 9,480 MECs, and
- **Total shift 14,270 MECs.**

The sectoral distribution of employment is expected to remain relatively stable over the next 30 years. However, there are some core trends to consider as part of the land and capacity planning process. Sectors that will see the most employment growth in absolute terms over the long term are:

- Professional services (+2,140 MECs),
- Retail trade (+1,610 MECs), and
- Health care and social assistance (+1,610 MECs).

In percentage terms, the highest growth occurs in the Primary sector (+76%), Professional services (+56%), and Road transport (+57%). Other key observations are:

- For all sectors employment growth is positive over the next 30 years. This is consistent with a growing economy. However, some sectors will only see employment levels approaching those seen during the early 2000s (pre-GFC) towards the end of the analysis period.
- Employment growth within Education and training is expected to remain around the existing levels, with only marginal shifts.
- The bulk (62%) of the growth expected to occur in the Primary sector is within the agriculture, forestry, and fishing support services. Structural shifts and how the primary sector is structured (e.g. more specialist contracting services being procured) are driving this shift.
- The effects of COVID-19 are expected to dampen growth over the short term.
- The data indicates Utilities will experience minimal (< 5 MECs) growth in the short term. However, the overall trend is upward, and the sectors will see some growth over the long term.

[14] The shifts in labour productivity are accounted for when estimating the land requirements. However, some caution is needed because growing labour productivity reduces the employment that is needed. If that reduced employment is then used (unadjusted) to estimate the land requirements, then it could understate the land requirements.

The distribution of employment anticipated in the future is consistent with the current structure and continues to highlight Napier as an urban centre and its role as a service hub for the wider Hawke's Bay.

2.1.2 Variation – High outlook

The base scenario takes a conservative position, and less conservative growth pathway is included to show the potential effects of stronger growth. The stronger growth pathway reflects the high population projections (as per StatsNZ) as well as improved export performance with a performance premium applied across all exports. Table 2-4 presents employment projections for the high growth scenario for Napier City.

Table 2-4: Napier City Employment Growth (MECs) - High, 2021-2051

Sector	Projected MECs				Growth		
	2021	2024	2031	2051	2021-2024	2024-2031	2031-2051
Primary Sector	1,560	1,680	1,940	2,770	120	260	840
Mining and Quarry	10	10	10	30	-	-	10
Manufacturing	3,000	3,120	3,410	4,340	120	290	930
Utilities	90	90	100	130	-	10	30
Construction	2,740	2,910	3,260	4,210	170	350	950
Wholesale trade	970	1,020	1,120	1,440	50	100	310
Retail Trade	3,390	3,590	4,010	5,190	200	420	1,180
Accommodation and food services	2,590	2,700	2,920	3,510	110	220	590
Road transport	1,720	1,820	2,020	2,730	90	200	710
Information media and teleco	190	200	220	280	10	20	60
Finance	200	210	240	310	10	20	70
Insurance and funds	180	190	210	270	10	20	60
Rental, hiring and real estate services	840	890	1,010	1,310	50	110	300
Professional Services	3,800	4,020	4,510	6,030	220	490	1,520
Government Admin (local and central)	1,910	2,020	2,250	2,880	110	240	630
Education and training	2,620	2,700	2,810	3,170	80	110	360
Health care and social assistance	3,260	3,480	3,940	5,150	220	470	1,210
Arts, Rec., Personal & Other services	1,740	1,830	2,040	2,650	100	210	610
Total	**30,790**	**32,460**	**36,020**	**46,370**	**1,670**	**3,560**	**10,360**

Compared against the base scenario, the change compounds over the longer term, and the difference from the total employment estimated for the base scenario are:

- Short term 150,
- Medium term 290, and
- Long term 880.

The data suggests that the total difference between two scenarios is 1,320 over the assessment period. The overall growth profile aligns with the base scenario, but the scale of change is larger. In the short term 1,670 additional MECs are projected, 3,560 MECs in the medium term and 10,360 MECs in the long term. Projected annual employment growth for the short term is 1.8% p.a., declining to 1.5% p.a. from 2024-2031 and again to 1.3% p.a. from 2031-2051. The data indicates Professional services will see the largest growth in employment with an increase of 2,230 MECs. Other key growth sectors are Health care and social assistance (1,890 MECs), Retail trade (+1,800 MECs) and Construction (+1,470 MECs). Similarly, the primary sector will see large positive percentage change that is estimated at +78%.

Sectors that are likely to experience minimal growth are Education and training (+21%) and Accommodation and food services (+35%) with an increase of 550 and 920 MECs from 2021-2051, respectively.

The key points are as follows:

- In the short-term growth is dampened by the effects of COVID-19, and the higher growth pathway (population and export driven) shows some improvement (vs the base scenario) over the short term.
- Employment in professional services increases the most from 3,800 MECs in 2021 to 6,030 MECs in 2051.
- Excluding Mining and quarrying, the largest percentage growth is within the primary sector (+78%), but this is driven by external factors (i.e., those that are beyond Napier).
- A higher population growth rates drives demand and thus employment in sectors associated with household spending (retail and entertainment), as well as sectors relating to demographic shifts (health spending).
- Under the high scenario, all sectors except Education and training and Accommodation and food services see materially larger growth. These two sectors show marginal shifts with employment.
- The biggest additional growth in actual employment, compared to the medium scenario, is anticipated in Health care and social assistance (+280 MECs), Education and training (+190 MECs) and Retail trade (+190 MECs). The additional growth in these sectors highlights the role of Napier City as a service hub under a high population scenario.

2.2 Hastings District

The Hastings economy is discussed below. The district's economic base has a different functional focus, with a large rural component that is linked to local processors. Local households are serviced and provide labour to local businesses. The recent trends and the outlook for the economy are presented below using the same structure as used for Napier.

2.2.1 Current situation and recent trends

StatsNZ data suggest that the Hastings District has a workforce of 52,370 employees[15] and the employment base is spread across several sectors. The data shows that Hastings service the local households and provides important services to the primary (rural/agriculture) sector.

Table 2-5 reports the employment levels across aggregate sectors. The Primary sector is the largest employer, engaging 10,710 MECs (2021), equal to one fifth of total employment. This reflects the availability of highly productive land used in agriculture and horticulture which supports significant employment. The district also shows high proportions of employment in:

- Professional services 6,630 MECs (13%),
- Manufacturing 6,460 MECs (12%), and
- Health care and social assistance 6,180 MECs (12%).

As a whole, the Hastings District workforce has grown by 14,160 MECs since 2001, an increase of 37% (Table 2-5). Professional services have seen the largest growth in employment, with an increase of 3,200 MECs since 2001. Health care and social assistance, and Construction, have also grown significantly, increasing by 2,560 and 2,220 MECs, respectively. These three sectors account for 56% of total employment growth since 2001

[15] The employment data is based on the NZ business demography statistics (BDS). The BDS is an annual snapshot (as at February) of the structure and characteristics of businesses.

for the district. Most of the other industries have also experienced employment growth at lower levels, however, employment has fallen in:

- information media and telecommunications (-170 MECs, -49%) and
- manufacturing (-90 MECs, -1%).

The stagnation of employment growth over the 10-year period from 2006-2016, as observed for Napier City, is also observed in the data for Hasting District. Over this period, the total district's employment increased by only 800 MECs, an average annual growth rate of 0.2%.

These cyclical movements add complexity to estimating outlook, but the potential implications of the swings on land use planning need to be considered. It is important to look through short term movements (impacted by one, or two large developments).

Table 2-5: Hastings District Employment (MECs), 2001-2021

Sector	MECs				
	2001	2006	2011	2016	2021
Primary Sector	9,160	9,360	10,010	9,470	10,710
Mining and Quarry	20	20	20	30	20
Manufacturing	6,550	6,740	5,870	6,190	6,460
Utilities	170	220	250	330	510
Construction	1,840	2,740	2,870	2,960	4,060
Wholesale trade	1,090	1,340	1,270	1,410	1,600
Retail Trade	3,290	3,820	3,370	3,360	3,560
Accommodation and food services	1,540	2,010	1,950	2,000	2,560
Road transport	1,200	1,200	1,330	1,200	1,400
Information media and teleco	350	370	350	270	190
Finance	250	380	410	430	540
Insurance and funds	160	200	200	200	240
Rental, hiring and real estate services	680	750	710	660	750
Professional Services	3,440	4,520	4,100	5,150	6,630
Government Admin (local and central)	1,000	1,220	1,430	1,290	1,790
Education and training	2,500	3,100	3,270	2,880	3,170
Health care and social assistance	3,620	4,350	5,000	5,180	6,180
Arts, Rec., Personal & Other services	1,350	1,610	1,790	1,740	2,010
Total	**38,210**	**43,950**	**44,220**	**44,750**	**52,370**

Table 2-6: Hastings District Employment Changes (MECs), 2001-2021

Sector	Change in MECs				
	2001-06	2006-11	2011-16	2016-21	2001-2021
Primary Sector	200	650	-540	1,240	1,550
Mining and Quarry	-	-	10	-10	-
Manufacturing	190	-870	310	270	-90
Utilities	50	30	90	180	350
Construction	890	140	90	1,090	2,220
Wholesale trade	250	-70	150	180	500
Retail Trade	530	-450	-20	200	270
Accommodation and food services	470	-60	50	560	1,020
Road transport	-	130	-130	200	200
Information media and teleco	10	-20	-80	-90	-170
Finance	130	40	20	110	290
Insurance and funds	40	-	-	40	70
Rental, hiring and real estate services	80	-40	-50	90	80
Professional Services	1,090	-420	1,050	1,480	3,200
Government Admin (local and central)	220	210	-150	500	780
Education and training	600	170	-400	290	670
Health care and social assistance	730	650	180	1,010	2,560
Arts, Rec., Personal & Other services	260	170	-50	270	650
Total	**5,740**	**270**	**530**	**7,620**	**14,160**

2.2.2 Outlook – 48 Sectors Employment

The projected employment for Hastings District over the short, medium and long term is presented in Table 2-7 below. Overall, the shift in employment in Hastings is estimated as follows:

- In the short term, 2,200 MECs,
- Medium term 4,530 MECs,
- Long term 11,340 MECs, and
- **Total shift 18,070 MECs.**

The table reports the employment outlook across the aggregated sectors, and shows the estimates per year, and the change between different timeframes.

Table 2-7: Hastings District Employment Growth (MECs), 2021-2051

Sector	Projected MECs				Growth		
	2021	2024	2031	2051	2021-2024	2024-2031	2031-2051
Primary Sector	10,710	11,180	12,150	14,710	470	970	2,560
Mining and Quarry	20	20	30	40	-	-	10
Manufacturing	6,460	6,770	7,460	9,200	310	690	1,740
Utilities	510	540	590	700	20	50	120
Construction	4,060	4,310	4,860	6,550	250	550	1,680
Wholesale trade	1,600	1,660	1,790	2,110	60	130	320
Retail Trade	3,560	3,650	3,820	4,040	90	170	220
Accommodation and food services	2,560	2,640	2,800	3,150	80	160	340
Road transport	1,400	1,470	1,620	2,010	70	150	390
Information media and teleco	190	190	200	210	-	10	10
Finance	540	560	600	660	20	40	60
Insurance and funds	240	250	270	300	10	20	30
Rental, hiring and real estate services	750	760	770	930	10	10	160
Professional Services	6,630	6,950	7,640	9,530	320	690	1,890
Government Admin (local and central)	1,790	1,870	2,030	2,390	80	160	360
Education and training	3,170	3,210	3,260	3,450	40	50	190
Health care and social assistance	6,180	6,450	6,980	7,860	270	530	880
Arts, Rec., Personal & Other services	2,010	2,080	2,250	2,610	80	160	370
Total	**52,370**	**54,570**	**59,100**	**70,440**	**2,200**	**4,530**	**11,340**

In total, the District's workforce is expected to grow to 70,440 MECs by 2051, an increase of 35%. The size of the employment growth is constrained by the ageing population and the size of the 'potentially active economic population'[16] but labour productivity growth suggests that the VA (GDP) growth would be higher.

The shift in employment is based on economic growth (based on VA). In terms of the employment levels, the base scenario suggests that the total employment will continue to grow over the short, medium, and long terms. Annual growth (compound) is estimated at 1.4% p.a. between 2021-2024. This then declines to 1.1% p.a. from 2024-3021 and again 0.9% from 2031-51. The anticipated growth rates are between historically recorded rates between 2001-2021. During these longer timeframes, compound growth rates varied between 0.1% and 3.4% (depending on which period is considered). A drop off in projected medium- and long-term annual growth rates is anticipated for Hastings. However, the rate of change trends down and reflects the linear growth (vs exponential growth).

[16] This is the working age population and is generally referred to as those between 19 and 65 years old. However, the upper limit has been shifting upwards as individuals work longer.

Overall, the distribution of employment is stable over the long term. The primary sector's role in the economy is expected to remain a key feature of the local economy. In fact it will see strong growth over the next 30 years (+4,000 MECs or an increase of 37%). Industries within the Primary sector that will see the largest increase in employment are agriculture, forestry, and fishing support services (+1,870 MECs) and horticulture and fruit growing (+1,800 MECs). Other sectors anticipated to experience significant growth are:

- Professional services 2,900 MECs,
- Manufacturing 2,740 MECs,
- Construction 2,490 MECs, and
- Health care and social assistance 1,680 MECs.

Two sectors experience minimal growth over the next 30 years, Mining (+20 MECs) and Information media and telecommunications (+20 MECs). A reason for the small shifts relates to increased application of technology. In turn, this causes a shift of employment to other sectors, including those that service the technologies that are used.

Other key observations are:

- Growth for all sectors is positive over the next 30 years.
- The effects of COVID-19 are expected to dampen growth over the short term for accommodation and food services. How the opening of the international borders translate into local visitor spending will affect the scale and size of the employment outlook for sectors associated with the visitor economy.
- Short term projected annual growth is strong (1.4% p.a.) but the uncertainty, tightening interest cycles and supply chain issues are likely to constrain growth going forward.
- Primary sector and professional services growth accounts for almost two fifths (38%) of total growth over the period 2021-2051.
- For Manufacturing, the key increases in employment are anticipated in beverage and tobacco product manufacturing (+740 MECs) and other food manufacturing (+600 MECs). These shifts mean that the existing manufacturing capabilities and strengths are expected to remain embedded in the local economy.
- The importance of people-centric sectors, like health care and education is seen in the continued growth of employment in these sectors.

2.2.3 Variation – High outlook

A high growth scenario, reflecting higher population estimates and higher export performance, is included in the assessment. This reflects the upside potential and forms the upper threshold for the business land modelling. Under the high scenario, the district's workforce is expected to increase to 76,430 MECs (Table 2-8). The data indicates that in the short term an additional 2,680 MECs are projected, 5,670 MECs in the medium term and 15,290 MECs in the long term.

Projected annual growth for the short term is 1.7% p.a. (compounded), declining to 1.4% p.a. between 2024-2031, before levelling off at 1.2% p.a. between 2031-2051. To put this in context, the short term growth rate is just above the long term (2001-2021) compound growth rate of 1.6% while the medium and long term growth rates are slightly below it. The growth rates for the outlook are well above the 0.1% and 0.2% recorded between 2006-2011 and 2011-2016, the periods reflecting the low growth periods. On a per average (year-on-year and then averaged), between 2001 and 2021, employment moved 1.3% with a large range – between -2.9% and up to 1.4%.

In terms of the sectoral patterns, the relative change aligns with that observed for the base scenario. The largest growth is anticipated to occur in the Primary sector with an addition 5,000 MECs over the next 30 years. The data indicates Professional services (+3,600 MECs), Manufacturing (+3,570 MECs), Construction (+2,660 MECs) and Health care and social assistance (+2,360 MECs) are also expected to experience significant growth over this period. The largest growth in percentage terms occurs in the following sectors:

- Mining +100% (albeit off a low base),
- Construction +65%,
- Road transport +56%, and
- Manufacturing +55%.

Table 2-8: Hastings District Employment Growth (MECs) - High, 2021-2051

Sector	Projected MECs				Growth		
	2021	2024	2031	2051	2021-2024	2024-2031	2031-2051
Primary Sector	10,770	11,330	12,500	15,770	550	1,170	3,270
Mining and Quarry	20	20	30	40	-	-	10
Manufacturing	6,550	6,930	7,780	10,120	380	850	2,340
Utilities	510	540	600	760	30	60	160
Construction	4,070	4,330	4,920	6,730	270	590	1,810
Wholesale trade	1,610	1,680	1,850	2,280	80	160	430
Retail Trade	3,610	3,740	3,990	4,480	130	250	490
Accommodation and food services	2,580	2,690	2,910	3,490	110	220	570
Road transport	1,410	1,500	1,680	2,200	90	180	520
Information media and teleco	190	200	210	240	10	10	30
Finance	540	570	620	720	20	50	100
Insurance and funds	240	260	280	340	10	30	60
Rental, hiring and real estate services	760	780	800	1,020	10	20	220
Professional Services	6,660	7,040	7,860	10,260	380	820	2,400
Government Admin (local and central)	1,810	1,900	2,110	2,650	100	210	530
Education and training	3,220	3,310	3,480	3,910	90	170	440
Health care and social assistance	6,220	6,550	7,220	8,580	330	670	1,360
Arts, Rec., Personal & Other services	2,020	2,120	2,330	2,870	100	210	540
Total	**52,800**	**55,480**	**61,150**	**76,430**	**2,680**	**5,670**	**15,290**

Other observations include:

- For all sectors growth is positive over the next 30 years under a high growth outlook.
- Employment in mining doubles from 20 MECs in 2021 to 40 MECs in 2051.
- Employment growth in the Primary sector, Professional services and Manufacturing accounts for just over half (52%) of total growth over the period 2021-2051.
- In the short-term growth is largely unaffected by the effects of COVID-19. Growth tapers off in the medium and long term as the growth takes a linear pathway (i.e. not exponential).
- A higher population growth is driving demand and thus growth in employment in some sectors of the economy, and the higher population growth assumptions will underpin this growth.
- Total projected employment in 2051 is 76,430 MECs.
- Under the high growth scenario, the data indicates additional growth on top of the medium scenario outlook projections for all sectors (except Mining).
- Hasting District's key employment sectors continue to experience growth and the additional growth in these sectors highlights the competitive advantages of the District in these sectors i.e. availability of highly productive land for horticulture and fruit growing.

Compared to the base scenario, a high growth pathway will see higher overall employment. The differences are as follows:

- By 2024 +910,
- By 2031 +2,050, and

- By 2051 +5,990.

The biggest additional growth in employment, compared to the medium scenario, is anticipated in:

- Primary sector +1,000 MECs,
- Manufacturing +830 MECs and
- Professional services +700 MECs.

2.3 Points from the engagement and wider context

The growth outlook as framed in the preceding section integrates information and insights received during engagements with a selection of local businesspeople, and economic development practitioners. The engagements were confidential and therefore the specific individuals involved are not listed. The local insights were combined with recent economic commentary around the state of the economy. **It is very important to consider the economic outlook in the context of the rapidly changing economic landscape. Inflation is currently very high, and interest rates are shifting higher. Supply chain disruptions and global geopolitical issues are clouding the economic outlook. It would be inappropriate to ignore these factors, especially when looking at the short-term outlook.** The key points from the engagement are summarised first, before the changing economic landscape (and the implications) are presented.

2.3.1 Key points from the engagement

Broad indications are that the economic outlook in both Napier and Hastings remain positive, but there are growth challenges. Some challenges are existing, and others are emerging. The engagements were used to get locally grounded inputs and perspectives from the respective councils' economic development arms. The information gathered during these engagements informed the modelling calibration process. The key points and observations made during the engagements are summarised below, first for Hastings and then Napier. Note, that these views are high-level and not comprehensive indicators of the region's economic future. Where possible, the points were triangulated against other reports and sources.

<u>Hastings</u>

Hastings is seen as the agricultural and industrial hub of the area. One of the central challenges for the Hastings economy, is the supply of labour – this is a known issues and is expected to remain acute for the foreseeable future. For example, horticulture makes up a large share of the district's economy, with this sector heavily reliant on migrant labour (e.g., backpackers, RSE workers). The closing of New Zealand's borders as a result of the Covid-19 pandemic, is widely reported as having a detrimental impact on the sector in Hastings (*'fruit are left on the ground to rot', 'never seen it this tough'*).

Despite the re-opening of borders, the labour shortage has remained. The respondent commented that this was a constraint for this sector in Hawke's Bay even before the pandemic. The sector is tackling the issue in different ways:

- Some corporate fruit growers are taking a long-term view and replanting orchards in a way that will eventually enable automated picking.[17]

[17] https://www.nzherald.co.nz/hawkes-bay-today/news/apple-picking-robot-could-be-a-game-changer-for-the-industry/GVWTBAKPU5WZPIZVHT46P5S5DM/

- Other businesses are taking on permanent staff and training staff to be able to reduce seasonal requirements i.e., using staff across multiple business processes during different times of the year (pruning, picking, etc.). This has been shown to attract labour, providing more stable employment for people in the area.
- Food manufacturing firms, linked to the horticulture sector, have been investing in automation as a way of mitigating the labour shortage.
- The construction sector is addressing the labour pressures by partnering with local businesses and collaborating. The supply chain constraints resulting from the Covid pandemic are placing large strains on this sector's ability to deliver work.

Arguably, a more pressing issue that would limit future growth is supply water and three waters considerations. The Regional Council has proposed new limits for water quality and water quantity in rivers, lakes, streams and aquifers in the Tutaekuri, Ahuriri, Ngaruroro and Karamu River catchments.[18] Those limits are one of several constraints on the ability of new wet industries to establish in the district, or for current businesses to transition from industries requiring a lower water to those with a higher water. We understand that this is a significant issue.

During the discussions, the growth potential for some primary sector sub-sectors (e.g. pip fruit) was highlighted. We understand that this sector's potential is being presented in a very positive light. However many of the available literature (and anecdotal evidence) is three to four years old i.e., pre-Covid. Recent sectoral growth outlook reports like the MPI Situation Outlook for Primary Industries (June 2022) present a more balanced view of the challenges and issues facing the sector. The challenges are mostly related to global factors (Russia-Ukraine conflict), supply chain issues and the flow on effects on key commodity prices (including agricultural inputs such as fuel and fertiliser that are rising sharply). The tightening economic conditions in key export markets (for pip fruit), like China (17% of apple and pear exports) and EU (excluding UK; with 12% of exports) are likely to see difficult trading conditions over the short term. This uncertainty is reflected in MPI growth outlook that slowing in export growth – down from +13% between 2018/19 to -6% in 2020/21.

The MPI sector outlook asserts that the sectoral outlook is influenced by:

- Increasing costs of production,
- ongoing shortages of skilled and unskilled labour, and
- the likelihood that shipping disruptions will continue until 2023/24.

These factors will put pressure on growers' profit margins in the short to medium term and growers are expected to continue removing poorer-performing orchard blocks and varieties. In fact, the MPI report states that some growers may choose not to replant and to change land use or to sell their properties. For these reasons, forecasts of little or no increase in the total planted area of apples and pears over a two-year period are maintained. Changes in production volumes are likely to be associated with recent plantings maturing and productivity gains.

[18] These freshwater limits are part of Proposed Plan Change 9 ('TANK Catchments') to the Hawke's Bay Regional Resource Management Plan. On 9 September 2022, decisions on submissions on that proposed plan change were issued by a panel of five independent commissioners. At time of writing, some of those decisions may yet be appealed to the Environment Court as per RMA processes. Plan Change 9 is part of the Regional Council's work programme to implement the National Policy Statement for Freshwater Management.

The medium-term outlook for exports is positive and the high-quality nature of the horticulture produce will continue to support activity. But the near term is uncertain with acute pressures on the sector. This means that for the land demand estimates, a more bearish approach is appropriate.

Napier

Napier is viewed as the tourist and retail centre of the wider region. Looking forward, the respondent is of the view that professional services (tech sector) and logistics will be the main sectors driving the Napier economy. The respondents highlighted that the local retail sector has held up well despite the effects of the pandemic, with business locations seeing high occupancy rates (low vacancy rates).

Identified areas of strengths include Napier's attractive built environment, art deco buildings, sea front and vibrant centres. These attributes attract people, which is why retail and tourism are expected to remain strong and the post Covid travel environment (with border restrictions being relaxed) will support the visitor economy. It is acknowledged it will take time for tourism to recover from the effects of Covid-19.

Important economic assets for the city include the sea and airport. It is the view of the respondent that enabling expansion of the access to these ports, will unlock and enable growth. Accessibility to the ports is an important aspect that would need constant protection and enhancements.

The greatest constraint to growth in the city is understood to be infrastructure. The respondents highlighted a significant infrastructure deficit of around $1bn (this could not be verified). This suggests a large deficit in infrastructure for both residential and non-residential activities. The historic relationships with mana whenua and the Councils were pointed out as weaknesses for the city, and it is taking time to rebuild the trust and collaboration needed for strong economic performance.

In terms of the commercial sector, the demand for office space remains strong and the local business community expects this to remain the case. Buildings with flexibility (e.g. hot desking/shared office space) are performing the best. Ahuriri is facing strong demand, seen as a 'vibey' place to locate. Especially popular with the tech sector. The respondents did highlight caveats and uncertainty around the short-term economic outlook (and the effects of the interest rate increases).

Commentary on the overall economic outlook

The NZ economy is changing direction as it emerges for the immediate shocks associated with the Covid-lockdowns and response. Several measures were implemented during the Covid-pandemic to support the economy and protect jobs. With the economy moving beyond Covid (even though some risks remain), means that the stimulatory effects of those support measures are coming to an end. At the same time inflation and capacity constraints are requiring policy tightening to reduce economic pressures. The inflationary environment is a clear manifestation of these pressures. Rising interest rates are expected to shift economic activity down.

Rising interest rates change the cost of capital, affecting decisions about how capital is applicated, and the risk profiles associated with the allocation. Rising interest rates have a cooling economic effect, lowering investment activities, and slowing asset price appreciation. The effects of recent interest rate increases are noticeable in the housing market and investment intentions. For example, house prices are down 5% vs the peak in November 2021 and the outlook is for house prices to continue contracting over the next 12-24 months (the size of the price change varies depending on the economic commentary, but the direction of change is

consistent). The investment outlook is also trending more negative and high interest rates are expected to dampen demand.

The inflation outlook is expected to remain above the Reserve Bank's inflation target (mid-point of 2%) until 2025. **This suggests that the slowing economy is likely to remain depressed for the short term. The NZIER consensus forecasts highlighting pull backs in GDP and private consumption over the rest of 2022 and slowing through 2023/24 before picking up again in 2024/25. The continued lift in interest rates to get inflation under control will slow economic activity. The upward trend in interest rates is highlighted across all economic commentaries (e.g. the banks).**

In addition, confidence levels are falling and suggest that the economic pressures are limiting growth opportunities. Labour and capacity constraints are inhibiting activity and investment intentions. In fact, some economic commentary suggests that there could be some quarters with negative growth. The Q1-2022 GDP data confirmed that the economy took a hit from Omicron and the associated labour, and supply chain effects. Economic activity was weak, with a 0.2% quarter-on-quarter contraction. Some volatility in GDP indicators is expected over the short term as global activity slows, supply chain constraints are resolved and as interest rates move. This volatility is evident in the anticipated GDP figures for Q2-2022 – some commentary suggests that the economy (GDP figures) are likely to bounce around. However, the volatility should not be seen suggesting that a slowdown is not anticipated. Rising interest rates as way to combat inflation is likely to result in a broader downcycle. This downcycle will impact local investment activity and the demand for business land.

3 Land and floorspace demand

Economic activities and businesses operate from specific locations. These locations are managed through the planning structures. This section describes the anticipated demand for business land and floorspace, over time.

The demand of land is a function of economic growth. Shifts in the economic structure, and the relative change in employment levels across different sectors, occur at different rates. At the core, the approach starts with employment estimates, and then translates these into land and floorspace requirements. This is based on the logic that for businesses to carry out their business activities, they need to accommodate their workforce, plant and equipment, and allow for on-site transport requirements (e.g., loading bays). The future land and floor space requirements are estimated using the employment outlooks.

The section starts with an overview of the approach and the main assumptions, before presenting the demand outlook for Napier City and Hastings District.

3.1 Spatial relationships

The demand outlook is based on the expected employment growth with the employment growth summarised in the preceding section. The employment projections have been translated into the estimated floorspace and land use requirements using the different space-employment relationships as observed across different dataset around other economies around NZ. These ratios were adjusted to align with the observed local growth patterns and using Council information about sector-based land area occupied by zone. Importantly, a range of different sources were used in reviewing the ratios and the expected outcomes. Table 3-1 reports the ratios used.

These averages are derived from current data relating to employment and land use/space types. These ratios show the revealed patterns and the spread across different locations, and areas. An important reason for the diversity is that businesses have a large degree of variation of how they use space. The assessment started with the average values and then adjusted these to match recently observed patterns, and other information. In addition, the ratios were compared against the rating data. We have relied on our previous experience in similar analyses as well as information from commercial entities[19] as cross-checks.

The ratios are kept constant over time. This means that the analysis does not reflect improved capital/labour to land (building) use ratios that may occur going forward. This means that the ratios, and the demand patterns derived using them, are towards the lower end of the spectrum. In the context of the BCA, this approach is appropriate, because it would not lower/reduce the land requirements or floor area. If capacity then exceeds demand (or demand + margin), then there is a reasonable degree of certainty that the demand is/will be catered for.

Several broad categories (with sub-categories) were defined as the ratios are estimated accordingly. These categories are based of the (general) similarity of activities carried out by employees. For example, commercial office space may be occupied by a wide range of businesses and organisations across several sectors (e.g. accountants, lawyers as well as government departments and community services).

[19] For example Colliers and JLL

Table 3-1: Employment to floorspace and land ratios (sqm per employee per space type)

Land Area per Employee (sqm per employee)					
Use type	Min	Max	Mean	Napier	Hastings
Office---Commercial	13	100	38	20	20
Office---Retail	20	100	69	45	20
Shops---Commercial	10	100	31	50	70
Shops---Retail	15	200	101	85	70
Accommodation	15	400	275	200	125
Warehouse	100	600	358	350	365
Factory	80	500	278	270	300
Yard---Commercial	100	350	283	200	100
Yard---Industrial	100	350	181	140	100
Other Built---Commercial	20	500	195	120	120
Other Built---Industrial	20	500	122	125	120
Education	50	500	233	167	100
Outdoor---Commercial	10	1000	72	50	50
Outdoor---Industrial	10	1000	-	75	50
Outdoor---Rural	10	1000	588	50	50
GFA per Employee (sqm per employee)					
Use type	Min	Max	Mean	Napier	Hastings
Office---Commercial	13	100	19	20	20
Office---Retail	20	100	19	27	27
Shops---Commercial	10	100	27	27	27
Shops---Retail	15	100	27	47	47
Accommodation	15	200	50	100	100
Warehouse	100	200	167	167	167
Factory	80	200	138	138	138
Yard---Commercial	50	150	100	85	85
Yard---Industrial	50	150	100	100	100
Other Built---Commercial	20	120	60	60	60
Other Built---Industrial	20	120	60	60	60
Education	30	100	50	60	60
Outdoor---Commercial	10	100	20	20	20
Outdoor---Industrial	10	100	20	20	20
Outdoor---Rural	10	100	30	30	30
Note, the minimums and maximum values as reported do not necessarily relate to the same observation. The minimum and maximums (and mean) are across the datasets and should therefore not be combined.					

The following three core categories were defined:

- **Industrial**: This covers both heavy and light industry with the type and nature of emissions into the wider environment driving the difference. Heavy industrial activities need to be appropriately buffered from more sensitive activities such as residential land uses. Light industrial activities may capture the same set of ANZSIC codes, yet due to scale or nature of production processes, do not

require the same level of buffering. In addition, activities that may not be manufacturing in nature are categorised as light industrial for the purposes of the NPSUD. These include, yard-based storage, transport and distribution, construction, utilities, and wholesaling. However, caution is needed when considering construction because a share of this sector's employment relates to trade activities. These businesses are often registered outside industrial locations (i.e., in residential areas) because the builders are not location-bound.

- Commercial: The commercial spaces generally relate to office activities and public administration. Commercial captures the paid accommodation sectors as well as health and education. This is due to the nature of the space types they occupy. For this category, care is needed because education includes schools which are often located close to the communities they service and not in core business locations.
- Retail: This captures all forms of retail activity and retail-based services such as repairs and maintenance of household goods, hairdressing, and other personal services plus a few categories of commercial activity including real estate agencies, dentists, and optometrists.

In terms of approach, the employment projections (base scenario) were translated into land and floor area requirements by allocating the employment projections to the space types (in the above tables). The economic sectors align Hastings and Napier Councils' definitions of 'wet' and 'dry' industries. These definitions align with the ANZSIC sectors. The estimated employment growth is transformed into land and floorspace requirements using the following key steps:

- The employment estimates are distributed spatially across Hastings and Napier using different approaches. For example, area (sqm) by zone and SA1 combinations are applied to estimate the relative location (in the area) of sectors employment,
- The share of employment (by sector) that is in areas that do not have the expected (relevant) zoning is estimated. For example, a share of construction jobs is in residential areas. These shares are used to adjust the employment growth that is used to estimate the demand for land and GFA downward. This adjustment assumes that share of employment that is in out of zone locations will remain stable. The shares vary considerably, with low (<0.5%) for some manufacturing activities, and up to 50% for education (driven by schools).
- The change in employment (growth or contraction) per sector is adjusted for intensification. The share of growth that is accommodated through intensification (i.e., more intensive use of existing sites) is based on how big a sector is as well as the size of the growth and the type of sector. The share of each sectors growth that is accommodated via intensification is around 5% (median value across all the sectors) but it varies depending on the sector. Applying these assumptions and then aggregating the results suggest that a quarter (24%-25%) of growth will be accommodated through more intensive use of sites. Importantly, a third of the intensification growth is in transport, storage and office-type activities (e.g., professional services and central government activities).
- The adjusted employment growth is allocated to zones, and the land area requirements for the zones are estimated based on the space-type requirements (as per Table 3-1). Sectoral use of space types is distributed (percentage shares) based on local conditions and a need to calibrate the potential growth to observed patterns. Appendix 3 reports the assumed ratios. By taking a matrix approach, a sector's growth can be disaggregated across different space types. This approach reflects that a sector's growth is unlikely to be solely in one space-type.

By outlining the information in a matrix format, we have allowed a single sector to split its activity between different space types. This is important as it is unlikely that all employment in any one industry occupies the exact same space type. A simple example is an industrial business with a large industrial footprint, but also a warehouse area and a head office in commercial office space.

The NPSUD has an urban focus, meaning that the important rural sector is excluded. However, considering its important role in Hastings, as well as its lesser role in Napier, agriculture is included in the economic assessment to help estimate the outlook. The rural sectors do not directly drive demand for industrial or commercial land. The indirect (flow on) effects are included in the modelling. However, a small portion of the associated (rural) growth is translated into industrial land requirements (urban). The main effects of the agriculture sector on business land (in the urban areas) are through the supply chains, and the sectors supplying agriculture (like services to agriculture) and sectors that process agricultural goods.

While not an BCA requirement, the analysis aggregated the economic activity into ten sectors, as used by the Councils. The current relationships[20] of these sectors (listed below), and the main zones is used to allocate growth to different zones. The basic premise is that these industries (especially the wet/dry sector) reflect some co-location advantages that would persist going forward.

- Wet Industry,
- Dry Industry,
- Service Industry,
- Transport and Storage,
- Wholesale and Retail,
- Utilities and Waste Services,
- Other Services,
- Primary Production,
- Accommodation, and
- Other.

The sector-zone and Council industry relationships are based on the area occupied in each zone, and by each industry. These relationships are linked to sectoral growth (employment) as well as the space-types to inform the spatial allocation of demand across the zones, and the associated capacity. In terms of the allocation process, it was assumed that the non-wet industries can locate in zones that can accommodate wet industries, but wet industries can only locate in zones where there are other wet industries i.e., the existing distributions reveal where there is appropriate infrastructure. Note, the availability of water (i.e., an allowance or ability to take) is not explicitly included in the assessment.

3.2 Demand outlook for Napier

The demand for business land is a function of the anticipated growth, as well as the sectoral mix of the growth. There are several factors determining the overall demand, including the assumed densities. The demand for business land has been calculated using different combinations and the results are presented in a way that shows the range of potential outcomes. The different component parts are dealt with separately.

[20] Based on the share of land area, per zone, that is occupied on a per sector basis (this is informed by work completed by the Councils that linked activities to ANZSIC economic sectors).

3.2.1 Industrial

The future demand for industrial land has been estimated based on the population growth patterns, the underlying economic structures of the district, and sectoral performance. The analysis also includes different scenarios where the inputs are adjusted to show a more aggressive pathway.

Table 3-2: Industrial Land Demand: Napier – over time (ha)

Zone	3Y	7Y	20Y	SUM
Main Industrial	3.4	7.8	22.0	33.2
Business Park Zone	0.4	0.8	1.9	3.1
Airport Zone	0.4	1.0	2.8	4.2
Deferred Airport Zone	0.0	0.0	0.1	0.1
Suburban Industrial Zone	0.1	0.3	0.8	1.2
Mixed Use and West Quay Waterfront Zones	0.5	1.1	3.0	4.6
Port and Marine Zones	0.0	0.0	0.2	0.2
Wastewater Treatment Zone	0.0	0.1	0.2	0.4
SUM	4.9	11.1	31.0	47.0
Average per year (sum divided by number of years)	*1.6*	*1.6*	*1.6*	

The overall demand for industrial land, over the long term (in total) is estimated at 47.0ha. Most of the industrial land demand is expected to be in the Main Industrial zone, with this zone accounting for 70% of demand. This share is a function of the type of sectors that can be accommodated in this zone, as well as the sectoral employment growth. Importantly the distribution of demand across the zones is a function of currently occupied land by different economic sectors.[21]

Beyond the main industrial zone, the type of businesses that are located in the Business Park Zone, the Mixed Use and West Quay Waterfront Zones as well as the Airport Zone will see an increase in demand (i.e., for those types of businesses) and these businesses would need to be accommodated in appropriate locations (this might not be in the same location/zone as where the demand is estimated). The spatial reallocation and reconciling the demand and the potential locations (capacity) occurs in a later section. Therefore, the demand indications presented here should be seen as the first step in the overall process. Combined, these zones will see a quarter of the demand (25%-26%) for industrial land. In area terms (ha), the demand for land in these zones is estimated at:

- 1.3h over the short term,
- 2.9ha over the medium term, and
- 7.8h over the long term.

Based on these estimates, the total demand in these zones over 30 year is estimated at 11.9ha.

Several zones will see small shares of the demand looking forward, including the Deferred Airport Zone, the Port and Marine Zones and the Wastewater Treatment Zone. The modelling restricts the level of demand that is allocated to these zones. For example, a strict allocation process is followed and only port related employment related growth[22] is linked to this zone. Similarly, the Wastewater Treatment Zone is associated

[21] The Councils classified the local businesses to economic sectors (ANZSIC)
[22] Other transport, postal, courier, transport support and warehousing services.

with 'water, sewerage, drainage and waste services', and only this sector's growth is allocated to this zone. Importantly, these zones are treated as 'unavailable' to accommodate growth associated with the wider economy.

In terms of the type of industries (wet, dry, service etc), the within-zone distribution varies. At a total level, following proportions are identified:

- Wet Industry 18%,
- Dry Industry 32%,
- Service Industry 3%-4%,
- Transport and Storage 18%-21%,
- Wholesale and Retail 17%, and
- All other 11%-13%.

The shares are expected to remain broadly constant over time. These shares vary if the zones are considered individually. For the Main Industrial zone, the shares are skewed towards the wet and dry industries, that combined account for two thirds of the demand (in this zone). The splits are:

- Wet Industry 25%,
- Dry Industry 41% - 42%,
- Transport and Storage 12% - 14%
- Wholesale and Retail 16% to 18%, and
- All other 3% to 4%.

In addition to the base scenario, a high growth scenario is included with a view to illustrate the potential upper end of demand over time. The high scenario reflects StatsNZ's high population growth pathway, and exports are lifted across the board (+5%). The lift in economic activity will see an increase in demand for land and while the quantum will shift upwards, the relative distribution stays constant. The total demand for industrial demand under the high scenario is expected to increase to 56.0ha over the entire period, with the growth over the different periods estimated as follows:

- Short term 4.9ha,
- Medium term, 11.1ha,
- Long term 31.0ha, and
- **Total** **56.0ha.**

Competitiveness Margin

As outlined in the NPSUD Part 3 (in 3.26), Councils are required to include a competitiveness margin.

> *"A competitiveness margin of development capacity, over and above raw expected demand that tier 1 and 2 local authorities are required to provide, that is required in order to support choice and competitiveness in housing and business land markets.*
>
> *The competitiveness margins for both housing and business land are;*
>
> - *For the short term, 20%,*
> - *for the medium term, 20%,*
> - *for the long term, 15%*

Including this margin in the overall demand for land increases the quantum to include in the sufficiency assessment.

Table 3-3: Total Industrial Demand (Including and excluding margin)

		Ha			
Total Demand		3Y	7Y	20Y	SUM
Base	Excluding Margin	4.9	11.1	31.0	47.0
High	Excluding Margin	5.8	12.9	37.4	56.0
Base	Including Margin	5.9	13.4	35.7	54.9
High	Including Margin	6.9	15.4	43.0	65.3
Annual requirements (including margin)					
	Base	*2.0*	*1.9*	*1.8*	*1.8*
	High	*2.3*	*2.2*	*2.1*	*2.2*

Adding the competitiveness margin across the different timeframes lifts the additional area to include in the assessment by between 7.9ha and 9.3ha over the assessment period. Over the short term, the margin adds 1ha to demand, 2.2ha over the medium term and 4.7ha over the long term. Under the high scenario these increases are greater – 1.2ha over the short term, 2.6h and 5.6ha over the medium and long term respectively.

The margin is included in the sufficiency assessment to highlight the links between the demand, margin and available capacity.

Building Consents

Using building consent information (provided by the Councils) covering industrial floor space for the 2005 to 2021 period, the average annual demand for industrial floor space was estimated. This is used as a broad measure of the demand patterns. Table 3-4 presents the annual average, and applies different assumptions to show the range of land area requirements. Importantly the approach uses a trimmed mean to remove the effects of outliers.

Table 3-4: Building Consents for Industrial Floor Space (2005-2021) – Napier

2005-2021	Site coverage	Awatoto	Onekawa	Other Napier	Napier
Annual Average* GFA (sqm)		610	4,350	410	5,375
Estimated land size (Ha)	30%	0.2	1.4	0.1	1.8
	35%	0.2	1.2	0.1	1.5
	45%	0.2	1.1	0.1	1.3

**Trimmed Mean. Rounded.*

The annual average demand levels in Napier have been relatively stable. However, 2021 was an exceptionally strong year in terms of industrial building activity. The consented floorspace was more than double the year before and 2.5 times that of 2019. The previous spike of this magnitude was in 2013. However, it is important to note, not all of the building floor space (in the consent data) relates to vacant land meaning that some

caution is needed when applying the information to the demand outlook. For example, some of the consents included developments like, office extensions, ablution blocks, refitting workshops, etc.

Note, these are averages over time, and the so, averages for the individual areas will not sum to the average for Napier. Onekawa accounts for the largest annual average when compared against Awatoto and the rest of Napier. The data suggests that annual demand for industrial land is 1.3 and 1.8 hectares of industrial land is taken up annually across Napier by development of industrial floorspace.

It is acknowledged, that the information in this table excludes building consents issued in the first quarter of 2022. According to information received from Council, the land area associated with building consents approved during this period, totals 7.7ha. If this is taken up in the short term (reflecting economic uncertainty, supply chain constraints, inflation and cost increases and so forth) and this would decrease the available capacity. However, due to timing issues and the uncertainty around when these opportunities would be ready for the market (to occupy), so it was not included in the modelling.

3.2.2 Commercial and Retail

Estimating commercial and retail demand uses a similar approach to that used for the industrial land demand assessment, i.e., translating employment growth into additional demand for space. This section presents the demand outlook over the short, medium and long terms. The retail and commercial demand is reported individually, as well as in aggregate in terms of Gross Floor Area (GFA). The reason for combining the two types is because the planning provisions, and the local spatial patterns, suggest a high degree of spatial integration. Neither Napier, nor Hastings, have 'dedicated' retail zones, except for Napier's Large Format Retail zone. This is not uncommon in an urban environment. In fact, it is rare that commercial land is zoned independently of retail land, as the aggregation of workforce and businesses requiring office space, naturally stimulates demand for retail and hospitality goods and services. In addition, most commercial activities have an ability to locate on upper levels of retail centres, suggesting colocation of retail and commercial activities within the same zone.

Table 3-5 presents the short, medium and long term demand outlook followed by some key observations.

Table 3-5: Additional Floor Space Demand in Napier (excl. Industrial) – Medium Outlook (ha)

	Ha			
	Commercial	Retail	Other	SUM
3 YEARS				
SUM	1.1	0.4	1.0	2.5
Annual Average	0.4	0.1	0.3	0.8
7 YEARS				
SUM	2.5	0.9	2.1	5.5
Annual Average	*0.4*	*0.1*	*0.3*	*0.8*
20 YEARS				
SUM	6.1	1.9	5.4	13.4
Annual Average	*0.3*	*0.1*	*0.3*	*0.7*

Combined, the total additional demand for commercial, retail and other floor space across is estimated at:

- 2.5ha over the short term (0.8ha per annum),
- 5.5ha over the medium term (0.8ha per annum), and
- 13.4ha over the long term (0.7ha per annum).

The overall structure of demand (by floor space type), is expected to gradually shift due to economic sectors growing at slightly different rates:

- Commercial 45% in the short term, up to 46% in the long term
- Retail 16% in the short term, down to 14% in the long term
- Other 39% in the short term, up to 40% in the long term.

The shifts are due to differential sectoral employment growth, i.e. sectors requiring commercial and 'other' space, growing at a faster rate than retail employment. The modelling assumes the space type required (i.e., the area required by each sector on a per employee basis) by sectors remain stable over time.

The 'other' floor space refers to accommodation, education, warehousing, outdoor spaces, and so forth. Floor space that is not strictly office or retail space but is required by sectors typically locating within these zones. This highlights the diverse nature of employment in the commercial and retail zones.

Competitiveness margins

The NPSUD Part 3 (3.26), requires Councils to assess demand including the competitiveness margins:

- 20% over the short term
- 20% over the medium term
- 15% over the long term

Including the competitive margin increases the quantum of floor space to be included in the sufficiency assessment. Table 3-6 presents demand estimates with competitiveness margins included and excluded. The estimates show the additional floor space required over the short, medium and long term. Including the competitiveness margin lifts demand as follows: (the figures in brackets report the demand plus margin under the high scenario):

- Short term 3ha (3.7ha)
- Medium term 6.6ha (8.1ha)
- Long term 15.4ha (20.5ha)

The sufficiency assessment includes margins, to highlight the links between the demand, margin and available capacity.

On average, around 1ha/year of floor space is required to accommodate additional employment within commercial and retail zones.

Table 3-6 Additional Demand for floor space (Including and excluding margin) – Napier

		Ha			
Total Demand		**3Y**	**7Y**	**20Y**	**SUM**
Base	Excluding Margin	2.5	5.5	13.4	21.4
High	Excluding Margin	3.1	6.8	17.8	27.7
Base	Including Margin	3.0	6.6	15.4	25.0
High	Including Margin	3.7	8.1	20.5	32.3
Annual requirements (including margin)					
	Base	*1.0*	*0.9*	*0.8*	*0.8*
	High	*1.2*	*1.2*	*1.0*	*1.1*

3.3 Demand outlook for Hastings

Hastings has experienced strong economic growth in the immediate past, but over the medium term, the growth has tended to follow the business cycles. The recent economic developments around increasing prices (inflation), global geo-political uncertainties and rising interest rates are likely to have a cooling effect on local activity. However, the existing development pipeline and economic momentum could assist in providing a soft landing over the short term. Regardless, the outlook is positive, and demand for new (additional) business areas, including industrial, retail and commercial space is expected to remain over the medium to long term. It is important to look at historic trends that around the development trajectory and look beyond outliers.

3.3.1 Industrial

Using the economic outlook as foundation, and translating the employment projections into land requirements, provide an indication of the anticipated demand for industrial land area, over the short, medium and long terms. Table 3-7 presents the estimated (additional) industrial land that would be required to accommodate the projected employment growth.

Table 3-7: Hastings: Industrial Land Demand – over time (ha)

Zone	3Y	7Y	20Y	SUM
General Industrial	10.9	25.7	58.2	94.8
Tomoana Food Industry	0.2	0.5	1.3	2.0
Havelock North Village: Industrial and Business	0.2	0.5	1.0	1.6
Light Industrial	0.7	1.6	3.9	6.2
Whirinaki Industrial	2.1	4.5	9.4	16.1
Deferred General Industrial	-	-	-	-
SUM	14.1	32.7	73.9	120.7
Annual Average	*4.7*	*4.7*	*3.7*	*4.0*

Over the long term (30 years) the total additional demand for industrial land, is estimated at 120.7 hectares. More than three quarters (79%) of this is expected within the General Industrial zone, with this share remaining fairly stable over the different timeframes **– of course this is subject to availability (of land as well as the supporting infrastructure**). This stability is a function of the type of activities anticipated to locate in

this zone, and the projected employment growth in industrial sectors. Similar to Napier, the distribution of demand across the zones is a function of currently occupied land by different economic sectors.[23] That is, the existing patterns are interpreted as showing locational preferences and co-location decisions.

Demand for industrial land in the Whirinaki Industrial zone accounts for 13% of the total over time, and the Light Industrial zone, 5%. Havelock North Village Business and Industrial, and Tomoana Food Industry zones are expected to accommodate the remainder (3%) of growth. In area terms (ha), the demand for land in the industrial zones is estimated at:

- 14.1ha over the short term,
- 32.7ha over the medium term, and
- 73.9ha over the long term.

In the General Industrial zone, which is expected to accommodate most of the growth (94.8ha), the demand for land over time, is estimated at:

- 10.9ha over the short term,
- 25.7ha over the medium term, and
- 58.2ha over the long term.

In terms of the current land-use by industry type (wet, dry, service etc), the within-zone distribution varies. At an aggregate level, the following proportions are identified across the industrial zones in Hastings:

- Wet Industry 36%,
- Primary Production 13%
- Dry Industry 11%,
- Transport and Storage 10%,
- Wholesale and Retail 6%,
- Service Industry 5%, and
- All other 18%.

The shares are expected to remain broadly constant over time. The distribution varies somewhat when zones and locations are considered on an individual basis. In the General Industrial zone wet and dry industries, when combined, account for a large share (42%) of the demand (in this zone). In terms of locations, the wet and dry industries (respectively) make up the following shares (in the General Industrial zone):

- Hastings Central 94% and 0%,
- Irongate 10% and 28%,
- Omahu Road 28% and 13%,
- Tomoana 64% and 1%, and
- Whakatu 29% and 5%.

Beyond the General Industrial zones, wet industries account for between 0% and 7% of demand in other zones, and dry industries account for between 4% and 27% of current demand.

To illustrate the potential risks of a higher growth pathway resulting in insufficient land capacity, a higher growth pathway was also modelled. As outlined earlier in the report (section 2.1.2), the high scenario is based on higher population growth as per StatsNZ's high population projection, as well as stronger overall economic activity (e.g., a lift in exports of 10%). Under these assumptions, demand for industrial land shift higher and is

[23] The Councils classified the local businesses to economic sectors (ANZSIC)

expected to increase to 151.2ha (+30.5ha relative to the base scenario) over the long term, with the growth over the different periods estimated as follows:

- Short term 16.6ha (+2.5ha),
- Medium term, 38.8ha (+6.0ha), and
- Long term 95.8ha (+21.9ha).

The annual average demand for industrial land in Hastings under the high scenario (the figures in brackets show the change relative to the base scenario), is estimated at:

- Short term 5.5ha (+0.8ha),
- Medium term, 5.5ha (+0.8ha), and
- Long term 4.8ha (+1.1ha).

Adding a Competitiveness Margin

As per the NPSUD, a competitiveness margin is added (NPSUD Part 3, 3.26). The margin is set at 20% in the short and medium term and 15% in the long term. Including this margin increases the quantum in the sufficiency assessment. Table 3-8 presents the estimated demand for the different scenarios, and also reports the effects of the margins.

Adding the competitiveness margin, lifts demand by between 20.4ha and 25.4ha over the assessment period. The range reflects the different outcomes under the base and high scenarios. The margin adds (the figures in brackets report the margin under the high scenario):

- Short term 2.8ha (3.3ha),
- Medium term 6.5ha (7.8ha), and
- Long term 11.1ha (14.4ha).

The sufficiency analysis (section 5) considers the results of both the 'with' and 'without' margin.

Table 3-8: Hastings Industrial Demand (including and excluding margin) for Base and High scenarios

Total Demand		Ha			
		3Y	7Y	20Y	SUM
Base scenario	Excluding Margin	14.1	32.7	73.9	120.7
High scenario		16.6	38.8	95.8	151.2
Base scenario	Including Margin	16.9	39.3	85.0	141.1
High scenario		19.9	46.5	110.2	176.6
Per annum values (including margin)					
Base		*5.6*	*5.6*	*4.2*	*4.7*
High		*6.6*	*6.6*	*5.5*	*5.9*

Building Consents

Similar as the approach for Napier, the building consent data were used to estimate the historical average annual demand for industrial floor space. This is then compared with the anticipated demand as a means of

validating the assumptions in the modelling, keeping in mind the current (and expected) economic landscape. Table 3-9 presents the annual average consented floor space, and different coverage ratios to estimate the land demand. A trimmed mean was used to help eliminate the influence of outliers.

Table 3-9: Building Consents for Industrial Floor Space (2005-2021) – Hastings

2005-2021	Site coverage	Omahu	Whakatu & Tomoana	Irongate	Other Hastings	Hastings
Annual Average* GFA (sqm)		9,520	5,380	1,930	1,200	**18,030**
Estimated land size (Ha)	30%	3.2	1.8	0.6	0.4	**6.0**
	35%	2.7	1.5	0.6	0.3	**5.2**
	45%	2.4	1.3	0.5	0.3	**4.5**

**Trimmed Mean. Rounded.*

It is stressed that the activity over the past 3-5 years has been high compared to the long-term trend and this exceptional strong growth is not expected to continue when the current economic outlook is considered. It is therefore pragmatic to look at the longer-term average (2005-2021).

On average, between 2005 and 2021, consents for approximately 18,030sqm of industrial floor space were issued annually, across Hastings. Council's data shows in 2020 nearly 50,000sqm of industrial floor space were consented. Similar to Napier, not all of the consented floor space requires additional vacant land. The consent data (over time) revealed that consents for additions and alterations to buildings, canopy constructions and so forth, are also included in the data set. We did not attempt to clean the data and therefore the above data includes activities that do not generate demand for vacant land.

The floor space was translated into land area using three different coverage ratios. The analysis revealed that industrial land required across Hastings, ranges from 4.5 to 6.0 hectares.

3.3.2 Commercial and Retail

The sector-specific employment estimates are used to inform future demand for commercial, retail, and other floor space. Table 3-10 presents a summary of the additional demand, driven by employment growth, segmented into short, medium, and long term.

Table 3-10: Additional Floor Space Demand (excl. Industrial) in Hastings – Medium Outlook

	Commercial	Retail	Other	SUM
3 YEARS		Ha		
SUM	0.7	0.3	0.7	1.7
Annual Average	*0.2*	*0.1*	*0.2*	*0.6*
7 YEARS				
SUM	1.5	0.5	1.5	3.5
Annual Average	*0.2*	*0.1*	*0.2*	*0.5*
20 YEARS				
SUM	3.4	0.8	3.9	8.0
Annual Average	*0.2*	*0.0*	*0.2*	*0.4*

The analysis suggests that over the next three decades, approximately 13 hectares of floor space will be required to accommodate employment growth typically located in retail and commercial zones. Combined, the total demand for commercial, retail, and other floor space across these zones is estimated around:

- Short term 1.7ha (0.6ha per annum),
- Medium term 3.5ha (0.5ha per annum), and
- Long term 8.0ha (0.4ha per annum).

Commercial floor space accounts for 43% of demand in the short term, decreasing slightly to 42% in the long term. Retail space makes up 14% of short term demand, and 10% over the long term. The shift in the relative shares underline the growth of demand from the 'other' sectors. It does not mean that the commercial and retail sectors are declining, but the other sectors are growing slightly faster.

The distribution of demand (by space type) across the zones, will change based on the varied spatial growth patterns. The specific future spatial patterns will need further analysis to reflect finer level insights into the micro-spatial trends. The current patterns provide a starting point and offers some insights into outlook (but this is only indicative of the scale). Section 4 presents the availability (and suitability) of capacity, which is then compared with demand to establish the sufficiency (Section 5).

Competitiveness margins

Adding the competitiveness margin, as required under the NPSUD (Part 3 in 3.26), lifts the quantum of demand to be incorporated in the sufficiency assessment. Table 3-11 provides an overview of the additional demand under the base and high growth scenarios. The estimated demand is reported with the margins included and excluded over the short, medium and long terms.

Table 3-11 Hastings Commercial Demand (including and excluding margin) for Base and High scenarios

Total Demand		Ha			
		3Y	7Y	20Y	SUM
Base scenario	Excluding Margin	1.7	3.5	8.0	13.2
High scenario		2.2	4.5	11.7	18.3
Base scenario	Including Margin	2.1	4.2	9.2	15.5
High scenario		2.6	5.4	13.4	21.4
Per annum values (including margin)					
Base		*0.7*	*0.6*	*0.5*	*0.5*
High		*0.9*	*0.8*	*0.7*	*0.7*

Including competitiveness margins, lifts the additional demand over the next three decades to 15.5ha (from 13.2ha excluding margins). The estimates suggest that the annual average additional demand is between 0.5ha and 0.8ha (including margins). The temporal distribution of demand plus margin is estimated as follows (the figures in brackets report the high scenario):

- Short term 2.1ha (2.6ha),
- Medium term 4.2ha (5.4ha), and
- Long term 9.2ha (13.4ha).

The sufficiency assessment in section 5 includes the margin to highlight the links between demand, margin, and available capacity.

4 Capacity and Suitability

The available development capacity to accommodate the envisaged growth, and how to account for the capacity, is discussed in sections 3.28, 3.29 and 3.30 of the NPSUD. Section 3.29 states that the development capacity provided by each Council should be:

- plan enabled,
- infrastructure ready, and
- suitable for each sector.

The Councils can define 'suitable capacity' to reflect the local context, but it must include (at least) location and site size as part of the assessment. Unlike assessing residential capacity (for the Housing Assessment), Councils are not required to assess business capacity through the feasibility lens. It is sufficient to assess the capacity in terms of suitability and in terms of location and scale. The suitability is assessed using a Multi-Criteria Analysis (MCA) framework. Each location is assessed using a set of criteria that provides an indication of the suitability of locations. The selected criteria reflect the development and locational decision, and are varied across sectors (industrial, retail, or commercial).

Each area (zoned areas) is scored against the relevant criteria to provide an overall score out of 100. Comparisons can then be made between where the plan enabled capacity (vacant land) is located and the MCA score for those areas. If capacity is provided in the areas that score highly in the MCA, Council can be confident that development will proceed at some time during the thirty-year planning horizon. However, if capacity is clustered in areas that score poorly in the MCA, they may find that land is not taken up by developers, and pressure will arise on more suitable capacity.

Results of the MCA scoring process is placed alongside capacity to identify, and highlight, mismatches between plan enabled capacity and the suitable areas.

The section starts by outlining the plan enabled and infrastructure ready capacity before the locations are evaluated using the MCA.

4.1 Capacity estimates

The available development capacity is presented in terms of the plan enabled- and the infrastructure ready capacity.

4.1.1 Industrial capacity

The capacity estimates for the industrial land were prepared by the Councils and we have relied on this information. We understand that the Councils estimated the available capacity using a staged approach starting with an earlier (2018) assessment of vacant land. This list was then updated by subtracting sites where there have been developments (i.e., new development). Land that has been earmarked for future zoning/servicing is included in the relevant future timeframes (when it will become available). This inclusion is subject to being identified in the Long-term Infrastructure Strategy and/or earlier growth management strategies (HPUDS). The available capacity, as estimated by the Councils, reflect:

"land that is zoned and serviced readily available to the market".

The capacity is presented on a 'per zone' and 'per broad location' basis (see Table 4-1) and the anticipated future additions to industrial land capacity is also shown.

Table 4-1: Available capacity – Industrial

	Zone	*General location*	*Currently Available (ha)*	*Additional (ha)*		
				3y	7y	20y
Napier	Main industrial	Pandora	4			
	Main industrial	Awatoto	10			
	Main industrial	Onekawa	2			
	Business Park Zone	Poraiti (rural)	-			
	Airport Zone/Deferred Airport Zone	Napier Airport	45			
	Suburban Industrial Zone	Various	0			
	Mixed Use and West Quay Waterfront Zones	Ahuriri	1			
	Port and Marine Zones	Napier Port	-			
	Wastewater Treatment Zone	Awatoto	-		10	30
Hastings	General Industrial/Light Industrial	Hastings Central	-			
	General Industrial	Irongate	64.6			
	General Industrial	Omahu Road	82.5			
	General Industrial /TFI	Tomoana	12.6			
	General Industrial /TFI	Tomoana Extension (HPUDS)				50
	General Industrial	Whakatu	47.4			
	Havelock North Village: Industrial & Business	Havelock North Village	-			
	Light Industrial	Stortford Lodge	0.03			
	Whirinaki Industrial Zone	Whirinaki Industrial Zone	-			
Source: information supplied by the Councils						

Based on the information prepared by the Councils, the available industrial capacity across the two areas (and in the urban areas, so excluding the rural areas) is estimated at:

- Napier – 62ha currently available and another 10ha becoming available over the medium term, followed by a further 30ha over the long term.
- Hastings District – 207ha currently available, with another 50ha available to accommodate future growth (especially around the Tomoana food hub location) over the long term.

In Napier, the capacity is concentrated in the Deferred Airport Zone (42ha) and, the main industrial zone across Pandora, Awatoto and Onekawa account for a quarter of the available capacity. In Hastings, the industrial capacity is spread over

- Irongate,
- Omahu Road, and
- Whakatu.

Combined, these three areas have 195ha area.

We understand that this capacity includes greenfield (vacant) sites as well as an allowance to enable a lift in the intensity at which sites are used (i.e., where there are readily identifiable portions of existing sites that are unused or poorly utilised, then these are included in the capacity).

The Napier capacity excludes several large land areas from the assessment, including:

- Business Park Zone (40ha) - This land is zoned for industrial purposes, but is owned by Council, and it has been proposed to be zoned as Rural Conservation in the Draft District Plan that is currently being prepared.
- Wastewater Treatment Zone – This land is earmarked for, and to support, wastewater treatment plant and any expansion to the current facility. The area covers 61ha (there could be some surplus capacity that might be available for industrial use).

The plan enabled capacity is tempered by the infrastructure ready capacity.

During the sector engagement, the constraints on the development activity arising from water supply were raised. The respondents indicated that wet industry growth was inhibited because of an inability to secure water consents under the new environmental limits proposed by the Regional Council. The role of the trade waste system (separate industrial network) was highlighted as supporting industrial growth and activity. The capacity assessment does not explicitly reflect the effects of the trade waste, or water consent, issues. However, the importance of these enabling activities should not be underrated, because they form a key part of the enabling business environment even if these are not core requirements under the NPSUD.

4.1.2 Commercial and Retail Capacity

This section presents the plan enabled capacity in the relevant retail and commercial zones across Napier and Hastings. Plan enabled capacity is the theoretical maximum area that can be utilized for development in response to additional demand (driven by employment growth). Plan enabled capacity (PEC)was estimated using a combination of:

- Councils' rating data bases and planning provisions.
- Commercial Property Review 2022[24] provided by Council.

The rating data (and land use codes) were used to establish a link between the planning zones and parcel-level information. PEC for the commercial and retail zones is reported in terms of floor space, segmented by:

- Vacant Capacity refers to bare land in the relevant zones. Vacant land parcels were identified using a combination of land use description, existing built floor area metrics and improvement values, as reflected in the rating databases. A base level of development of 50sqm has been used as the lower limit (of development). If the building area on a parcel is below this threshold, then the parcel is assumed to be vacant. Rules relating to site coverage, building heights and floor area ratios were used to estimate the GFA based on the zoning of the parcel.
- Net additional Redevelopment Capacity refers to the additional capacity that can theoretically be added to the existing floor space by redeveloping the parcel up to the maximum under plan provisions. The operative plan rules (e.g., site coverage, building heights and floor area ratios) were used to estimate the total GFA that is enabled on a parcel. The current building floor area (based on Council's rating information) was subtracted to estimate the GFA that could be added if the parcel was to be up-developed to its full plan enabled capacity.
- Unoccupied Capacity refers to the floor space reported by the property review as being unoccupied at the time of the survey. Based on the information provided by Logan Stone Ltd to Councils, the

[24] Prepared by Logan Stone Limited.

unoccupied floor space is included in the capacity estimates. It is acknowledged that this is a snapshot and would fluctuate from time to time. This information was only available for Hastings urban area.

Table 4-2 reports the supply (plan enabled capacity) in the commercial and retail zones in Napier and Hastings.

Table 4-2 Floor Space Capacity in Commercial and Retail zones

Planning zones		Vacant Capacity	Net additional Redevelopment Capacity	Unoccupied Capacity	Total Capacity (supply)
		Ha			
Napier	Art Deco Quarter	0.1	7.8	*NA*	7.9
	Fringe Commercial	6.6	58.1	*NA*	64.8
	Suburban Commercial	-	21.3	*NA*	21.3
	Foreshore Commercial	-	0.3	*NA*	0.3
	Large Format Retail	11.9	8.8	*NA*	20.7
	Mixed Use	0.4	6.8	*NA*	7.2
	Inner City Commercial	1.1	3.6	*NA*	4.7
	SUM	20.2	106.7	*NA*	126.9
Hastings	Central Commercial	1.6	43.2	*0.9*	45.8
	Commercial Service	0.9	11.3	*0.4*	12.6
	Suburban Commercial	-	2.6	-	2.6
	Residential Commercial	-	0.8	*0.0*	0.8
	Large format retail	0.1	10.8	*0.1*	10.9
	Flaxmere Commercial	-	3.3	-	3.3
	Flaxmere Commercial Service	0.6	4.2	*0.0*	4.8
	Havelock North Village Centre Retail	-	5.4	-	5.4
	Clive-Whakatu Suburban Commercial	0.1	0.8	-	0.9
	Haumoana - Te Awanga Suburban Commercial	-	0.0	-	0.0
	Waimarama Suburban Commercial	-	0.1	-	0.1
	SUM	3.2	82.5	1.4	87.2

The modelling suggests that in *Napier*, 127ha of floor space could be developed within the provisions of the operative City Plan. The net additional redevelopment capacity accounts for 84% of the plan enabled capacity. The balance is related to the vacant capacity (20ha of floor space).

The three zones in Napier that have the largest estimated plan enabled capacity (GFA) are:

- Fringe Commercial 64.8ha,
- Suburban Commercial 21.3ha, and
- Large Format Retail 20.7ha.

Vacant capacity is concentrated in the Large Format Retail (LFR) zone (60%) and another third (33%) is in the Suburban Commercial zone (33%). Activities in the LFR zone is specific in nature. The zoning restricts the use of these areas for other types of commercial uses, such as office or accommodation, for example. Conversely, Fringe Commercial zone, where 10 hectares is vacant (plan enabled GFA), is more diverse in term of potential

activities, including larger retailers and supermarkets, accommodation providers, fast food outlets and hospitality businesses, office based activities (e.g. lawyers and accountants), and so forth.

The net additional redevelopment capacity is relatively large, and concentrated in Fringe Commercial and Suburban Commercial zones. This suggests that sites located in these zones theoretically could see substantial up-development (more intensive use/intensification). However, this assessment did not consider each parcel individually to determine the practicality of such redevelopment. One of the issues might be parking provisions. The plan enabled capacity modelling does not consider on-site parking requirements for example. If on-site parking is required, it would lower the reported plan enabled capacity. *The interplays between developers' actual activity, market demand for sites with/without dedicate parking and the impacts on the overall capacity will need to be assessed as part of a wider evaluation of parking requirements across zones.*

The analysis suggests that across *Hastings*, around 87.2ha GFA could be developed within the provisions of the ODP. In Hastings, zones with the greatest estimated GFA capacity are:

- Central Commercial 45.8ha,
- Commercial Service 12.6ha, and
- Large Format Retail 10.9ha.

The net additional redevelopment capacity (82.5ha) account for nearly all (95%) of the plan enabled capacity in Hastings. Excluding this, suggests that only 4.6ha of floor space is available to accommodate future growth in these zones. This capacity is associated with:

- 3.2ha vacant capacity, and
- 1.4ha unoccupied capacity.

Importantly, the unoccupied floor space will vary from time to time, and this only presents a snapshot.

Vacant capacity across Hastings is relatively low, with no vacant GFA capacity in some zones. The Central Commercial zone accounts for half (51%) of the vacant capacity (1.6ha) and Commercial Service zone for a further quarter (26%; 0.9ha). These two zones are centrally located, broadly making up the CBD. The relatively low vacant GFA capacity in Hastings' commercial and retail zones is noteworthy because it reflects that local areas (and zones) are already using the available resource. The ability to accommodate future growth, and the share of growth that is accommodate in these zones will need to be monitored.

4.2 Infrastructure Ready Capacity

The NPSUD requires the available capacity to be assessed in terms of the availability of infrastructure to support development. **Water infrastructure as well as the availability of water for use are known issues in the Napier and Hastings contexts. This issue was identified through work with the Councils and the ground truthing process.**

During the process, the team engaged with the councils' infrastructure teams to ascertain the degree to which additional development could be accommodated in industrial areas. **Similar information was not available across the commercial and retail zones. Additional work is needed to develop a firm understanding of the infrastructure availability and/or deficits.** The comments from the infrastructure representatives are summarised below to illustrate the feedback received and matters raised.

At a high level, the team did not see issues with the potential yields across industrial areas. However, the context is important. For example, in Omahu Road, there are distinct areas depending on the level of service

for wastewater, trade waste and availability of water for wet and dry industries. These sectors have different water-infrastructure requirements, and the infrastructure is not available across all locations. Similarly, stormwater is seen as an on-site issue that require consent from the regional council.

A critical issue is water availability, and it should be regarded that the ability to take and use more groundwater or water from rivers and streams across the Heretaunga Plains is no longer an option. This means that new businesses need to consider alternative approaches to securing access to water. Generally, the main available options are:

a) water supply that is subject to (and reliant on) local reticulated water supplies which already have water consents (acknowledging that there are already constraints on water supply infrastructure), or
b) finding innovative solutions to transfer water consents from existing consent holders.

The availability of water services, and the ability to connect, is not only a local (in the industrial area) consideration. The availability of the wider infrastructure, like trunk sewers and the connections, would need to be assessed.

The ability to provide water to the new industrial areas (e.g. Irongate), as well as the timing of infrastructure investments and upgrades, need to be considered in an infrastructure assessment.

4.3 Suitability assessment

As mentioned in the introduction, the suitability of the different business locations is assessed using a Multi-Criteria Analysis-framework. The MCA approach offers an ability to consider a range of criteria across different locations, and how well those locations 'scored' for each criteria.

The different business locations are each scored against criteria and the ratings are then expressed as a percentage (overall score out of 100). Comparisons can then be made between where the plan enabled capacity is located and the MCA score for those areas. If capacity is provided in areas that score highly in the MCA, then Councils can be confident that development is likely to occur in those areas. However, if capacity is clustered in areas that score poorly, they may find businesses do not develop that land, and pressure will be brought to bear on other land (with high(er) MCA scores).

Table 4-3 summarise the scores for the industrial locations, and across the criteria, which includes:

1. Access to major road/transport routes; good transport access, especially road/motorway,
2. Flat land, large land parcel, or contiguous site,
3. Service infrastructure in place or proposed,
4. Area has potential for co-location or clustering with associated business activities or is contiguous with existing business land zoned for industrial activities,
5. Proximity to labour,
6. Ability to buffer adverse effects from residential and sensitive activities, distance from sensitive land uses,
7. Low level of traffic congestion in vicinity,
8. Exposure / profile / visibility,
9. Accessibility to Napier Port,
10. Access to complementary / supporting business services.

Table 4-4 presents the information for the commercial and retail zones, and the scores for each zone. The criteria used to score commercial and retail locations (zones) are slightly different.

Table 4-3: MCA Scores for Napier and Hasting's Industrial areas.

	Zone	Location	Access to major Road / transport routes; good transport access, especially road/motorway	Flat land, large land parcel (minimum size??) contiguous site	Service Infrastructure in place or proposed	Area has potential for co-location or clustering with associated business activities or is contiguous with existing business land zoned for industrial activities	Proximity to labour	Ability to buffer adverse effects from residential and sensitive activities, distance from sensitive land uses	Low level of traffic congestion in vicinity	Exposure / profile / visibility	Accessibility to Napier Port.	Access to complementary / supporting business services	Score
Napier	*Main industrial*	*Pandora*	18	12	14	17	4	15	3	8	4	3	85
	Main industrial	Awatoto	14	12	10	5	3	18	4	4	3	2	65
	Main industrial	Onekawa	16	12	14	12	7	9	2	8	3	3	75
	Business Park Zone	Poraiti (rural)	16	18	1	8	4	15	4	6	4	4	70
	Airport Zone/Deferred Airport Zone	Napier Airport	17	15	8	12	2	10	3	8	3	2	70
	Suburban Industrial Zone	Various	15	5	13	5	7	5	2	8	2	2	56
	Mixed Use and West Quay Waterfront Zones	Ahuriri	16	10	14	14	5	5	1	8	4	4	70
	Port and Marine Zones	Napier Port	16	10	15	10	4	16	3	5	5	3	76
	Wastewater Treatment Zone	Awatoto	14	10	3	7	3	18	4	1	3	2	57
Hastings	*General Industrial/Light Industrial*	Hastings Central	10	13	13	12	10	10	2	8	1	4	72
	General Industrial	Irongate	20	18	12	10	5	20	5	5	2	2	86
	General Industrial	Omahu Road	19	17	12	10	7	12	3	8	2	2	80
	General Industrial /TFI	Tomoana	15	17	12	10	8	17	4	3	2	2	78
	General Industrial /TFI	Tomoana Extension (HPUDS)	15	17	12	10	8	17	4	3	2	2	78
	General Industrial	Whakatu	17	18	10	10	5	18	4	5	2	2	79
	Havelock North Village: Industrial & Business	Havelock North Village	10	13	13	10	10	5	2	8	1	3	65
	Light Industrial	Stortford Lodge	10	15	13	12	10	5	2	8	1	4	70
	Whirinaki Industrial Zone	Whirinaki	15	15	10	8	3	19	5	2	3	1	70

Table 4-4: MCA Scores for Napier and Hasting's Commercial and Retail zones

	Zone	Access to major Road / transport routes; good transport access, especially road/motorway	Proximity to market - households within 5km	Exposure / profile / visibility	Co-location or clustering with associated business activities - Retail Centre	Parking availability	Proximity to labour	Low level of traffic congestion in vicinity	Existing or proposed public transport	Access to complementary / supporting business services	Secure infrastructure - high speed fibre, power etc.	Diversity of Space types	Proximity to market - tourist accommodation within 1km	Score
Napier	*Art Deco Quarter*	5	9	3	13	10	8	3	4	8	8	2	3	72
	Inner City Commercial	5	9	3	13	10	8	3	4	8	8	2	3	72
	Fringe Commercial	6	9	4	13	13	8	2	3	8	8	3	3	76
	Suburban Commercial	5	10	3	12	14	9	3	2	7	8	2	1	72
	Foreshore Commercial	7	7	1	3	14	6	5	1	2	8	2	4	57
	Large Format Retail	9	8	4	10	15	8	1	2	5	8	1	1	69
	Mixed Use	9	8	3	12	12	8	3	1	9	8	1	1	71
Hastings	*Central Commercial*	8	9	4	14	13	9	2	4	10	9	4	3	85
	Commercial Service	6	9	3	13	11	9	2	3	8	9	2	3	74
	Suburban Commercial	5	9	3	12	11	9	3	1	6	8	1	1	66
	Residential Commercial	5	9	3	10	9	9	3	2	5	9	2	2	65
	Large format retail	9	9	4	12	14	9	1	3	9	9	1	2	78
	Flaxmere Commercial	7	6	3	8	13	6	4	1	5	8	2	1	61
	Flaxmere Commercial Service	7	6	3	8	13	6	4	1	5	8	1	1	60
	Havelock North Village Centre Retail	8	7	4	10	14	7	3	1	7	8	4	3	72
	Clive-Whakatu Suburban Commercial	10	3	5	4	10	3	1	1	3	8	1	3	50
	Haumoana - Te Awanga Sub. Com.	4	2	4	1	10	2	4	1	1	8	1	1	37
	Waimarama Suburban Commercial	5	9	3	12	11	9	3	1	6	8	1	1	66

The locations score highly on the attributes (criteria) normally associated with the careful planning, and citing, of industrial locations. All the business locations scored highly for:

- Accessibility, and the ability to access major road or transport linkages. Having access to quality and suitable transport linkages and infrastructure supports business activity by reducing transport costs. the business/industrial locations have good linkages to support transport.
- Appropriate typography (flat land) with large sites.
- The infrastructure is available to accommodate and support activities is score relatively high (apart from a small number of locations). however, the scoring reflects the potential constraints and wider considerations (e.g., the limitations on the water consents).
- The ability of a location to foster between business advantages (e.g. co-location, agglomeration, and clustering). The ability to operate in a network of related and unrelated businesses can also deliver spill over benefits.

The location of the business zone relative to the surrounding land uses is important because often a buffer is required, especially around industrial activities. This includes the ability to manage and limit reverse sensitivity issues. Again, these aspects can be managed using appropriate planning mechanisms.

Beyond these criteria, the scores fall to lower levels with proximity to labour (i.e., distance away from the residential areas) and exposure filling the middle of the scores (range). The lower scored criteria relate show that the locations are:

- Potentially subject to traffic congestion. This is despite suitable locations on traffic routes but highlights the level(s) of use (of the infrastructure.
- The access to the port is subject to distance and the access to routes. However, access to the port is not seen as core requirement for all sectors. In fact, only a portion of businesses rely of the port to underpin their business activity.
- The distance to other type of business locations (e.g., commercial areas with supporting business activities like accountants and lawyers) is score towards the lower end. This is a function of where the activities are located, based on zones, and is somewhat removed from industrial locations.
- Except for the Suburban Commercial zones, these business zones are largely found in one geographic area, so they were not assessed by location as the industrial land was.

The scores are integrated into the wider discussions associated with the sufficiency assessment.

4.4 Stakeholder Engagement

The NPSUD highlights the need to engage with local developers to source inputs and to consider local views. Hastings District Council have recently completed an 'Intentions Survey' of owners of vacant land and the findings were also considered as part of our assessment. A summary of the results from this survey is included in Section 4.4.1, including some key observations.

In addition, the local economic development agencies[25] and large economic assets (like the port and airport) were surveyed to inform the growth modelling, and the development outlook. The engagement helped to

[25] We note that the local economic agencies were in the process of being restructured into a single entity to drive economic development.

ensure that local development perspectives were integrated into the analysis and vacant capacity was not overstated.

In particular, the engagement with developers has been used to assist in identifying characteristics of land and location attributes associated with the suitability assessment. The stakeholder engagement process was undertaken in the form of an online survey, administered by M.E, with support from council staff. Results were then collated and incorporated into the MCA. Respondents were asked to rate factors (out of 100) to indicate the importance of those factors when development decisions are made. Table 4-5 presents the results and shows the relative importance of key factors influencing investment decisions.

Table 4-5: Summary of factor importance

Factor	Average	Industrial	Commercial	Retail
Other service Infrastructure in place or proposed (Freshwater, Wastewater, Roading, Power).	89	89	NA	NA
Risk of Natural Hazards (other than flooding - i.e. geotechnical issues, liquefaction, fault lines, tsunami inundation)	87	98	82	82
Flooding risk and stormwater infrastructure availability.	86	88	82	90
Accessibility to Napier Port.	86	86	NA	NA
Flat land, large land parcel, contiguous sites (functional location).	86	86	NA	NA
Access to major Road / transport routes; good transport access, especially road/motorway. Freight/heavy vehicle focused.	82	82	NA	NA
Co-location or clustering with other industrial & service activities (Agglomeration benefits)	82	82	NA	NA
Co-location or clustering with other retail activities (Cross Shopping).	80	NA	NA	80
Ownership Structure (tenure i.e. freehold v leasehold land).	78	86	70	NA
Parking availability.	77	NA	64	89
Suitable, reliable communication infrastructure in place or proposed (e.g. telecommunications, fast internet, etc.).	77	NA	73	80
Co-location or clustering with complementary business activities - particularly retail.	73	NA	73	NA
Ability to develop a range of space types including multi-storey buildings.	72	NA	72	NA
Proximity to market - dense resident or tourist population in walkable catchment.	70	NA	NA	70
Ability to buffer adverse effects from residential and sensitive activities, distance from sensitive land uses.	66	66	NA	NA
Access to major Road / transport routes; good transport access, especially road/motorway.	65	NA	65	66
Proximity to market - tourist accommodation and attractions.	64	NA	NA	64
Exposure / profile / visibility.	63	52	60	78
Access to complementary / supporting business services (Business sector suppliers).	61	NA	61	NA
Water Infrastructure in place or proposed (freshwater, wastewater).	61	NA	57	65
Access to complementary / supporting business services (supplying retail sector).	61	NA	NA	61
Access to productive land/primary production activities.	61	61	NA	NA
Other service infrastructure in place or proposed (e.g. power, roading, rail).	59	NA	58	59
Access to complementary / supporting business suppliers and resources.	55	55	NA	NA
Proximity to labour.	51	73	31	50
Low level of traffic congestion in vicinity.	48	56	42	48
Proximity to market - dense employment in walkable catchment.	44	NA	NA	44
Accessibility to Hawkes Bay Airport.	39	32	46	NA
Existing or proposed public transport.	36	NA	NA	36
Access to railway, including sidings.	26	26	NA	NA

The sample size for the developer survey is relatively small due to the targeted nature of it combined with low response rates. We consider survey fatigue to have played a role, since there were two related surveys[26] being conducted at the same time. Responses therefore have to be treated with caution. Nevertheless, valuable high-level observations are drawn from the results.

Some of the criteria are universal across all development types (i.e. industrial, commercial, retail), while other considerations are sector specific. For example A*vailability of parking* is unlikely to affect the decision for industrial development but will be considered when a developer decides to provide space for retailing and commercial activity. Similarly, *Access to Napier Port* is less of a consideration for a commercial (office) development than what it would be for an industrial development. The following criteria are relevant for all development sectors:

- Risk of Natural Hazards (other than flooding i.e., geotechnical issues, liquefaction, fault lines, tsunami inundation),
- Flooding risk and stormwater infrastructure availability,
- Exposure / profile / visibility,
- Proximity to labour, and
- Low level of traffic congestion in vicinity.

The results shows that natural hazards and infrastructure resilience are critically important for developers, with average scores of 86 and 87. As expected, *Exposure/Profile/Visibility* is very important to retail development (78), but less so for industrial developers (52). Location relative to where employees are located, is relatively unimportant for commercial developers. This could be attributed to the emergence of hybrid working[27], with employers successfully employing office workers further afield. However, this could also related to the generally high levels of accessibility and moderate travel times in the local context.

The ownership structure, and how a property is held, are key considerations because it influences how readily a section can be developed. Industrial developers rated it somewhat higher (86) than commercial developers (70). Retail premises are generally leased, so this question was not put to retail developers.

Sector-specific observations derived from the survey are presented below.

Industrial

In addition to factors already highlighted, important considerations (>80) for this group centres around the physical attributes of a site, i.e. large, flat parcels, and accessibility, i.e. good access to heavy vehicles and focused on transport routes and Napier Port.

Co-location or clustering with other industrial and service activities is also important to this group because of the agglomeration benefits that arise. These include lower transactions costs, labour pooing, sharing of suppliers and so forth.

For this group, proximity to labour is a moderately important (73) consideration. This points to industrial activities' reliance on employees being physically present in the general location, but not necessarily in close proximity. A constraint highlighted by Councils' economic development agencies, is the availability of labour in especially the rural sector, but this sector is not directly linked to industrial land demand.

[26] A survey of industrial land developers/owners by Barkers & Associates and the Intentions survey by Council, were sent to developers around the same time. There were some overlap of the parties targeted by these surveys.
[27] Time is split between working from home and working from the office.

Commercial

Besides the factors already mentioned, reliable communication infrastructure is rated as important (73). This is on par with co-location/clustering with retail (73). This confirms what is observed across Napier and Hastings, with most zones accommodating a mixture of commercial (office) and retail activities. Having the ability to develop a range of space types that include multi-storey buildings, is moderately important (72) for commercial developers. This is likely due to retail usually locating on the ground floor (and as required by planning provisions), and commercial above ground level.

Retail

For this group, parking availability (89) is crucial, followed by considering flood risk during development decisions/due diligence. Convenience is an important attractor for retail, which includes providing parking options. This is especially true for Napier and Hastings where public transport options are limited. If households can't access a retail development conveniently, they might go elsewhere and this is considered by developers. Convenience is further underscored by the importance ascribed to *co-location with other retail activities* (80) by respondents. This points to the need for, and importance, of the centres hierarchy.

With reference to the wider **development considerations**, developers were asked about constraints and business land capacity in Hastings and Napier. Zone provisions and a lack of infrastructure are seen as the main barriers for development and some respondents indicated that the business zone provisions were "*out of date*" and too restrictive. Zones in Havelock North Village and Tomoana were specifically mentioned.

When asked about the sufficiency of business land in Napier and Hastings, respondents broadly agreed that there is sufficient retail space, but commercial land (for office activities) is in short supply. The responses about industrial land were varied. The general view was that Hastings has sufficient industrial land over the short term, but the supporting infrastructure is lacking. Similarly, Napier was perceived to have sufficient zoned land but infrastructure considerations limited development. Another respondent is of the view that over the longer term, more land along the rail corridor between Tomoana to Whakatu, should be zoned industrial. Another developer remarked, "*if more land is made available for industrial too soon then we won't see enough density of development in the existing/most recently rezoned industrial areas (Irongate & Omahu North). The scale of any newly zoned industrial land should be well thought out - don't release too much all at once.*"

A general observation is, that developers are eager to engage with Councils on planning for the future to ensure economic development is not hindered by a lack of business land capacity.

4.4.1 Intentions survey

The Intension Survey was administered by HDC, and a summary of the responses was provided to M.E. Table 4-6 presents a summary of the relevant responses. It is beyond this project scope to provide a full discussion of the survey. It is important to note that the survey was conducted at the beginning of 2022, before the strong inflation figures became very visible, and the Reserve Bank accelerating the interest rate tightening cycle.

Table 4-6: Intentions Survey Summary (selected variables)

Timeframe	Development Plans		Ha
0-1 years	Developing for Own Use	Expansion from within Hawke's Bay	5.0
		Relocation/Expansion from outside of HB	2.8
	Developing for Another Party	Expansion from within Hawke's Bay	-
		Relocation/Expansion from outside of HB	1.3
		Total	**9.1**
2-3 years	Developing for Own Use	Expansion from within Hawke's Bay	-
		Relocation/Expansion from outside of HB	2.0
		Undetermined	1.1
	Developing for Another Party	Expansion from within Hawke's Bay	-
		Relocation/Expansion from outside of HB	-
		Undetermined	18.0
		Total	**21.1**
4-5 years	Developing for Own Use	Expansion from within Hawke's Bay	-
		Relocation/Expansion from outside of HB	-
		Undetermined	1.2
	Developing for Another Party	Expansion from within Hawke's Bay	-
		Relocation/Expansion from outside of HB	-
		Total	**1.2**

Source: HDC Intensions Survey Results Summary

The survey results were considered when assessing the current vacant capacity and the expected short term demand for industrial land. Importantly, the respondents indicated that there is some uncertainty about their plans, and several factors such as demand, sale price, market trends will impact their decisions.

Respondents were asked about their development plans over the next five years, including whether:

- they are developing for themselves,
- developing for another party, or
- planning to sell/subdivide in the near future.

We consider 'developing for own use' and 'developing for another party' as relevant. Land which will be sold or subdivided is assumed to be vacant, and therefore part of the vacant capacity assessment.

The survey asked about the characteristics of the end activity, using the following options:

- Relocation from within Hawke's Bay,
- Expansion from within Hawke's Bay,
- Relocation/expansion of a business from outside Hawke's Bay, and
- Undetermined.

To estimate the net impact of the development intentions, i.e. how much industrial land would be taken up if owners' plans came to fruition, relocation from within Hawke's Bay was excluded. It is assumed that when a business relocates, it takes up a vacant site, but simultaneously frees up land on the site it previously occupied. That is, the relocation is to another site. We were unable to determine what the impact of these relocations were, i.e. whether businesses that relocate take up more or less space in their new location (this was another reason for excluding this segment).

Based on the responses, activity in 2022 (0-1 years) will be strong, with an intended 9.1ha of industrial land being developed. While the 2-3 years period is showing very strong 'demand' (21.1ha), it has to be treated with caution. The specific responses relating to the 21.1ha, reveals great uncertainty surrounding the developer's intentions. In addition to the uncertainty whether they can find a buyer/occupier for the land,

there is the matter of water availability in the location, which is likely to constrain development. It is plausible that this capacity might only be taken up later, given the current economic outlook and uncertainty about the near future. Further, the survey reflects individual responses and sums the intentions and does not reflect market visibility about what others are doing. For example, if a development is taking place, then a developer might wait until a future date before commencing his/her development. **Considering the large jump in intentions for the 2-3 year period suggests that there could be 'wait and see' theme over the short term.**

Future (4-5 years) development intentions are uncertain. Based on the survey results it appears that 1.2 ha of industrial land is intended to be developed. The survey does not provide insight into the specific markets that would be targeted and the current economic environment is adding uncertainty.

5 Sufficiency assessment

The sufficiency assessment combines the estimated demand and the supply of land using a qualitative approach. The net position, of supply vs demand, is interpreted in terms of sufficiency. The sufficiency assessment provides information about the degree to which the Section 3.3 of the NPSUD is satisfied. The section indicates that there has to be "*at least sufficient development capacity in its region or district to meet the expected demand for business land*". The capacity needs to be assessed in terms of:

- Plan enabled,
- Infrastructure ready,
- Suitable to meet the demands of different business sectors, and,
- Meets the expected demand plus the appropriate competitiveness margin.

In practice, that means that the land required is zoned and feasible for the next 10 years (short to medium term) and has been identified in the various plans and strategic documents over the next 30 years (the long term).

The sufficiency assessment presented below draws from earlier sections about the capacity, demand and the suitability. The assessment includes the competitiveness margin as stipulated by the NPSUD.

We note that the forward-looking demand is based on broad, trend-growth continuing and that the recent (very) strong lift in activity over the recent past will be tempered over the short term. For the short term outlook, the anticipated growth is tempered by rising interest rate environment, supply chain constraints, declining confidence levels and global geo-political uncertainties. These uncertainties are factored into the assessment and the short-term outlook, and growth pathway over the next 3-5 years. Based on historic trends, (section 2), a rebound could be expected after a slowdown and **we strongly advise the Councils to continue to monitor development activity over the short-medium timeframe.**

5.1 Napier City – Sufficiency Assessment

The sufficiency of land provision is illustrated using several tables highlighting the demand, capacity and the suitability. The different land uses are discussed separately using a mix of land area (ha) and GFA to illustrate the relative positions over time.

5.1.1 Industrial sufficiency

The industrial sufficiency is presented at a zone level. These zones are broadly location (area) specific except for the main industrial zone that covers Pandora, Awatoto and Onekawa. Similarly, the suburban industrial zone covers several smaller areas throughout the city. Table 5-1 summarises the results of the sufficiency assessment, and it reports:

- The demand (base scenario) for land across the different zones, and over time
- The demand with the competitiveness margin included

- The capacity that remains after the vacant land has been developed. This step includes a spatial allocation of demand across zones to allow for situations where there is demand for space in a specific zone, but that zone is at capacity (no spare capacity). 'Wet industry' demand to allocated to zones that can accommodate wet industries.
- The sufficiency situation for the base and high scenarios are shown. The sufficiency compares the situation for the 'without' and 'with' competitiveness margin applied.
- The available capacity would need to be assessed from an infrastructure capacity perspective. The available information needs to be expanded before the degree to which infrastructure supports (or not) development can be determined. This would need to include stormwater and consider the aspects like the water table and low-lying areas.

Table 5-1: Napier Industrial Sufficiency

		Main Industrial	Business Park Zone	Airport Zone	Deferred Airport Zone	Suburban Industrial Zone	Mixed Use and West Quay Waterfront Zones	Port and Marine Zones	Wastewater Treatment Zone	TOTAL
Vacant Capacity (pre-dvlpmt)	Crnt	15.2	-	3.8	41.5	0.1	1.0	1.0	-	62.6
	7y	11.3	-	3.4	41.4	0.0	0.8	0.9	-	57.
	20y	5.0	-	2.4	38.2	0.0	0.6	0.4	-	46.6
Demand (base)	3y	3.4	0.4	0.4	0.0	0.1	0.5	0.0	0.0	**4.9**
	7y	7.8	0.8	1.0	0.0	0.3	1.1	0.0	0.1	**11.1**
	20y	22.0	1.9	2.8	0.1	0.8	3.0	0.2	0.2	**31.0**
Demand + Margin (base)	3y	4.1	0.4	0.5	0.0	0.2	0.6	0.0	0.0	**5.9**
	7y	9.4	1.0	1.2	0.0	0.4	1.3	0.1	0.1	**13.4**
	20y	25.2	2.2	3.2	0.1	0.9	3.5	0.2	0.3	**35.7**
Capacity/ balance post devmt.	3y	15.2	-	3.8	41.5	0.1	1.0	1.0	na	**62.6**
	7y	11.3	-	3.4	41.2	0.0	0.8	0.9		**57.5**
	20y	5.0	-	2.4	38.2	0.0	0.6	0.4		**46.6**
Sufficiency (Base Sc)	3y	Ok	Insuf.	Ok	Ok	Insuf.	Ok	Ok	Ok	**Ok**
	7y	Ok	Insuf.	Ok	Ok	Insuf.	Insuf.	Ok	Ok	**Ok**
	20y	Insuf.	Insuf.	Insuf.	Ok	Insuf.	Insuf.	Ok	Ok	**Ok**
Sufficiency (High Sc)	3y	Ok	Insuf.	Ok	Ok	Insuf.	Ok	Ok		**Ok**
	7y	Insuf.	Insuf.	Ok	Ok	Insuf.	Insuf.	Ok		**Ok**
	20y	Insuf.	Insuf.	Insuf.	Ok	Insuf.	Insuf.	Ok		**Ok**

The key observations about the sufficiency situations across Napier are:

1. At a total, city-wide level, there is sufficient industrial (plan enabled) capacity to accommodate the growth (demand). This allows for a transfer/relocation of the demand from zones without capacity to other zones with capacity. This is the situation for the base and high scenarios.
2. At a zone level, capacity constraints emerge over the long term, especially for the main industrial zone where a shortfall is identified for the base and high scenarios. This growth is assumed to be

accommodated in the Deferred Airport Zone. Similarly, the capacity constraints would emerge over the medium and long term for the Mixed Use and West Quay Waterfront Zones.

3. Some of the zones are already showing capacity constraints. The Business Park Zone, and the Suburban Industrial Zones are already at capacity (based on the small are that is included in the assessment i.e., the entire 44ha is not included in the assessment as capacity. We understand that the area is not available for development because alternative (non-industrial) uses are being explored. The overall demand (growth) in these zones is generally low, reflecting the existing constraints.
4. Over the long term, the growth in local industrial activity is expected to see pressures in the Main industrial zone, as well as the Airport zone, regardless of which scenario (base or high) is considered.

A critical assumption of the capacity assessment is that the Deferred Airport zone is part of the available capacity[28]. The sufficiency assessment returns materially different outcomes if this piece of land is excluded. If it is excluded, then there is insufficient capacity at an overall (total) level over the long term. Under this assumption, there is no zone with sufficient capacity over the long term. Further, if the high scenario is assessed, then the sufficiency assessment falls down when the competitiveness margin is also included. If the Airport Deferred zone is excluded (under the base scenario), then 30.5ha of plan enabled capacity would be required to ensure that compliance with the NPSUD is achieved. The interplays between the industrial markets of Napier and Hastings are worth mentioning as there is a degree of substitutability, suggesting that This means that if the Napier locations are at capacity, and not further investments can be accommodated, then a Hastings location is likely to be considered.

The sufficiency assessment would need to be updated to reflect infrastructure constraints and investment programmes.

5.1.2 Commercial and Retail sufficiency

This section compares the demand for commercial and retail GFA in Napier, and draws in the information presented earlier in sections 3.2.2, and 4.1.2.

The sufficiency assessment started by considering only vacant capacity, but clear pressures were identified. The sufficiency assessment (Table 5-1) revealed insufficient capacity over the long term, even under the base scenario excluding the competitiveness margin. Therefore, the assessment includes redevelopment but the uncertainties around this approach should be acknowledged because the ease/complexity of redevelopment is unknown. A scenario approach is used to illustrate how much of the redevelopment activity would need to take place for the sufficiency criteria to be achieved. Two shares were considered - 5% and 10% (of the redevelopment capacity is taken up). Under the 5% scenario, development capacity (potential supply) is lifted to 25.6ha (from 20.2ha). Under this scenario, there is sufficient capacity to accommodate the growth over the short and medium term, but there are constraints over the long terms. This is the case with the competitiveness margin included and under the high scenario. The base scenario returns sufficient capacity over the long term.

If 10% of the redevelopment capacity is realised, it lifts total capacity to 30.9ha. There would be sufficient capacity in the commercial and retail zones, over the long term under all scenarios, and with the competitiveness margin included. Sensitivity testing shows that the required share of redevelopment capacity that is needed to return a 'sufficient' result is around 7%.

[28] Based on capacity information supplied by Napier City Council.

This suggests, Council should closely monitor the level of redevelopment capacity being taken up by the market (being developed). The amount of redevelopment capacity that is taken up over the short, medium and long term need to be viewed as part of the total uptake that includes vacant uptake. That is, the relative shares of uptake taking place on vacant land, versus redevelopment.

Figure 5-1: Napier Commercial and Retail Sufficiency

		Vacant Capacity (only)		Vacant + 5% Redevelopment Capacity		Vacant + 10% Redevelopment Capacity	
		Base	High	Base	High	Base	High
Demand	3y	2.5	3.1	2.5	3.1	2.5	3.1
	7y	5.5	6.8	5.5	6.8	5.5	6.8
	20y	13.4	17.8	13.4	17.8	13.4	17.8
Demand + Margin	3y	3.0	3.7	3.0	3.7	3.0	3.7
	7y	6.6	8.1	6.6	8.1	6.6	8.1
	20y	15.4	20.5	15.4	20.5	15.4	20.5
Capacity after development	3y	17.8	17.1	22.4	0.0	27.8	0.0
	7y	12.2	10.3	15.7	0.0	21.0	0.0
	20y	0.0	0.0	0.0	0.0	3.2	0.0
Sufficiency - Excl Margin	3y	Ok	Ok	Ok	Ok	Ok	Ok
	7y	Ok	Ok	Ok	Ok	Ok	Ok
	20y	Insuf.	Insuf.	Ok	Insuf.	Ok	Ok
Sufficiency - Incl Margin	3y	Ok	Ok	Ok	Ok	Ok	Ok
	7y	Ok	Ok	Ok	Ok	Ok	Ok
	20y	Insuf.	Insuf.	Ok	Insuf.	Ok	Ok

It is important to note that this sufficiency assessment was conducted at a city-wide level because the location of office and retail activities are driven by a range of factors. Demand for retail and commercial GFA is largely generated close to market, i.e. driven by residential growth and the location of households, over time. It would not be appropriate to use current spatial distribution of retail and commercial employment to estimate future demand for commercial and retail GFA. But, the current patterns are aligned with existing residential patterns and provide a useful starting point for future analysis. Demand is generated by households and the development patterns are related to residential and intensification growth. In turn, this influences the spatial patterns of commercial and retail development uptake.

While not shown in the above tables, around 60% of vacant capacity is in the Large Format Retail zone. Considering the nature of this land use, its location and the relationship with other activities (e.g. commercial and retail), means that this zone's vacant capacity is masking the true available capacity. If this vacant capacity is ignored, then the redevelopment activity that is needs ensure that there is 'sufficient' GFA is estimated at 21%.

5.2 Hastings District – Sufficiency Assessment

The results of the sufficiency assessment for the Hastings district are summarised under three separate headings.

5.2.1 Industrial sufficiency

It is important to ensure that sufficient industrial land is available, in appropriate locations, to support economic growth and activity. Table 5-2 presents the sufficiency assessment at a zone level, comparing available capacity with demand for industrial land. Demand for the base scenario is presented including and excluding the competitiveness margin. The spatial distribution of demand is driven by current land use patterns. In addition, the results of the sufficiency assessment under the high scenario are reported at the bottom of the table.

Table 5-2: Hastings Industrial Sufficiency

		General Industrial	Tomoana Food Industry	Havelock Nth Village: Industrial, Business	Light Industrial	Whirinaki Industrial	TOTAL
Vacant Capacity (pre-development)	Current	198.9	8.3	1.0	0.0	2.2	210.3
	7y	187.3	8.0	0.8	0.0	0.1	196.3
	20y	205.5	7.5	0.6	0.0	0.0	213.5
Remaining capacity		133.5	5.8	0.4	0.0	0.0	139.7
Demand (excl margin)	3y	10.9	0.2	0.2	0.7	2.1	14.1
	7y	25.7	0.5	0.5	1.6	4.5	32.7
	20y	58.2	1.3	1.0	3.9	9.4	73.9
Demand (incl margin)	3y	13.0	0.3	0.2	0.8	2.5	16.9
	7y	30.8	0.6	0.5	1.9	5.4	39.3
	20y	67.0	1.5	1.2	4.5	10.8	85.0
Sufficiency* (Base Scenario)	3y	Ok	Ok	Ok	Insuf.	Insuf.	Ok
	7y	Ok	Ok	Ok	Insuf.	Insuf.	Ok
	20y	Ok	Ok	Insuf.	Insuf.	Insuf.	Ok
Sufficiency * (High Scenario)	3y	Ok	Ok	Ok	Insuf.	Insuf.	Ok
	7y	Ok	Ok	Ok	Insuf.	Insuf.	Ok
	20y	Ok	Ok	Insuf.	Insuf.	Insuf.	Ok

**Includes margin for sufficiency assessment.*

The key observations about the sufficiency of industrial zoned land, across Hastings are:

1. Under base scenario settings, around 120ha will be needed over the next 30 years to accommodate the projected employment growth. Under a high scenario setting, this increases to 151ha over the next 30 years. If the competitiveness margin is included, 141ha and 177ha, respectively, would be required.
2. In Hastings an estimated 210ha of land has been identified as currently vacant and available for industrial purposes (i.e. zoned/plan enabled). Council's urban development strategy identifies a further 50ha at Tomoana over the long term, which increases industrial (plan enabled) capacity to 260ha by 2051. We understand that the future use of this area will be subjected to review as part of the Future Development Strategy process.
3. **This suggests at a total, district-wide, level there is sufficient industrial (plan enabled) capacity to accommodate the employment growth (demand) even if higher than expected growth eventuates. However, this would need to be viewed against infrastructure readiness as well as other considerations like water availability (ability to secure consents).**
4. The industrial land available to be developed is more than demand requires at the district level, even when the competitiveness margin is included. However, supply is concentrated in General Industrial zone, so **at a finer zone level, there are capacity constraints.** This is in all but the General Industrial and Tomoana Food Industry zones.
5. According to Council's estimates, the Light Industrial zone currently has very little vacant capacity (300sqm located in Hastings Central). The estimates (based on sectoral employment growth, and existing spatial patterns) suggest that demand for this location is exceeding the availability capacity even in the short term. However, other location options appear to be available (in other zones).
6. In the Whirinaki Industrial zone, capacity constraints emerge over the medium and long term even if the competitiveness margin is excluded. Including the margin as per NPSUD requirements, reveals a shortage of capacity in the short term. In the event of higher than anticipated growth (i.e. the high scenario), the shortage in this zone is more acute. Under a high scenario, Whirinaki Industrial zone faces shortages in the short term, even when the margin is excluded. Further, the area is a larger single use site and we understand that the area included in the capacity consideration is only the readily developable portion. It will be within the owner's capability to add additional land to the industrial portion of the site if he/she so wishes'
7. Havelock North Industrial and Business, is expected to see a shortage over the long term, regardless of whether a margin is applied or not, and under both the base and high scenarios. Considering the proximity of Havelock North to Hastings, the demand could (theoretically) be accommodated elsewhere in the district such as Irongate or Whakatu, assuming that these locations would be appropriate, and comparable to the Havelock North Industrial and Business zone.

5.2.2 Commercial and Retail sufficiency

Like Napier, the sufficiency assessment firstly assumed that only vacant capacity is available to satisfy commercial and retail GFA demand. However, the shortfall in Hastings is more acute than in Napier. The assessment shows there is sufficient commercial and retail plan enabled GFA over the short term (including when the competitiveness margin is incorporated), but shortfalls emerge over the medium and long term.

Table 5-3 presents the results of the assessment, including two scenarios where a share (20% and 25%) of the redevelopment capacity is taken up.

Table 5-3: Hastings Commercial and Retail Sufficiency

		Vacant Capacity		Vacant + 20% Redevelopment Capacity		Vacant + 25% Redevelopment Capacity	
		Base	High	Base	High	Base	High
Demand	3y	1.7	2.2	1.7	2.2	1.7	2.2
	7y	3.5	4.5	3.5	4.5	3.5	4.5
	20y	8.0	11.7	8.0	11.7	8.0	11.7
Demand + Margin	3y	2.1	2.6	2.1	2.6	2.1	2.6
	7y	4.2	5.4	4.2	5.4	4.2	5.4
	20y	9.2	13.4	9.2	13.4	9.2	13.4
Capacity after development	3y	1.5	1.1	18.0	17.6	22.1	21.7
	7y	0.0	0.0	14.5	13.1	18.7	17.2
	20y	0.0	0.0	6.5	1.4	10.6	5.5
Sufficiency – Excl Margin	3y	Ok	Ok	Ok	Ok	Ok	Ok
	7y	Insuf.	Insuf.	Ok	Ok	Ok	Ok
	20y	Insuf.	Insuf.	Ok	Ok	Ok	Ok
Sufficiency – Incl Margin	3y	Ok	Ok	Ok	Ok	Ok	Ok
	7y	Insuf.	Insuf.	Ok	Ok	Ok	Ok
	20y	Insuf.	Insuf.	Ok	Insuf.	Ok	Ok

If 20% of redevelopment capacity is assumed to be developed, then capacity across Hastings's commercial and retail zones, is lifted to 19.7ha (from 3.2ha). Under such a scenario, insufficient capacity remains over the long term and under the high growth pathway (including the competitiveness margin).

Under a scenario where 25% of the redevelopment capacity is realised, GFA capacity lifts to 23.9ha. There would then be sufficient capacity, over the long term under all scenario settings. Sensitivity testing showed, ~21% is the required level of development (of the redevelopment capacity) over the long term.

Like for Napier, the sufficiency assessment in Hastings was conducted at the district-wide level.

The results indicate the level of business capacity (commercial and retail) that is available for both Napier and Hastings, if all vacant business-zoned land was occupied by business activities.

However, there is a complicating matter in some locations where residential and business activity can co-locate (for example Ahuriri). Residential activity (household units) has permitted status in several other[29] business zones. While it is generally recognised that retail uses would take preference over residential activity on the ground floor in these zones, there could be competition for upper-floor space between residential and office activities. If residential capacity displaces business capacity, then there could be a need for additional

[29] Napier: Mixed Use zone, Art Deco Quarter zone, Fringe Commercial zone, Suburban Commercial zone, Foreshore Commercial zone and Inner City Commercial zone. Hastings: Hastings Commercial Service zone, Hastings Central Residential Commercial zone, Havelock North Village Centre Mixed Use zone, Clive Suburban Commercial zone, Haumoana - Te Awanga Suburban Commercial zone, and Waimarama Suburban Commercial zone.

capacity to accommodate employment growth. The size of residential development that displaces commercial activities (and uses available capacity) will determine how much additional capacity would be needed. Councils should monitor this.

While the assessment did not differentiate between commercial and retail capacity, there was broad consensus during the stakeholder engagement that there is sufficient retail space, but commercial land (for office activities) is lacking. The analysis shows that this is the case if redevelopment capacity is excluded. The vacant capacity is limited, and over the long-term redevelopment capacity will need to be developed to meet overall demand levels.

5.3 Conclusion

In most, if not all cases, local authorities have provided sufficient business land capacity to exceed the requirements at the territorial authority-wide level over the 10-year period. Most have ample supply for the full 30-year period, available today or planned for the future. There are some localised insufficiencies and other areas where margins are close, but overall there is more than enough supply.

The limited information about infrastructure capacity is a gap in the business land sufficiency assessment. This gap relates to the degree to which the growth can be accommodated within existing (and planned) infrastructure constraints. The assessment used available information, but additional work is needed to ensure to lift the knowledge about local infrastructure capacity constraints.

6 Concluding remarks

M.E have undertaken a BCA for the urban areas of Napier and Hastings, to meet the key areas required under the NPS-UD for Napier and Hastings. Ensuring that there is sufficient land capacity to support the local market to deliver the required business space is important because it contributes to community wellbeing through enabling employment.

This change in employment is core in estimating the land and floorspace requirements to carry out daily business activities. In other words, the future economic outlook is translated into employment numbers, and in turn, these were used to estimate the business land requirements. The assessment gives a positive demand outlook for industrial, commercial and retail sectors projected for Napier and Hastings area, across the assessment period.

The net position of supply vs demand according to the measures of plan enabled, infrastructure ready, demand requirements of the associated businesses, suggest sufficiency for the business zone availability to service its short and medium-term demands. However, over the longer terms, some pressures emerge in some zones. The current economic outlook is clouded by global geopolitical shifts, and the tightening business cycle. The trends over the short term will influence the relative sufficiency levels for the medium term (10 years), and it is suggested that the local trends be carefully monitored. In addition, infrastructure capacity and its ability to support growth needs to be assessed.

7 Appendices

Appendix 1: Overview of the Policy Framework

The following is a highly summarised overview of the NPS-UD policy framework. The NPS-UD contains a number of objectives and policies that aim to meet those objectives. This report aims to assist in meeting policies under Subpart 3 – Evidence-based decision making and Subpart 5 – Housing and Business Development Capacity Assessment (HBA). Under clause 3.10 Assessing demand and development capacity:

(1) Every local authority must assess the demand for housing and business land in urban environments, and the development capacity that is sufficient to meet that demand in its region or district in the short term, medium term, and long term, and

(2) Tier 1 and tier 2 local authorities comply with subclause (1) in relation to tier 1 and tier 2 urban environments by preparing and publishing an HBA as required by subpart 5.

As determined by subpart 5 – Housing and Business Development Capacity Assessment (HBA), this report aims to assist fulfil subclauses 3.28 Business land demand assessment, 3.29 Business land development capacity assessment, and 3.30 Assessment of sufficient development capacity for business land.

Clause 3.28 Business land demand assessment requires:

1) Every HBA must estimate, for the short term, medium term, and long term, the demand from each business sector for additional business land in the region and each constituent district of the tier 1 or tier 2 urban environment.

2) The demand must be expressed in hectares or floor areas.

3) For the purpose of this clause, a local authority may identify business sectors in any way it chooses but must, as a minimum, distinguish between sectors that would use land zoned for commercial, retail, or industrial uses.

4) The HBA for a tier 1 urban environment must:

a) set out a range of projections of demand for business land by business sector, for the short term, medium term, and long term; and

b) identify which of the projections is the most likely in each of the short term, medium term, and long term; and

c) set out the assumptions underpinning the different projections and the reason for selecting which is the most likely; and

d) if those assumptions involve a high level of uncertainty, the nature and potential effects of that uncertainty.

Clause 3.29 Business land development capacity assessment requires:

1) Every HBA must estimate the following, for the short term, medium term, and long term, for the region and each constituent district of the tier 1 or tier 2 urban environment:

a) the development capacity (in terms of hectares or floor areas) to meet expected demand for business land for each business sector, plus the appropriate competitiveness margin; and

b) of that development capacity, the development capacity that is:

i) plan-enabled; and

ii) plan-enabled and infrastructure-ready; and

iii) plan-enabled, infrastructure-ready, and suitable for each business sector.

2) *A local authority may define what it means for development capacity to be "suitable" in any way it chooses, but suitability must, at a minimum, include suitability in terms of location and site size.*

Clause 3.30 Assessment of sufficient development capacity for business land requires:

1) *Every HBA must clearly identify, for the short term, medium term, and long term, whether there is sufficient development capacity to meet demand for business land in the region and each constituent district of the tier 1 or tier 2 urban environment.*
2) *The requirements of subclause (1) must be based on a comparison of:*
   a) *the demand for business land referred to in clause 3.28 plus the appropriate competitiveness margin; and*
   b) *the development capacity identified under clause 3.29.*
3) *If there is any insufficiency, the HBA must identify where and when this will occur and analyse the extent to which RMA planning documents, a lack of development infrastructure, or both, cause or contribute to the insufficiency.*

Appendix 2: Introduction to the EFM

The EFM is a multi-regional scenario model which traces the economic implications of growth by economic sector and households over a thirty-year timeframe. The model adopts a 'systems' perspective in its evaluation of the impacts of growth, acknowledging that many of the issues we face today are highly interconnected and complex. It uses an integrated approach to assess the possible implications of plausible scenarios, given a range of assumptions. The model helps to identify possible constraints and limiting factors which may result from economic growth using 'what if' scenario analysis.

The EFM is based on a multi-regional economic input-output table, capturing the impacts of growth on the study area, as well as on the wider regional and national economies. The model uses input-output mathematics to capture not only the direct effects of final demand growth in each sector, but also the indirect (i.e. upstream flow-on) and induced (i.e. resulting from consumer spending) effects associated with this growth. The impacts resulting from each scenario are compared with the 'baseline' Business-As-Usual (BAU) scenario, which is established by estimating sectoral domestic and export final demand, and by developing quantitative projections of population and export growth. This baseline analysis can be augmented by including qualitative information on prevailing or imminent economic conditions gathered through literature searches, industry reports, media commentaries, and dedicated workshops and interviews with key regional stakeholders.

The model analyses the economic impacts for 48 industries within the region, focussing on key industries. (These industries can be disaggregated to 106 sectors and can be linked to the 6 Digit ANZSIC Business Directory's 500 sectors).

Results from the quantitative econometric projections, literature reviews and interviews are combined using the EFM, to project the full 'business as usual' evaluation of economic growth for the region. The model projects domestic and export market growth, and the impacts of changes to the region's population and business requirements. For example, industries driven by local demand are primarily influenced by changes in the size of the population, and its composition. The Council's population growth projections (or StatsNZ's) could be used to estimate the effects on the education, health and community services sectors, and growth of the accommodation, restaurants and bars, cultural and recreational services, and retail trade sectors. Industries driven by international demand are analysed using quantitative projections of export growth, for each industry. These are based on time-series analysis of commodity outputs and employment growth rates. Industries driven by intermediate demand (such as road transport and services to agriculture) are captured via flow-on implications from growth of the key industries. Technological progress and changes in labour productivity are also accounted for.

We note that the EFM reflects a set of assumptions that can be adjusted to assess the outcomes relative to the base scenario. The outputs are then compared to reflect the relative change. Different component parts can be adjusted to reflect the scenarios, including: household consumption (based on population and population ageing), international exports, inter-regional exports, gross fixed capital formation (GFKF), and changes in inventory.

Appendix 3: Sector-land use (space-type) relationships

Sector	Office---Commercial	Office---Retail	Shops---Commercial	Shops---Retail	Accommodation	Warehouse	Factory	Yard---Commercial	Yard---Industrial	Other Built---Commercial	Other Built---Industrial	Education	Outdoor---Commercial	Outdoor---Industrial	Outdoor---Rural
Horticulture and fruit growing	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	95%
Sheep, beef cattle and grain farming	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	95%
Dairy cattle farming	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	95%
Poultry, deer and other livestock farming	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	95%
Forestry and logging	0%	0%	0%	0%	0%	0%	8%	0%	15%	0%	0%	0%	0%	0%	77%
Fishing and aquaculture	0%	0%	0%	0%	0%	19%	0%	0%	0%	0%	47%	0%	0%	0%	35%
Agriculture, forestry and fishing support services	20%	15%	0%	0%	0%	15%	10%	0%	0%	0%	0%	0%	40%	0%	0%
Mining, quarrying, exploration and other mining support services	0%	0%	0%	0%	0%	0%	10%	0%	20%	0%	0%	0%	70%	0%	0%
Oil and gas extraction	0%	0%	0%	0%	0%	0%	10%	0%	20%	0%	0%	0%	70%	0%	0%
Meat and meat product manufacturing	0%	0%	0%	0%	0%	20%	80%	0%	0%	0%	0%	0%	0%	0%	0%
Dairy product manufacturing	0%	0%	0%	0%	0%	10%	90%	0%	0%	0%	0%	0%	0%	0%	0%
Other food manufacturing	0%	0%	0%	0%	0%	10%	80%	0%	10%	0%	0%	0%	0%	0%	0%
Beverage and tobacco product manufacturing	0%	0%	0%	0%	0%	20%	80%	0%	0%	0%	0%	0%	0%	0%	0%
Textile, leather, clothing and footwear manufacturing	0%	0%	0%	0%	0%	10%	90%	0%	0%	0%	0%	0%	0%	0%	0%
Wood product manufacturing	2%	0%	0%	0%	0%	11%	60%	0%	28%	0%	0%	0%	0%	0%	0%
Pulp, paper and converted paper product manufacturing	2%	0%	0%	0%	0%	20%	63%	0%	16%	0%	0%	0%	0%	0%	0%
Printing	2%	0%	0%	0%	0%	21%	78%	0%	0%	0%	0%	0%	0%	0%	0%
Petroleum and coal product manufacturing	2%	0%	0%	0%	0%	11%	20%	0%	68%	0%	0%	0%	0%	0%	0%
Chemical, polymer and rubber product manufacturing	2%	0%	0%	0%	0%	20%	63%	0%	16%	0%	0%	0%	0%	0%	0%
Non-metallic mineral product manufacturing	2%	0%	0%	0%	0%	11%	50%	0%	38%	0%	0%	0%	0%	0%	0%
Primary metal and metal product manufacturing	2%	0%	0%	0%	0%	6%	60%	0%	33%	0%	0%	0%	0%	0%	0%
Fabricated metal product manufacturing	2%	0%	0%	0%	0%	25%	48%	0%	25%	0%	0%	0%	0%	0%	0%
Transport equipment manufacturing	2%	0%	0%	0%	0%	11%	68%	0%	20%	0%	0%	0%	0%	0%	0%
Machinery and equipment manufacturing	2%	0%	0%	0%	0%	11%	68%	0%	20%	0%	0%	0%	0%	0%	0%
Furniture and other manufacturing	2%	0%	0%	0%	0%	11%	68%	0%	20%	0%	0%	0%	0%	0%	0%
Electricity generation and supply	9%	0%	0%	0%	0%	14%	0%	0%	18%	0%	58%	0%	0%	0%	0%
Gas supply	0%	0%	0%	0%	0%	15%	0%	0%	20%	0%	65%	0%	0%	0%	0%
Water, sewerage, drainage and waste services	2%	0%	0%	0%	0%	15%	0%	0%	27%	0%	56%	0%	0%	0%	0%
Construction	5%	5%	0%	0%	0%	10%	5%	0%	15%	30%	30%	0%	0%	0%	0%
Wholesale trade	5%	0%	0%	0%	0%	95%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Retail Trade	0%	0%	66%	0%	0%	0%	0%	34%	0%	0%	0%	0%	0%	0%	0%
Accommodation and food services	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Road transport	3%	0%	0%	0%	0%	10%	10%	0%	78%	0%	0%	0%	0%	0%	0%
Other transport, postal, courier, transport support and warehousing services.	5%	0%	0%	0%	0%	21%	10%	0%	24%	0%	40%	0%	0%	0%	0%
Air and space transport	10%	0%	0%	0%	0%	10%	40%	0%	30%	0%	10%	0%	0%	0%	0%
Information media and telecommunications	60%	0%	0%	0%	0%	25%	15%	0%	0%	0%	0%	0%	0%	0%	0%
Finance	95%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%
Insurance and superannuation funds	95%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%
Auxiliary finance and insurance services	95%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%
Rental, hiring and real estate services	10%	10%	5%	0%	0%	15%	0%	15%	10%	5%	0%	0%	0%	0%	30%
Ownership of owner-occupied dwellings	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Professional, scientific, technical, administrative and support services	45%	0%	42%	0%	0%	0%	0%	0%	0%	13%	0%	0%	0%	0%	0%
Central government administration, defence and public safety	35%	0%	0%	0%	0%	15%	0%	0%	15%	20%	0%	0%	15%	0%	0%
Local government administration	50%	0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%	0%
Education and training	25%	0%	20%	0%	0%	0%	0%	0%	0%	0%	0%	55%	0%	0%	0%
Health care and social assistance	20%	20%	20%	0%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%	0%
Arts and recreation services	25%	0%	29%	0%	0%	3%	3%	0%	0%	40%	0%	0%	0%	0%	0%
Personal and other services	11%	0%	39%	0%	0%	14%	10%	0%	0%	26%	0%	0%	0%	0%	0%

Employment outlook – sector specific comments

Forestry and logging – the wood availability forecasts published by MPI in 2021 shows a levelling off of wood in all four modelled scenarios from 2040 onwards. Some growth expected in the near term (2021-2029), then stabilizing over the medium to long term. No sign of the exponential growth.

Fishing and Aquaculture – growth but no specific/large developments in this sector in Hawke's Bay, that we are aware of. According to MPI's national situation and outlook for the primary sector[30] seafood export revenue is forecast to begin recovering in 2022, as the food service industry starts to reopen, though it will take a number of years to return to previous highs.

Meat product manufacturing – Market research report by Ibisworld[31] on meat processing in NZ, highlighted the weakened trading conditions as a result of the pandemic, which are anticipated to reduce global demand for industry goods over the coming year. As a result, industry exports (and revenue) have fallen consecutively for the two years through 2021-22. This is expected to continue in the short term, but the sector is expected to show strong growth over the long term.

[30] https://www.mpi.govt.nz/dmsdocument/45451-Situation-and-Outlook-for-Primary-Industries-SOPI-June-2021
[31] https://www.ibisworld.com/nz/industry/meat-processing/90/