City of Moreton Bay
Urban Areas Employment Lands
Investigation (UAELI)
Land Supply Update 2024





'Gura Bulga'

Liz Belanjee Cameron

'Gura Bulga' – translates to Warm Green Country. Representing New South Wales. Brown Country. Representing Victoria.



'Dagura Buumarri' Liz Belanjee Cameron

'Dagura Buumarri' – translates to Cold



'Gadalung Djarri'

Liz Belanjee Cameron

'Gadalung Djarri' – translates to Hot Red Country. Representing Queensland.

Ethos Urban acknowledges the Traditional Custodians of Country throughout Australia and recognises their continuing connection to land, waters and culture.

We pay our respects to their Elders past, present and emerging.

In supporting the Uluru Statement from the Heart, we walk with Aboriginal and Torres Strait Islander people in a movement of the Australian people for a better future.

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Executive Summary

Background

1. Moreton Bay City Council (Council) has engaged Ethos Urban to prepare the City of Moreton Bay (CMB) Urban Areas Employment Lands Investigation (UAELI) Industrial Land Supply Update 2024 (the Project). The Project updates the demand and supply modelling outlined in the original UAELI 2022 and provides a contemporary baseline to inform the planning of industrial land in CMB.

Industrial Land and Policy Context

- 2. CMB's industrial supply framework comprises the 22 industrial locations identified in original UAELI 2022. The total zoned area remains the same, apart from adjustments to the following precincts:
 - Elimbah East and North East Business Park (NEBP), due to approved variations.
 - Waraba (formerly Caboolture West), to account for the Bruce Highway Western Alternative.
- 3. A review of relevant strategic policies highlights that:
 - Significant population growth is anticipated in SEQ and CMB and there is a need to support new economic opportunities through prudent planning and infrastructure provision.
 - Diversifying the economy and leveraging competitive advantages are key economic development priorities for CMB.
 - New industrial areas are required in CMB to cater for population and employment growth.

Economic Context and Demand Drivers

- 4. CMB is Australia's third largest municipality (by population) and accommodated some 510,100 persons in 2023. Its population is projected to increase to approximately 890,190 persons by 2053¹, representing average growth of +12,670 persons per annum (pa) over the period.
- 5. CMB supported approximately 163,230 local jobs in 2023 (year ending June). Health care and social assistance (32,510 workers, or 19.9%), retail trade (20,240 workers or 12.4%), education and training (17,830 workers, or 10.9%) and construction (17,770 workers, or 10.9%) were the four largest industries in 2023.
- 6. In 2021, CMB's self-containment rate (i.e. the share of employed CMB residents who work in CMB) was 49.5%, a slight increase from 2016 level (48.5%). The self-containment rates of the Northern and Southern Region were 45.8% and 41.2%, respectively. The Southern Region's lower self-containment can be attributed to its proximity to central Brisbane. This is evidenced by a significantly higher proportion of Southern Region residents working in Brisbane City (45.1%) compared to the Northern Region (19.5%).
- 7. Industrial building approvals in CMB totalled \$893.7 million (or \$111.0 million per annum) from 2017 to 2024 (year ending June). From 2021 onwards, the annual value of industrial building approvals has averaged \$156.8 million, compared to \$65.2 million between 2017 and 2020. This increase is likely due to a combination of COVID-19 related impacts on the industrial sector including growth in e-commence and nearshoring, and potentially supply constraints in neighbouring LGA's pushing demand to CMB.
- 8. CMB contains approximately 11.5% of SEQ's total planned industrial supply, which is significantly more than neighbouring LGA's Brisbane and Sunshine Coast.
- 9. A lack of appropriate land supply in Brisbane and Sunshine Coast LGAs (especially large sites) will likely result in a transfer of land demand to CMB. The remaining supply of low and medium impact industry land in Brisbane LGA and Sunshine Coast LGA was 6 and 16 years, respectively, in 2021, based 10-year take-up trends.
- 10. Macro trends driving demand for industrial land in Australia (and CMB) include the rapid acceleration in e-commerce, shifts in supply chain strategies, shifts in occupier preferences, and demand for well-located assets with sustainability credentials. Local demand drivers include substantial projected population growth and investment in CMB's manufacturing and construction sectors.

¹ ShapingSEQ 2023 population projections rebased to the ABS ERP 2023.

Current Supply and Recent Take-up

- 11. In 2023, CMB's industrial supply comprised approximately 553.7ha of Net Vacant Land (NVL), some 203.7ha less than in 2021. NVL is gross vacant land less constrained land and a civil infrastructure allowance for unsubdivided greenfield sites.
- 12. The municipality's provision of Effective Supply is approximately 464.9ha. Effective Supply is NVL which is appropriately zoned for development and able to be serviced. For the purposes of this assessment, approximately 18.1ha at Bribie Island Road and the entire Waraba precinct (70.6ha) are excluded from Effective Supply.
- 13. Of the 464.9ha of Effective Supply:
 - 234.2ha (or 50.4%) is in the General Industry (GI) zone precinct
 - 145.2ha (or 31.2%) is in the Mixed Industry and Business Area (MIBA) zone precinct
 - 78.9ha (or 17.0%) is in the Light Industry (LI) zone precinct
 - 6.7ha (or 1.4%) is Restricted Industry zone precent. No Effective Supply remains in the Marine Industry zone
 precinct.
- 14. Nearly two-thirds of CMB's Effective Supply is located in the Northern Region. More than half of the GI Effective Supply is at Elimbah East (54.3%) while 43.4% of MIBA's Effective Supply is at North East Business Park (NEBP).
- 15. Elimbah East is currently affected by a Preliminary Approval (Variation for the Elimbah East Masterplan) and NEBP is affected by Material Change of Use Preliminary Approval (including a Variation Approval). If these approvals were realised CMB would support 87.0ha less GI and 39.6ha less MIBA Effective Supply.
- 16. CMB's average annual take-up of industrial land was 22.7ha across the six years to 2023 (year ending June). Around half of the land consumed across this time period was in the GI zone precinct. Actual demand for industrial land is likely to be higher than observed take-up trends due to current supply constraints which are beginning to impact CMB's industrial sector.

Demand Scenarios

- 17. Industrial land take-up in CMB will likely be underpinned by a range of demand drivers, including:
 - Population growth generating demand for land accommodating urban services, such as building supplies and auto repair shops.
 - Businesses with broader markets than a local area, such as: warehousing and logistics centres;
 manufacturers of products supplied to national and international markets; marine servicing specialists; or construction firms supporting major infrastructure projects.
 - Industrial land demand transfer from Brisbane, and to a lesser extent the Sunshine Coast. That is, overflow
 demand generated by companies wishing to establish or expand in SEQ, but are unable to secure
 appropriately priced, sized or located land in either Brisbane or the Sunshine Coast (and view available
 supply in CMB as an appropriate locational substitute).
- 18. The modelling of industrial land demand undertaken comprises the following two demand components:
 - Population Growth Demand (PGD) assumes a continuation of the current relationship between industrial demand and population growth. This is estimated by maintaining a constant ratio of occupied land per capita between 2023 and 2053.
 - New Business Demand (NBD) refers to demand premium over and above a fixed per capita supply level.
 NBD could be attributed to a range of factors including demand transfer from neighbouring municipalities with supply constraints, aggressive attraction initiatives from Council's Economic Development unit (relative to historic trends), and infrastructure investment that enhances CMB's industrial credentials.
- 19. The actual amount of future industrial demand in CMB is difficult to predict due to a variety of factors which are uncertain. Accordingly, three demand Scenarios (Low, Base and High) have been prepared to provide a line of sight regarding what future industrial demand might be across the 30 years to 2053. The Scenarios differ by varying NBD as follows:
 - Base Scenario: total demand is approximately 25.0% higher by 2053 compared to demand projected by maintaining the current ratio of occupied land per capita

- Low Scenario: total demand is approximately 10.0% higher by 2053 compared to demand projected by maintaining the current ratio of occupied land per capita
- High Scenario: total demand is approximately 40.0% higher by 2053 compared to demand projected by maintaining the current ratio of occupied land per capita.
- 20. **Total industrial demand** is projected to average 34.6ha pa between 2024 and 2053 under the Base Scenario, increasing from 28.2ha pa between 2024 and 2028 to 40.8ha pa between 2049 and 2053. Average industrial demand under the Low and High Scenarios are estimated to range between 27.0ha and 42.3ha pa between 2023 and 2053.
- 21. Projected demand pa for industrial land by zone precinct under the Base Scenario for the 2024 to 2054 period averages:
 - 19.2ha for GI land (increasing to 24.2ha under the High Scenario)
 - 8.2ha for MIBA land (increasing to 10.5ha under the High Scenario)
 - 6.1ha for Light Industry land (increasing to 6.5ha under the High Scenario)
 - 1.1ha for Other.

Supply Adequacy and Timing

- 22. CMB's adequacy of supply (in years) is calculated by dividing Effective Supply by projected demand. The municipality's industrial supply should be equivalent to at least 15-years for it to be considered adequate. Broadly speaking, 15-years is a suitable supply buffer for new industrial supply to be identified, planned, serviced, and brought to market.
- 23. Overall, CMB's total Effective Supply is projected to be exhausted in 2038 under the Base Scenario, representing a **supply of 15.0 years**.
- 24. At the zone precinct level, CMB's Effective Supply is equivalent to:
 - 14 years of GI supply
 - 20 years of MIBA supply
 - 14 years of LI supply
 - 11 years of Other
- 25. Hence, under the Base Case, additional GI, LI and Other (i.e. Marine Industry and Restricted Industry) supply needs to be identified and planned to ensure CMB's industrial market remains competitive, noting the significant population growth projected for the municipality.
- 26. The modelling undertaken provides a high-level indication of the required timing of individual industrial precincts. This analysis is undertaken for NVL (rather than Effective Supply) to include Waraba and Bribie Island Road. Under the Base Case, the key findings for the timing of remaining undeveloped precincts are:
 - GI supply will be exhausted by 2031 in the Southern Region.
 - Elimbah East is required to come online now and will be critical to CMB's industrial land supply going forward. Approximately 26.6% of total industrial demand is projected to flow to Elimbah East (out of current total NVL supply).
 - MIBA supply is required to come online at NEBP by around 2026, noting that preliminary development works have already commenced at this precinct.
 - GI industrial land in Waraba is required by around 2036, but should be delivered sooner (if possible) to alleviate supply risks associated with the reliance on Elimbah East.

Considerations for Future Planning

27. Considerations for the planning of industrial land in CMB flowing from the above findings, include:

- The demand and supply situation is more acute than envisaged in the previous UAELI 2022. Demand is now anticipated to be significantly higher, due primarily to stronger projected population growth. Yet the Effective Supply is now 188.2ha less than in 2021 (as reported in the UAELI 2022) due to the combined effect of take-up, planning approvals at Elimbah East and NEBP and adjustments to Waraba (to account for the Bruce Highway Western Alternative).
- CMB's 'eggs in one basket' supply problem remains a key concern. The UAELI 2022 identified that Elimbah East and NEBP were the only new greenfield areas for GI and MIBA yet to come online, and posed a significant supply risk at the municipal level if they didn't develop as planned. This risk remains and is arguably more acute due to recent planning approvals reducing the Effective Supply in both precincts.
- The Level of Future Demand is Uncertain. The three demand Scenarios (Low, Base and High) are intended to provide a 'line a sight' regarding what future industrial demand might be across the 30 years to 2053 to inform future planning. A Scenarios based approach to projecting demand has been used because there are a range of factors which cannot exactly be predicted that could determine the level of future demand in CMB. Accordingly, Council should review and update the demand and supply modelling regularly (say, every three to four years) to latest information.
- Additional supply needs to be identified and planned. We understand Council have been advancing a process to identify and plan new industrial supply precincts. The need for this process to produce results is more pressing. If it doesn't, CMB could have no GI and LI Effective Supply by 2037, and a significantly constrained market with limited sites available for sale or lease in the next ten or so years.

Accordingly, we recommend that CMB:

- o Explore options to bring online NVL at Waraba as soon as practicable.
- o Identify and plan other options for industrial supply, with a particular emphasis on delivering additional GI, LI and Restricted Industry supply.
- o Complete the investigation regarding the suitability of the Rural Residential Investigation area (RRIA) at Narangba East to accommodate industrial uses.
- o Explore options for additional Marine Servicing land where appropriately located.
- Undertake an assessment of renewal and redevelopment opportunities in the Brendale and Narangba industrial precincts.
- o Ensure that future supply options can be cost effectively connected to civil infrastructure.
- o Investigate options for civil infrastructure to be delivered that unlock existing supply that is not serviced.

Introduction

Background

Moreton Bay City Council (Council) has engaged Ethos Urban to undertake the City of Moreton Bay (CMB) Urban Areas Employment Lands Investigation (UAELI) Industrial Land Supply Update 2024 (the Project). The Project represents an update to the UAELI 2022 which provided a detailed assessment of the supply and demand for industrial land in CMB's urban areas.

Approximately two years have elapsed since the UAELI 2022 was finalised, and three years since the analysis was undertaken. In this time:

- Population growth in Southeast Queensland (SEQ) has increased significantly on the back of strong interstate
 migration and the resumption of overseas arrivals (which ceased during the COVID-19 period). The
 Queensland Government now anticipate that future population and employment growth in CMB will be
 higher than previously projected.
- Industrial demand in CMB has strengthened as evidenced by the high take-up rates observed by Council's annual industrial land take-up assessment.
- Approval of variations to the Planning Scheme at Elimbah East and North East Business Park has altered CMB's industrial supply framework.
- A new Regional Plan for Southeast Queensland has been released (ShapingSEQ 2023).

Council now requires that the demand and supply modelling outlined in the UAELI 2022 be updated to provide a contemporary baseline that informs the planning of industrial lands in CMB.

In undertaking this update, the consultant has:

- Reviewed relevant planning policies.
- Consulted with representatives of Councils Economic Development and Building & Development units to gain an understanding of on-the-ground development trends.
- Assessed the regional economic context and industrial market demand drivers and trends.
- Reviewed the current industrial supply and recent take-up trends outlined in Council's Industrial Land Supply Annual Report 2022-23.
- Updated the demand and supply modelling.
- Assessed the adequacy of supply and required timing of future industrial precincts.
- Estimated the future jobs and value added that would be supported by CMB's industrial sector based on the updated demand modelling.
- Considered implications for the planning of industrial land in CMB.

1.0 Industrial Land and Policy Context

This chapter identifies the industrial precincts in CMB's urban area and summarises relevant planning policies.

Key Findings:

- CMB's industrial supply framework comprises the 22 industrial locations identified in original UAELI 2022. The total zoned area remains the same, apart from adjustments to the following precincts:
 - Elimbah East and North East Business Park, due to approved variations.
 - Waraba (formerly Caboolture West), to account for the Bruce Highway Western Alternative.
- A review of relevant policy documents highlights that:
 - Significant population growth is anticipated in SEQ and CMB and there is a need to support new economic opportunities through prudent planning and infrastructure provision.
 - That diversifying the economy and leveraging competitive advantages are key economic development priorities for CMB.
 - That new industrial areas will be needed in CMB to cater for population and employment growth.
 - That supply constraints in Brisbane LGA will likely result in demand flowing to neighbouring LGAs.

1.1 Regional Location

CMB comprises 2,040 square kilometres in the northern portion of Brisbane's metropolitan area and supported a population of around 510,100 persons in 2023². Established in 2008, CMB replaced the former local government areas of Redcliffe, Pine Rivers and Caboolture, and is the third-largest local government area in Australia by population. The municipality's urban areas primarily reflect a linear pattern consistent with the alignment of the Bruce Highway, Sunshine Coast Railway Line (part of the North Coast Line) and Redcliffe Peninsula Line.

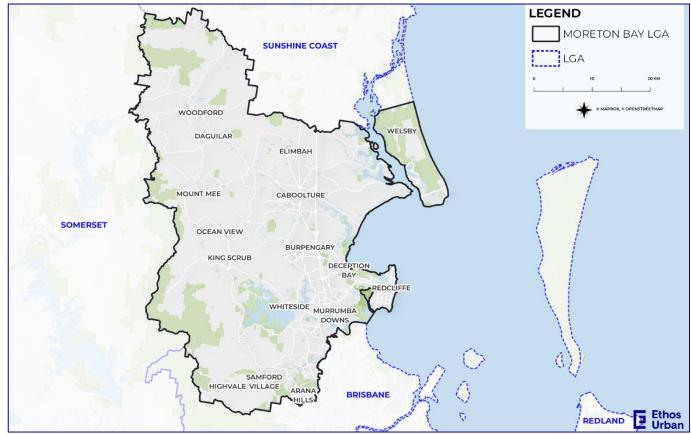


Figure 1.1 Regional Context

Source: Ethos Urban

² ABS Estimated Resident Population (ERP) 2023

1.2 Industrial Precincts in CMB

The precincts that comprise CWB's industrial supply framework are shown by Table 1.1 and Figure 1.2. These precincts are the focus of this report and reflect the 22 industrial locations identified in original UAELI 2022.

The land area of each precinct represents that currently in the Industry Zone of the Moreton Bay Planning Scheme, except for:

- Elimbah East which now reflects the area in the Industry Zone as per the Material Change of Use Preliminary Approval (Variation for the Elimbah East Masterplan), approved by Council on 14 June 2023. This approval decreased the amount of Industry Zone General Industry (GI) precinct supply and increased the provision of land in the Industry Zone Mixed Industry and Business Area (MIBA) and General Residential Zone Next Generation Precinct. It has not been acted upon at the time of writing.
- North East Business Park (NEBP) which now reflects the area in the Industry Zone as per the Variation Approval approved by the Queensland Planning and Environment Court on 11 August 2023 which reduced the quantum of MIBA. This approval has subsequently been acted upon.
- Waraba (formerly Caboolture West) which reflects future areas in the Industrial Zone designated in the Caboolture West Local Area Plan but adjusted by Council in accordance with the gazetted corridor for the Bruce Highway Western Alternative.

A new Industry Zone - Marine Services precinct is currently being considered as part of the land use and infrastructure planning investigations for the SEQ Development Area at Burpengary East (also known as North Harbour). The opportunity for this precinct is still being considered and therefore it has been excluded from this assessment.

The small industrial areas at Herschell Court (Redcliffe) and English Street (Elimbah) are out of scope of this Project. CMB also accommodates areas in the Township Industry Zone (comprising approximately 20ha) which are not within the scope.

Table 1.1 Industrial Precinct, CMB

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Northern Region	Southern Region
Elimbah East (in accordance with approved Change of Use – Preliminary Approval by C	· · · · · · · · · · · · · · · · · · ·
14 June 2023)	11. Deception Bay
2. Waraba (based on the future Industry Zone	e area 12. Deception Bay Road
designated in the Caboolture West Local Plan but reduced in accordance with gazetted corridor for	is. Boundary Road Narandba
Bruce Highway Western Alternative)	14. Scarborough Marina
3. Sandstone Point	15. Newport
4. Bribie Island Road Caboolture	16. Rothwell
5. Henzell Road, Caboolture	17. Kippa-Ring
6. First Avenue Bribie Island	18. Clontarf
7. PAC Morayfield	19. Petrie (MIBA precinct adjacent to The Mill PDA area
8. NEBP (in accordance with the Variation Ap approved by the Queensland Planning and	· UAFII/U//I
Environment Court on 11 August 2023)	20. Paisley Drive Lawnton
9. Bruce Highway Burpengary	21. Brendale
	22. The Hills District

Source: CMB: Ethos Urban

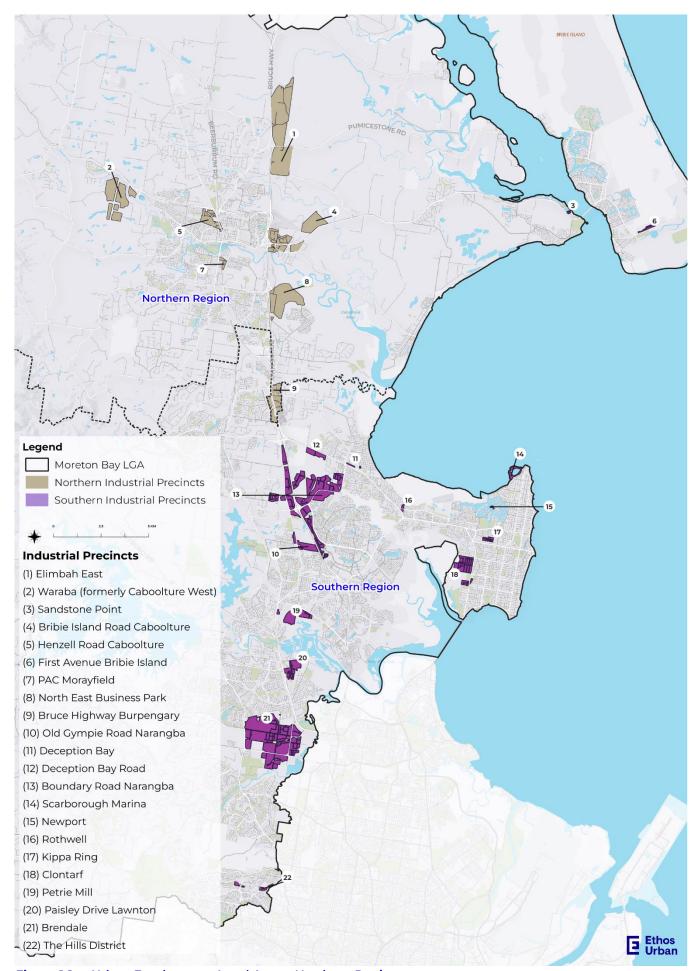


Figure 1.2 Urban Employment Land Areas, Northern Region

Source: Ethos Urban

1.3 Relevant Policies

Relevant directions and strategies in planning policy documents are summarised below.

Policy/Plan

Relevant Directions/Objectives

State/Regional Policies

ShapingSEQ South East Queensland Regional Plan 2023

ShapingSEQ 2023 is the statutory regional plan for the SEQ region and has been prepared as an update to ShapingSEQ 2017.

Background

ShapingSEQ 2023 provides the overarching regional framework to manage growth, change, land use and development in SEQ. It outlines a 50-year vision for SEQ to be a globally recognised region where residents love to live, learn, work, invest and play.

The Plan notes that SEQ is Queensland's fastest growing region and is anticipated to accommodate around 6 million residents by 2046, an increase of +2.2 million residents on the 2021 level. Over this period, CMB is projected to increase by approximately +308,000 persons, +125,800 dwellings, and a minimum of +85,400 jobs. This projected growth is substantially higher than that anticipated in the previous ShapingSEQ 2017 (+217,700 people, +88,300 dwellings and +66,000 jobs between 2016-2041).

Key Themes

ShapingSEQ is guided by five overarching themes: Grow, Prosper, Connect, Sustain and Live. These themes are supported by outcomes, strategies and priority actions to guide SEQ's future.

Of particular relevance to this Project is Prosper, which has the following vision:

"In 50 years, SEQ will be a globally competitive region – an innovative, economic powerhouse and a destination of opportunity for all, with continued strong jobs growth" (pg.17)

Outcomes and strategies of relevance under this theme, include:

- Outcome 1 Higher performing outward economy. This theme includes strategies to:
 - Foster high levels of economic activity and employment in export oriented and high-value sectors
 - Plan for and support continued growth in population-serving employment and traditional economic industries.
 - Plan for and deliver sufficient land and local infrastructure to accommodate, as a minimum, the employment planning baselines.
- Outcome 2 Regional Economic Clusters (RECs), which includes strategies to recognise and plan for RECs as regionally significant agglomerations of economic activity.
- Outcome 5 Major Enterprise and Industrial areas (MEIAs) and other industrial areas.
 Relevant strategies include:
 - Establish a regional industrial land framework to monitor regional industrial land supply, project industrial land demand and plan for projected regional industrial land demand in SEQ.
 - Ensure development in MEIAs facilitates their role in accommodating medium and highimpact industries and other employment uses associated with, or with access to, state transport infrastructure.
 - Accommodate a mix of commercial uses in MEIAs to give workers and enterprises an appropriate level of access to shops, amenities and facilities.
 - Plan for new and existing MEIAs, including associated connections to freight, intermodal and supply chain networks, to ensure they can accommodate regionally or state significant agglomerations of industry and business activity and respond to projected local and regional industrial land demand.
 - Protect planned and existing MEIAs, including associated transport infrastructure, from encroachment by incompatible land uses.
 - Enable the intensification and expansion of MEIAs, where appropriate, to improve their capacity and functionality, including through the delivery of supporting infrastructure.
 - Plan for a local supply of suitable land for industrial uses that considers anticipated demand within the LGA, constraints of the land, surrounding land uses and proximity to essential infrastructure required to service industrial development (Strategy 5.7).

In the Metro sub regional outcomes – outcomes for Prosper- Industrial Land, the Intent of ensuring there is sufficient Industrial land to accommodate projected demand will be implemented by planning for new industrial areas. It is stated that detailed planning will be prioritised for several industrial areas in the Metro sub-region including land within the Urban Footprint at Narangba East.

Note: that the last dot point (Strategy 5.7) replaces previous guidance in ShapingSEQ 2017 for a minimum threshold of 15-years supply that is "appropriately zoned and able to be serviced" be planned for at municipal level. Importantly, CMB is an urban growth corridor with an industrial market capable of supporting new industrial estates. This differentiates CMB from, say, Brisbane

Relevant Directions/Objectives

LGA, which has an industrial market that is largely built out with little remaining broad hectare areas to develop. Therefore, in planning for a suitable industrial supply in CMB (consistent with Strategy 5.7), it is prudent to still ensure a minimum threshold of 15-years supply that is appropriately for development zone and able to be serviced is maintained, noting that this threshold could not be achieved in municipalities with industrial markets that are built out. For this reason, the measure of Effective Supply (i.e. supply that is appropriately zoned and able to be serviced) is still considered appropriate for the CMB context and has been maintained in the UAELI Industrial Lands Supply Update 2024 (refer Chapters 3 and 5).

Regional Priorities

ShapingSEQ identifies 10 regional priorities as guidance to ensure the strategic intent of the Plan is upheld in implementation. Of specific relevance to the Project is:

- **Priority 6 New economic opportunities**. The population growth projected for SEQ brings with it a significant opportunity for jobs growth during the life of the Plan.
- **Priority 7 A sufficient pipeline of industrial land**. The supply of sufficient industrial land across SEQ is a key priority to service the growing population and to ensure SEQ can make the most of the opportunities. In particular, the Plan notes that:
 - The constrained land supply in City of Brisbane impacts the ability for projected employment increases for Brisbane to materialise and will result in industrial uses being accommodated in neighbouring LGAs.
 - A regional approach to industrial land will complement industrial land planning that already occurs at the local government level and will position SEQ to realise opportunities of national significance.
 - Existing regionally significant industrial locations in MEIAs must be safeguarded to ensure there is no loss of this industrial land to ensure ongoing supply over the next 25 years.
 - Supporting the resource recovery and recycling task set under the Queensland Waste Management and Resource Recovery Strategy (2019) is an important priority for industrial and in SEQ.

Elimbah

ShapingSEQ 2023 update brings the broader Elimbah area (1,493ha approx.) within the Urban Footprint as a development area. Currently, there are no designated industrial precincts nor are there any set timeframes for when development would commence.

State Planning Policy (SPP)

The State Planning Policy July 2017 (SPP) expresses the Queensland State Government's interests in land use planning and development. SPP (development and construction State interest) includes a State interest policy that a sufficient supply of suitable land for residential, retail, commercial, industrial and mixed-use development be identified that considers:

- Existing and anticipated demand
- The physical constraints of the land
- Surrounding land uses
- The availability of, and proximity to, essential infrastructure required to service and support such development.

This State interest also includes a policy that appropriate infrastructure required to support all land uses is planned for and provided. The infrastructure integration of State interest also requires that development occurs:

- In areas currently serviced by state and/or local infrastructure and associated services; or
- In a logical and orderly location, form and sequence to enable the cost-effective delivery of state and local infrastructure to service development.

Local Policy

CMB Planning Scheme

CMB Strategic
Framework of CMB
Planning Scheme V4,
outlines local
strategic policy
directions to guide
planning and
development in the
municipality.

Of most relevance to this assessment is the content of Section 3.7 – Employment Location, which outlines the local policy for employment areas, and is based around the theme of:

"A strong, resilient and diversified economy that grows prosperity in the region by using its competitive advantages to deliver exports, investments and sustainable accessible jobs."

It is noted that the creation of new employment opportunities and the growth of existing activities are among the greatest challenges to be addressed in the future development of the region, and that CMB has an employment self-sufficiency target of 70%.

A range of Strategic Outcomes are provided to guide employment land planning, including:

• **Diversification of the local economy:** Develop a diversified local economy that retains local jobs and builds on regional and sub-regional competitive advantages.

Relevant Directions/Objectives

- Maximise the opportunities for development of existing places of employment and business activity: Encourage increased activity and greater intensity of activity within existing places of employment and business activity.
- Location of new economic activities: Provide sufficient additional land for industry and related businesses to enable diversified, broad-based, future economic and employment growth across the region.

Of specific importance to this investigation is the zone precincts within the Industry Zone which allow for different industrial activities based on their level of impact (refer Chapter 6 of CMB's Planning Scheme). Each zone precinct in the Industry Zone and their purpose are outlined as follows:

- **Mixed industry and business precinct** facilitate a range of low impact industry and associated commercial uses which have a nexus with other industrial activities occurring in the precinct.
- Light industry precinct facilitate and maintain the long-term viability of a range of low impact
 and low intensity industrial and business activities which are compatible with adjacent
 commercial and residential areas.
- General industry precinct facilitate and maintain the long-term viability of a broad range of
 industrial uses which provide significant employment opportunities and require locations which
 are well separated from incompatible uses.
- **Restricted industry precinct** support the continued viability of a range of high impact and hard to locate industrial uses which contribute significantly to the regional economy and require locations which are well separated from incompatible uses.
- Marine industry precinct facilitate and maintain the long-term viability of waterfront based industry and associated commercial activities which require direct access to a waterway.

CMB Urban Area Employment Land Investigation UAELI 2022 (UAELI), Ethos Urban

The UAELI 2022 included a detailed assessment of industrial land supply and demand outlook to provide a baseline for planning in CMB.

Objectives

The UAELI's main objectives were to:

- Assess the demand and supply situation for industrial land in CMB's urban areas.
- Determine the adequacy of supply and establish whether CMB has an adequate effective supply of industrial land for future planning and development (ie. at least 15 years).
- Evaluate the supply and demand situation for site-specific uses focused on knowledge, health, innovation or technology, and aviation.
- Advise on the employment land needs in greenfield locations including Elimbah East and North East Business Park.

Adequacy of Supply

The adequacy of CMB's industrial supply was assessed in accordance with the direction in ShapingSEQ 2017 that at all times local governments should have at least 15-years supply of land that is appropriately zoned and able to be serviced. In doing this, the UAELI 2022 introduced the concept of 'Effective Supply' (i.e. supply that is appropriately zoned and able to be serviced).

The UAELI's main findings regarding the adequacy of CMB's industrial supply were that:

- The General Industry (GI), Mixed Industry and Business Area (MIBA), Light Industry (LI) and Restricted Industry (RI) precincts satisfied the minimum threshold of 15-years supply under the base case demand projects.
- Within the existing Effective Supply framework, Elimbah East (GI) and North East Business Park (MIBA) were the only greenfield locations that could support new large scale industrial estates. This presented as a risk to CMB's future industrial land planning and development in the municipality.

Recommendations

The UAELI 2022 provided the following recommendations for Council. These were broken down into four broad categories:

• Land Use Planning

- Investigate the ongoing role, function and need for separate LI, MIBA and GI zone precincts.
- Ensure high impact industrial land areas have appropriate buffers to sensitive uses.
- Identify future GI and MIBA land supply opportunities, due to the long-term reliance on Elimbah East and North East Business to deliver future industrial land.
- Refine the strategic framework to better reflect the strategies within ShapingSEQ, particularly in relation to the MEIAs for the region.

Relevant Directions/Objectives

- Review industrial zone codes and associated assessment benchmarks to ensure the planning scheme does not unnecessarily limit opportunities for contemporary industrial uses.
- Investigate ways to service future employment land to ensure timely delivery of industrial development.

• Location Specific Matters

- Refine the strategic framework to incorporate clear outcomes on the intent for Elimbah East and North East Business Park.
- Undertake an assessment of renewal and redevelopment opportunities in the Brendale and Narangba industrial precincts.

Land Use Monitoring Related Matters

- Continue to monitor and expand information on industrial precincts and land parcels, noting the critical importance of Council's industrial land database to support future decision making.
- Conduct an industrial land study every five years keeping the methodology and scope consistent and prioritising local industrial property market intelligence to complement information in industrial land databases.

• Economic Development and Advocacy

- Undertake local industrial market research to complement existing land use database.
- Advocate for the timely commitment and delivery of critical transport infrastructure with government authorities.
- Continue to deliver innovation infrastructure at the Mill at Moreton Bay and established strong governance structures to deliver an innovation agenda with strong linkages to local industry.

Growth Management Strategy 2042

The Growth
Management
Strategy 2042
provides a vision and
strategies to guide
the actions of Council
and stakeholders to
support the strategic
pillar in the Corporate
Plan 2022-2027 for
'Our well planned
places'.

The Growth Management Strategy 2042 sets out a roadmap structured around six outcomes achieve to the 'Our well planned places' Strategic Pillar.

Of particular relevance is **Outcome 5: Well-planned centres and employment areas** which includes the following strategic priorities:

- A connected network of centres and employment precincts creates vibrant and diverse places, supports high value local employment opportunities, and a framework for public sector investment in community infrastructure that is appropriate to each location.
- A sufficient supply of employment land supports a variety of industrial precincts across the
 region to diversify the economy and provide for high value local employment opportunities.

Outcome 5 includes a policy direction to investigate and identify new industrial land, particularly land close to highway interchanges and existing industrial areas to support long-term employment needs. Maintaining a 15-year supply of industrial land at all times is the applicable measure of success.

The Growth Management Strategy also notes that:

- Industrial employment contributes to higher levels of employment self-containment in the region.
- Additional new industrial areas will also be required to cater for growth and employment.
- Challenges to establishing new industrial areas include locational requirements, supporting infrastructure, site constraints and land ownership.

Regional Economic Development Strategy (REDS) 2020-2041

CMB's REDS provides directions, strategies and actions to guide economic development in the municipality.

The REDS is underpinned by the notion that a new direction is required for economic development in CMB and notes:

"it will be important for the next twenty years to reduce the reliance on population driven industries and focus on high value-adding industries, exports and innovation"

CMB's Competitive Advantage

To inform the Strategy's preparation, consultation with community stakeholders was undertaken which identified CMB's key economic strengths, including its:

- Size and scale, particularly in view of forecast population growth
- Diversity of areas and land use contexts
- Lifestyle and housing affordability
- Strategic location with proximity to Brisbane's CBD, airport and port, as well as the Sunshine Coast
- Access to transport infrastructure and the Sunshine Coast Broadband Cable; and
- Workforce and access to skills.

Relevant Directions/Objectives

Challenges identified included a lack of clear vision and bold aspirations for the economy, lack of identity and regional reputation as a business or investment destination, and lack of collaboration between stakeholders.

Future Directions - Bigger, bolder and brighter

The Strategy sets out the following economic goals for CMB to achieve by 2041:

- Bigger to double the size of the economy to more than \$40 billion.
- **Bolder** to create 16,000 new business and 100,000 new jobs to underpin a better future for local residents.
- **Brighter** to become a national leader in innovation and entrepreneurship and be considered a top 10 regional innovation hub in Australia.

Future Direction - Key growth areas for a brighter future

The Strategy put forward four key growth areas that would drive CMB's transition to a more sophisticated economy:

- Advanced manufacturing
- Food and agri-business
- Tourism, sport and major events; and
- Knowledge, innovation and entrepreneurship.

Future Direction - 5.3 Our bold projects for the future

In addition to the four key growth areas, a number of region-building projects are outlined that individually (and combined) have potential to increase high-value jobs, exports and investment in CMB.

These include North Harbour, The Mill at Moreton Bay, Scarborough Harbour Masterplan, SEQ Northern Freight Terminal and Wamuran Irrigation Scheme.

2.0 Economic Context and Demand Drivers

This chapter provides a snapshot of CMB's economic context and trends and drivers affecting the development of industrial land.

Key Findings:

- CMB is Australia's third largest municipality (by population) and accommodated some 510,100 persons in 2023. Its population is anticipated to increase to approximately 863,470 persons by 2053, representing average growth of +12,620 persons pa over the period.
- CMB support an estimated 163,230 local jobs in 2023 (year ending June). Health care and social assistance, retail trade, education and training and construction were the four largest industries in 2023. CMB's self-containment rate (i.e. the share of employed residents who work in CMB) in 2021 was 49.5%.
- Industrial building approvals in CMB totalled \$893.7 million (or \$111.0 million per annum) from 2017 to 2024 (year ending June). From 2021 onwards, the annual value of industrial building approvals has averaged \$156.8 million, compared to \$65.2 million between 2017 and 2020. This increase is likely due to a combination of COVID-19 related impacts on the industrial sector including growth in e-commence and nearshoring, and supply constraints in neighbouring LGA's pushing demand to CMB.
- CMB contains approximately 11.5% of SEQ's total planned industrial supply, which is significantly more than neighbouring LGA's Brisbane (6.2%) and Sunshine Coast (2.6%).
- Macro trends driving demand for industrial land in Australia (and CMB) include strong population growth, a
 rapid acceleration in e-commerce, shifts in supply chain strategies, shifts in occupier preferences, and
 demand for well-located assets with sustainability credentials. Local demand drivers include the substantial
 projected population growth and investment in CMB's manufacturing and construction sectors.

2.1 Study Area

CMB has been split into a Northern Region and Southern Region based on ABS Statistical Area 2 (SA2) geographies³ to analyse economic data and trends. The extent of these regions is illustrated by Figure 2.1.

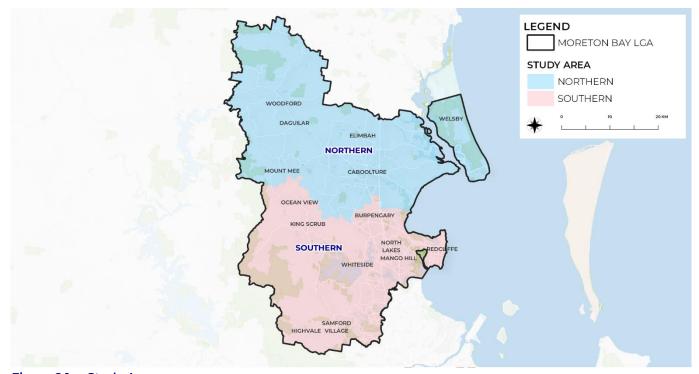


Figure 2.1 Study Area

Source: Ethos Urban

³ Note, for alignment with ABS ASGS Statistical Areas the following statistical geographies are included in the analysis: Scarborough – Newport – Moreton Island SA2 and Bribie Island SA2.

2.2 Population Growth

Recent Population Trends

In 2023 (year ending June), CMB had an estimated resident population of 510,100 persons, placing it as Australia's third largest LGA behind Brisbane and Gold Coast.

Between 2017 and 2020 population growth in CMB was fairly constant, averaging +9,330 (or +2.0%) pa.

In 2021, the rate of population growth declined as net overseas stopped due to border restrictions implemented during the COVID-19 pandemic (refer Figure 2.2).

In 2022 and 2023, population growth increased significantly as COVID-19 border restrictions eased. Specifically, the increase in 2021 was attributed to substantial growth in net internal migration, while net overseas migration was the main driver of increased growth in 2023.

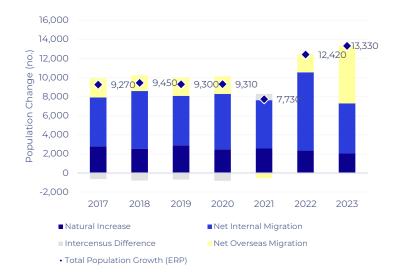


Figure 2.2 Components of Population Growth, CMB

Source: ABS Regional Population; Ethos Urban Note: Year ending June

Population Projections

For the purposes of this assessment, ShapingSEQ 2023 population projections at the SA2 level (provided to CMB by the Queensland Government) have been rebased to the latest ABS Estimated Resident Population (ERP) release (2023). The projections prepared are for the period 2023 to 2053. ShapingSEQ projections apply to the period to 2046 and the consultant has assumed a continuation of growth rates to 2053 (refer Table 2.1).

CMB's population is anticipated to increase by +380,090 persons between 2023 and 2053, representing annual average growth of +12,670 persons or +1.9%.

Development of greenfield residential areas will be a major driver of both population growth in CMB and the share of residential growth increasing in the Northern Region. Major growth areas between 2023 and 2053 in CMB, by SA2 include:

Waraba

Morayfield

Narangba

Wamuran

Elimbah

Table 2.1 Projected Population, CMB

Category	2021	2023	2028	2033	2038	2043	2048	2053
Population								
Moreton Bay - North	137,200	147,370	168,210	193,570	226,300	264,880	310,200	355,580
Moreton Bay - South	347,150	362,740	400,010	436,250	467,610	491,040	512,820	534,610
City of Moreton Bay	484,350	510,100	568,210	629,820	693,910	755,920	823,020	890,190
Annual Average Growth (no.)								
Moreton Bay - North		+5,090	+4,170	+5,070	+6,550	+7,720	+9,060	+9,080
Moreton Bay - South		+7,800	+7,450	+7,250	+6,270	+4,690	+4,360	+4,360
City of Moreton Bay		+12,880	+11,620	+12,320	+12,820	+12,400	+13,420	+13,430
Annual Average Growth (%)								
Moreton Bay - North		+3.6%	+2.7%	+2.8%	+3.2%	+3.2%	+3.2%	+2.8%
Moreton Bay - South		+2.2%	+2.0%	+1.7%	+1.4%	+1.0%	+0.9%	+0.8%
City of Moreton Bay		+2.6%	+2.2%	+2.1%	+2.0%	+1.7%	+1.7%	+1.6%

Source: ABS Regional Population; Ethos Urban; Shaping SEQ 2023

Shaping SEQ Population Projections

ShapingSEQ 2023 provides a comprehensive policy response to managing urban growth across the SEQ region. Final population projections in ShapingSEQ reflect changes in land use and infrastructure planning and policies that may influence the future distribution of the population, employment, and dwellings.

The projections are underpinned by the Model for Urban Land Use and Transport Interaction (MULTI). The MULTI was developed and calibrated for SEQ with dwelling supply estimates provided by local governments being an integral input.

2.3 Employment Trends

Employment by Industry in CMB

Total employment by industry in CMB is modelled by the National Institute of Economic and Industry Research (NIEIR). This dataset is widely considered to represent the most accurate and up to date measure of employment in an LGA.

Key findings for CMB's local jobs (i.e. CMB's workforce), as highlighted in Figure 2.3 include:

- CMB supported some 163,230 local jobs in 2023 (year ending June).
- Health care and social assistance (32,510 workers, or 19.9%), retail trade (20,240 workers or 12.4%), education and training (17,830 workers, or 10.9%) and construction (17,770 workers, or 10.9%) were the four largest industries in 2023.
- The amount of local jobs in CMB increased by +45,450 across the 10 years to 2023, representing average growth of +3.3% pa.
- Health care and social assistance (+15,150 jobs), education and training (+5,210 jobs), construction (+4,800 jobs) and accommodation and food services (+3,630 jobs) were the largest growth industries in CMB between 2012 and 2022.

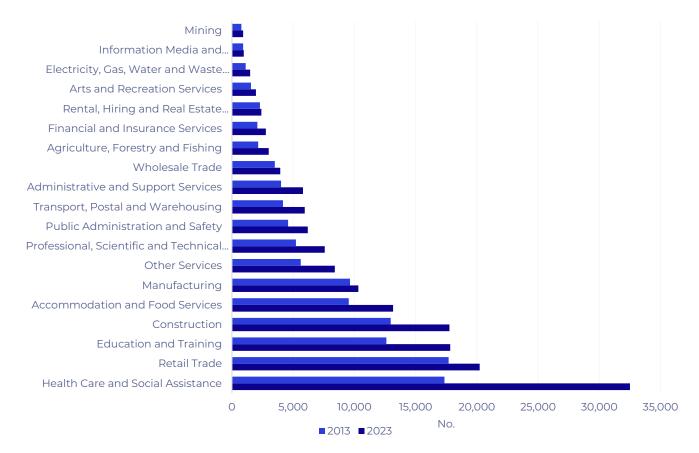


Figure 2.3 Workforce by Industry, CMB (year ending June)

Source: Ethos Urban; National Institute of Economic and Industry Research (NIEIR) compiled by .id (informed decisions)

Self-Containment

Employment self-containment is a measure of the share of employed CMB residents who are employed within the CMB. The employment self-containment target for CMB is 70%, as stated in the CMB Planning Scheme V4 (Section 3.7). CMB's self-containment rate in 2021 was 49.5%, a slight increase from 2016 levels at 48.5% (refer Table 2.2).

The Northern Region has a self-containment rate of 45.8%, while the Southern region stands at 41.2%. The Southern Region's lower self-containment can be attributed to its proximity to central Brisbane. This is evidenced by a significantly higher proportion of Southern region residents working in Brisbane City (45.1%) compared to the Northern Region (19.5%). Self-containment by industry sector is highlighted in Table 2.3 as a percentage that reflects the proportion of resident workers in CMB who work in CMB in the specified industry. All industrial related sectors have self-containment rates lower than 50%.

Table 2.2 Employment Self-Containment, CMB, 2021

Where they live	Northern Region	Southern Region	City of Moreton Bay
Same Region	45.8%	41.2%	n.a
Opposite Regional (Northern - Southern)	18.8%	4.4%	n.a
City of Moreton Bay	64.7%	45.6%	49.5%
<u>Elsewhere</u>			
Brisbane City	19.5%	45.1%	38.9%
Sunshine Coast	4.7%	0.9%	1.9%
Balance Elsewhere	11.2%	8.4%	8.9%

Source: ABS, Census of Population and Housing 2021; Ethos Urban

Table 2.3 Employment Self-Containment, CMB, 2021

Industry	Total CMB's Resident	Resident Workers	Self-Containment
madatiy –	Workers	Employed in CMB	Rate
Agriculture, Forestry and Fishing	2,870	2,200	76.7%
Mining	2,480	430	17.3%
Manufacturing	13,510	6,260	46.3%
Electricity, Gas, Water and Waste Services	2,830	900	31.8%
Construction	23,440	10,090	43.0%
Wholesale Trade	5,420	2,270	41.9%
Retail Trade	22,040	14,560	66.1%
Accommodation and Food Services	13,560	9,810	72.3%
Transport, Postal and Warehousing	12,570	3,790	30.2%
Information Media and Telecommunications	2,040	620	30.4%
Financial and Insurance Services	5,850	1,940	33.2%
Rental, Hiring and Real Estate Services	3,300	1,830	55.5%
Professional, Scientific and Technical Services	12,510	4,710	37.6%
Administrative and Support Services	7,320	3,320	45.4%
Public Administration and Safety	14,140	3,710	26.2%
Education and Training	17,760	11,410	64.2%
Health Care and Social Assistance	35,140	18,690	53.2%
Arts and Recreation Services	2,780	1,360	48.9%
Other Services	9,140	5,330	58.3%
Industry not classified	9,840	5,270	53.6%
Total Industries	219,270	108,470	49.5%

Source: ABS, Census of Population and Housing 2021; Ethos Urban

2.4 Other Economic Indicators

Non-Residential Building Approvals

Some \$5.9 billion of non-residential buildings was approved between 2017 and 2024 (year ending June) in CMB, averaging approximately \$740 million pa (refer Figure 2.4).

Health and education projects (primarily new or expanded hospitals) comprised the majority (38.7%) of non-residential investment over this period.

Industrial building approvals totalled \$893.7 million from 2017 to 2024, including \$699.0 million in investment attributed to warehouses in the Southern Region (refer Figure 2.5).

From 2021 onwards, the annual value of industrial building approvals has averaged \$156.8 million, compared to \$65.2 million from 2017 to 2020. This increase is likely due to a combination of:

- COVID-19 related impacts on the industrial section including growth in e-commence and nearshoring.
- Supply constraints in neighbouring LGA's pushing demand to CMB.



Figure 2.4 Non-Residential Investment in CMB, 2017 to 2024 (year ending June)

Source: ABS Building Approvals; Ethos Urban



Figure 2.5 Industrial Investment in CMB, 2017 to 2024 (year ending June)

Source: ABS Building Approvals; Ethos Urban

Development Pipeline

In April 2024, CMB's development pipeline comprised approximately \$15.9 billion worth of projects, according to the Cordell Connect database (refer Figure 2.6). Major government infrastructure funding and residential projects represent the bulk of investment at \$5.6 billion respectively.

Industrial related activity in CMB's pipeline totals \$543 million, including \$231 million (or 42.5%) proposed at Brendale. The investment pipeline at Brendale includes the construction of four data centres each with ancillary office space.

Major government transport infrastructure projects include:

- Gateway Motorway Upgrade, Bracken Ridge to Pine River (~\$2.1 billion).
- Moreton Connector Arterial Road Upgrade (~\$2.1 billion).
- Bruce Highway Roadworks (~\$900 million).

Other major projects include:

- The Mill at Moreton Bay. The Mill at Moreton Bay comprises 65ha of Council owned land and 110ha of green space. The master plan will comprise a major university campus for University of Sunshine Coast, a major private health precinct, advanced manufacturing, commercial mixed use, medium density residential and recreational areas.
- **Redcliffe Hospital Expansion (~\$1.1 billion).** Major expansion of the Redcliffe Hospital that will add around 204 more beds to the facility.

Development activity across a range of sectors (government infrastructure, residential, commercial etc) and flow-on effects through construction supply chains will drive demand for industrial land.

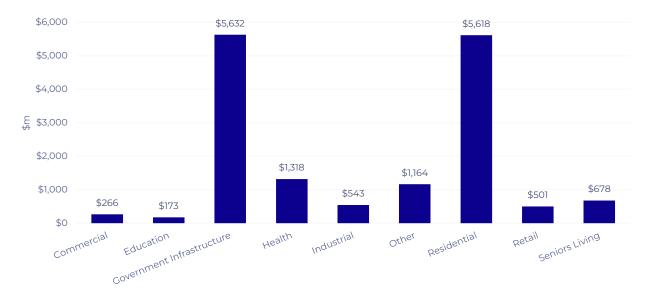


Figure 2.6 Future Projects, by Primary Land Use

Source: Cordell Connect; Ethos Urban

2.5 Industrial Market

Macro Trends Affecting the Industrial Sector

Overarching trends influencing industrial development in Australia (and CMB) are summarised as follows.

Table 2.4 Industrial Trends

Table 2.4 Industrial	rienus
Population Growth	Population growth is a key driver of industrial development. The substantial growth projected for CMB will drive additional demand for industrial space to support constructed related supply chains, local industrial services, and warehousing space servicing e-commerce.
Rapid acceleration in e-commerce	COVID-19 supercharged the take-up of online retailing which in-turn has increased demand for warehouse space. The share of online retail turnover in Australia peaked at 14.3% in September 2021 and has since stabilised at around 11.0% over the past year, which is still significantly higher than pre-pandemic levels (6.9% in February 2020). While e-commerce growth has slowed from pandemic highs, the share of online retailing will continue to grow fuelling future demand for industrial spaces, particularly
A shift in supply chain strategy	as businesses compete for strategic locations close to their customer base. Global supply chain risk increased during the pandemic and remains high due to the Russia-Ukraine war and geopolitical instability in the middle east. To reduce supply chain risks, global firms are shifting inventory closer to final consumers that allow for goods to be held for multiple retail cycles. Additionally, growth in online retailing is driving investment in hub-and-spoke distribution networks including last mile facilities close to urban residential areas.
Transitioning economy redefining the traditional industrial precinct	The distinction between industrial and commercial uses is blurring. In response to evolving tenant requirements, flexible 'enterprise' tenancies for small to medium sized businesses are increasingly being developed that include warehouse, showroom and office aspects. These facilities are popular for online business seeking a higher amenity space than the traditional warehouses are suited to light industrial or mixed commercial and industrial areas.
Renewal in onshore manufacturing	Growth of the manufacturing sector will further underpin demand in industrial real estate, with demand for larger warehouses – especially those in the food and life sciences sectors – projected to increase significantly. Trends such as advanced automation, robotics, artificial intelligence and machine learning are helping Australian manufacturers control two of their longstanding challenges: high labour costs and distance to markets. The 2023 CommBank Manufacturing Insights Report reveals that 72% of manufacturers in Australia expect to increase production levels in the next 12 months, while the same proportion are planning to increase capital expenditure.
Increased focus on Environmental, Social and Governance (ESG)	Institutional investors and other key stakeholders (such as customers) are increasingly scrutinising where and how products are sourced. Higher transportation costs and requirements to measure emissions, particularly across supply chains, are increasing demand for well-located assets with high sustainability credentials. Industrial precincts proximate population centres and transport hubs are now viewed as playing an important role in supporting environmental objectives by driving supply chain efficiencies.

Source: Ethos Urban

Industrial Land in SEQ

Queensland's Government's Land Supply and Development Monitoring (LSDM) Report (2021) is an information source for understanding the supply and demand situation for industrial land at the municipal level in SEQ.

Supply

SEQ's total industrial land supply is approximately 8,270ha, of which around 951ha (or 11.5%) is in CMB, according to the latest LSDM (refer Figure 2.7). CMB's supply is primarily in the medium and low impact categories.

Neighbouring municipalities – Brisbane and Sunshine Coast – have a total remaining supply of 730ha, including 426ha of low and medium impact industrial land.

The municipality with the most industrial land supply is Ipswich with around 3,549ha (or 42.9%), although this supply includes 2,384ha identified for 'industry investigation' in the Ebenezer Regional Industrial Area.



Figure 2.7 Planned Industrial Land Supply, 2021, SEQ

 $Source: QLD\ Government, Land\ Supply\ and\ Development\ Monitoring\ Report\ 2021; Ethos\ Urban$

Take-up

Approximately 244ha of vacant industrial land was developed (i.e. taken-up) in CMB across the 10 years to 2021, accordingly to the LSDM (refer Figure 2.8). This represents average take-up of 24.4ha over the period.

Take-up of low impact and medium impact land in CMB over the 10 years was relatively even (at 111ha and 118.6ha respectively), while take-up of high impact land totalled only 14.1ha.

Industrial take-up of industrial land in Brisbane LGA was more than double than CMB over the same period, averaging 58.6ha pa. Take-up was primarily for medium impact industrial activity (at 31.3ha pa).

Take-up in Sunshine Coast LGA averaged 13.5ha pa.

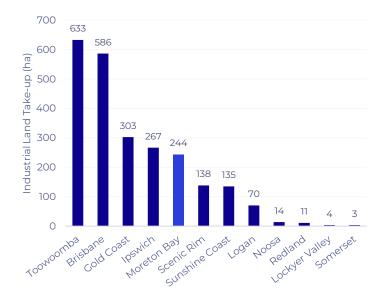


Figure 2.8 Total Industrial Land Take-up, 2011 to 2021

Source: QLD Government, LSDM 2021; Ethos Urban

Market Indicators

Supply constraints coupled with elevated levels of demand have led to significant rent and land value increases across Brisbane's industrial sector, and particularly in the Trade Coast and North sub-markets.

Key findings from market analysis by Cushman and Wakefield in Q3 2024 include:

- The North sub-market (which includes CMB) is second most expensive sub-market in the Brisbane in terms of averaging net facing rents and average land values.
- Although leasing demand has softened from the record highs of the past two years, it has reset at levels higher than pre-pandemic averages.
- The pace of rental growth across Brisbane continues to exceed national benchmarks with prime rents growing by 2.6% in Q3 2024, taking average prime rents to \$170/sqm net face. So far in 2024, 6.1% prime rental growth has been recorded, and a number of precincts, including the Trade Coast, remain on track to see double-digit growth in 2024.
- The Trade Coast market continues to have a premium with land values in the market ranging from \$700 \$930/sqm, albeit select precincts such as Eagle Farm are higher again at \$900 \$1,200/sqm. Land values in the South and South West, where the bulk of the developable land exists, range between \$450 \$650/sqm for 1-5 hectare lots depending on the precinct.
- Vacancy rates are expected to range between 3.0% to 3.5% over the next six months, before a likely uptick in mid-2025 off the back of backfill options becoming available.

(Refer report titled 'Marketbeat Brisbane Logistics and Industrial Q3 2024')

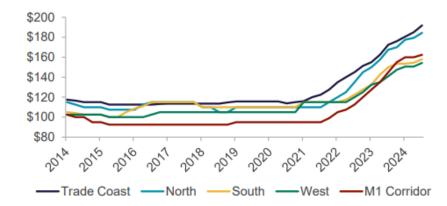


Figure 2.9 Prime Net Face Rents by Submarket

Source: Cushman & Wakefield

Table 2.5 Q3 2024 Brisbane Market Statistics, Prime Grade

Submarket	Vacancy Rates	Average Net Face Rent (\$/SQM)	Average Land Values (1-5ha, \$/SQM)
Trade Coast	1.7%	\$192	\$825
North	2.3%	\$184	\$725
South	4.0%	\$158	\$558
West	2.3%	\$154	\$500
M1 Corridor	2.5%	\$163	\$550
Average	2.7%	\$170	\$632

Source: Cushman & Wakefiled

Local Industry Demand

Category	Description
Primary Industries	
Manufacturing	Manufacturing is an important industry in CMB and employed 10,330 workers or 6.4% of the municipality's workforce (persons who work in the municipality) in 2023 (year ending June). The estimated value added generated by the sector is approximately \$1.3 billion (\$1,258 million), having increased by around +\$41.3 million across the ten years to 2023.
	CMB's manufacturing sector encompasses a range of activities, including building supplies production, fabrication, timber products, marine and leisure (such as boats and caravans), food packaging and mining equipment.
	Opportunities will present for local manufacturers to transition through investment in technology to become 'advanced manufacturers', as outlined in the REDS.
Construction	Construction is a key driver of CMB's economy and in 2023 (year ending June) supported:
	• 10.9% of the total workforce (17,770 jobs)
	• \$2.0 billion in value-added.
	Across the 10 years to 2023 the sector added +4,800 jobs.
	Substantial population growth projected for CMB (and neighbouring Sunshine Coast) will support the local construction sector, resulting in ongoing demand for land to support construction depots and trade supplies operators.
	In particular, demand for sites to accommodate construction sector aligned industry is expected to increase considerably in CMB's Northern Region as the Caboolture West (Waraba) Major Expansion Area and potentially Elimbah SEQ Development Area is delivered. Substantial residential development on the nearby Sunshine Coast at Caloundra South and Beerwah East Major Development Area will also drive industrial land demand in the longer-term.
Other Industries	
Food	CMB's rich soils and sub-tropical climate have long supported a strong local agriculture sector. Strawberries, pineapples, finger limes, macadamia nuts and avocados are the current major commodities.
Forestry	The municipality has a strong forestry sector focused on the harvesting of softwoods (pine). Significant forestry areas include the Beerburrum State Forest (east and west) and in areas managed by HQPlantations on Bribie Island. As a result, forestry aligned industry is a feature of CMB's employment areas for activities including timber processing and forestry transportation.
Marine Servicing	Marine servicing is a niche sector contingent on waterfront sites being available with capacity for dry-dock facilities. The capacity of existing marine servicing facilities at Scarborough Marine and Newport are understood to be fully occupied.

Additional Local and Regional Demand Considerations

Limited supply in neighbouring LGAs will likely result in spill-over demand

A lack of appropriate land supply in Brisbane and Sunshine Coast LGAs (especially large sites) will likely result in a transfer of some industrial demand form these municipalities to CMB.

Based on existing low and medium impact industry supply and annual average take-up between 2011 and 2021:

- City of Brisbane has approximately six (6) years of remaining industrial supply.
- Sunshine Coast Council has approximately 16 years of remaining industrial supply.

As the availability of industrial zoned land for sale or lease in these LGAs become more limited, industrial occupiers who would otherwise seek to locate will look elsewhere, including in neighbouring municipalities – when these available supply in these locations reflects an appropriate substitute.

Queensland's infrastructure boom will support the industrial sector

CMB's economic context is framed by the provision of major infrastructure, with convenient access to major road networks is an important consideration for industrial developers and prospective tenants.

For larger industrial areas in CMB – at Brendale, Narangba, Aerodrome Caboolture Aerodrome, or Elimbah East etc – convenient access to Bruce Highway or other major roads such as Gympie Road facilitate convenient access to the SEQ region and linkages to supply chains within CMB and extending north to the Sunshine Coast and beyond. Future delivery of the Bruce Highway Western Alternative will further improve access to CMB from neighbouring regions (north and south).

New supply on major freight routes with heavy vehicle interchange access will generally be most desirable to industrial occupiers, particularly warehousing and logistics operators.

The role of intermodal freight hubs

A potential new intermodal freight hub between Caboolture and Landsborough to better service the Moreton Bay and Sunshine Coast Councils and freight from Northern Queensland was first mooted in the 2010 transport plan for SEQ.

The potential still exists for this freight terminal. ShapingSEQ 2023 notes that the need for and location of an intermodal freight hub is critical matter that may affect the land suitable for development in Elimbah SEQ Development Area.

Key success factors for intermodal freight hubs include:

- **Location** typically because of significant site requirements, freight hubs are located in outer suburban or rural industrial areas where land is more available and less expensive.
- Network connections easy access to heavy rail and major road links is an obvious requirement.
- **Nearby complementary warehousing and distribution centres** to reduce end-to-end transport costs, and drive terminal throughput.
- **Operational efficiency** terminal throughput is critical to the viability of an intermodal hub. Reducing both truck and train turnaround times significantly influence throughput and costs. Trucks queuing for excessive time periods would be a sign of operational inefficiency.
- Tailored and scalable infrastructure to meet customer requirements capital intensive intermodal freight hubs face a significant stranding risk if road-based transport becomes cheaper, more flexible and more efficient. Technology improvements, shorter equipment replacement cycles and lower taxation arrangements can improve road-based transport competitiveness.

In short, for intermodal hubs to be successful, they need to be well located relative to customers and transport infrastructure and must operate with a very high degree of efficiency.

If it were decided that Elimbah SEQ Development Area could successfully accommodate an intermodal freight hub, it could anchor an active industrial precinct focused on related uses such as warehousing and logistics.

3.0 Current Supply and Recent Take-up

This chapter outlines the supply of industrial land in June 2023 and recent take-up trends.

Key Findings:

- In 2023, CMB's industrial supply comprised approximately 553.7ha of Net Vacant Land (NVL), some 203.7ha less than in 2021.
 - NVL is gross vacant land less constrained land and a civil infrastructure allowance for unsubdivided greenfield sites.
- The municipality's provision of Effective Supply comes to some 464.9ha.
 - Effective Supply is NVL which is appropriately zoned for development and able to be serviced.
- Of the 464.9ha of Effective Supply:
 - 234.2ha (or 50.4%) is in the General Industry (GI) zone precinct
 - 145.2ha (or 31.2%) is in the Mixed Industry and Business Area (MIBA) zone precinct
 - 78.9ha (or 17.0%) is in the Light Industry (LI) zone precinct
 - 6.7ha (or 1.4%) is Restricted Industry zone precent. No Effective Supply remains in the Marine Industry zone precinct.
- Nearly two-thirds of CMB's Effective Supply is located in the Northern Region. More than half of GI Effective Supply is at Elimbah East (54.3%) while 43.4% of MIBA Effective Supply is at NEBP.
- Elimbah East is currently affected by a Preliminary Approval (Variation for the Elimbah East Masterplan) and NEBP is affected by Material Change of Use Preliminary Approval (including a Variation Approval). Because of these Approvals, CMB supports 87.0ha less GI and 39.6ha less MIBA Effective Supply than would otherwise be the case.
- Across the six years to 2023 (year ending June) the average annual take-up of industrial land in CMB was 22.7ha. Around half of the land consumed across this time period was in the GI zone precinct. Note that average take-up over ten years to 2021 as slightly higher at 25.5ha pa, as outlined in the LSDM.
- Actual demand for industrial land is likely to be higher than observed take-up trends due to supply
 constraints. For example, discussions with CMB's Economic Development officers indicate that up to 60% of
 recent enquiries for industrial land (directed to CMB's Economic Development unit) could not be placed
 due to a lack of available sites (on the market).

3.1 Process of Estimating Industrial Supply

VUT Database

CMB assembles an annual 'Vacant, Underutilised, Taken-up' (VUT) industrial database as part of an agreement with State Development, Infrastructure, Local Government and Planning Department (SDILGP). This exercise ensures that CMB has an up-to-date data to review and monitor its industrial land supply, as recommended in UAELI 2022.

Methodology

The methodology to estimate the future supply of developable industrial land in CMB is summarised below and in Figure 3.1:

- **Total Industrial Land Supply.** Refers to all industrial zoned land in CMB. This includes land zoned as General Industry, Light Industry, Mixed Industry and Business, Restricted Industry and Marine Industry.
 - **Gross Vacant Land (GVL).** GVL is calculated by subtracting Taken-Up and Underutilised Lots from the Total Industrial Land Supply. GVL is a measure of the volume of industrial land that is vacant or underutilised before allowing for planning constraints or civil infrastructure requirements.
- **Net Vacant Land (NVL).** Net Vacant Land is gross vacant land less constrained land and Less civil Infrastructure allowance for greenfield sites. NVL provides an overview of the total supply of future industrial land supply, including land that for various reasons is not currently appropriately zoned for development and/or able to be serviced.
- **Effective Supply.** Effective Supply refers to total NVL less land that is not appropriately zoned for development or able to be serviced. As a result, it is the most suitable baseline for testing the municipality's adequacy of supply.

Note: Identifying land that is 'able to be serviced' is somewhat ambiguous. Having regard for how this measure will be used to inform a State benchmark, Council has worked in consultation with the State Government, to assess what industrial land can be considered able to be serviced.

Refer Appendix A1 for a more detailed description of the land supply assessment methodology.

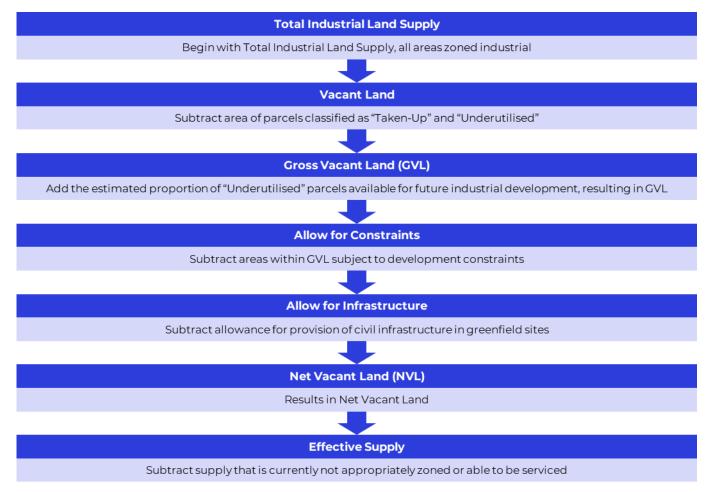


Figure 3.1 Process of Estimating Industrial Supply

Source Ethos Urban

Net Vacant Land (NVL) vs Effective Supply

NVL is GVL adjusted for constraints and greenfield civil infrastructure, as previously noted. This definition of NVL is intended to measure the volume of industrial land that is vacant and available to be developed to meet future demand. NVL does not measure market availability, that is, it does not identify land available for sale or lease at the time of assessment.

NVL represents the total volume of industrial land available for future industrial purposes and therefore includes some land that is not appropriately zoned for development and/or able to be serviced. For the purposes of this assessment NVL is used to model the indicative timing of all precincts (including those precincts that are not yet appropriately zoned or able to be serviced).

Effective Supply is NVL that <u>is</u> appropriately zoned for development and able to be serviced. Approximately 18.1ha of NVL at Bribie Island Road and the entire NVL at Waraba (70.6ha) has been categorised as <u>not</u> appropriately zoned or able to be serviced and is therefore excluded from Effective Supply.

For the purposes of this assessment, Effective Supply is the appropriate baseline to measure the adequacy of supply (i.e. how many years of supply remain at a given time).

3.2 Industrial Supply at 2023

Land Supply

The breakdown of CMB's industrial land supply in 2023 is provided by Table 3.1. Key findings include:

- Total Zoned Land is estimated at 1.808.4ha.
 - Approximately 990.8ha of total zoned land is occupied either taken-up or underutilised.
 - Note the estimated volume of underutilised land available for future industrial development is 110.6 ha.
- **GVL** is estimated at 928.1ha.
 - An estimated 244.2ha of GVL is constrained, and a further 129.1ha would be required for infrastructure provisions.
- **NVL** is estimated at 553.7ha.
 - Land that is not in Effective Supply includes:
 - o 18.1ha of LI land in the Bribie Island Road Caboolture precinct
 - 48.7ha of GI land and 21.9ha of LI land in Waraba.
- **Effective Supply** is estimated at 464.9ha.

Land Supply by Industrial and Zone Precinct

A detailed breakdown of NVL and Effective Supply by industrial precinct and zone precinct is shown in Tables 3.2 and 3.3.

Key findings for Effective Supply are:

- Nearly two-thirds of CMB's Effective Supply is in the Northern Region. Approximately 292.6ha (or 62.9%) of Effective Supply in CMB is in the Northern Region, with the balance of 172.3ha (or 37.1%) in the Southern Region.
- More than half of GI Effective Supply is in Elimbah East. Approximately 127.3ha (or 54.3%) of GI Effective Supply is in Elimbah East. Brendale supports nearly three quarters of the Southern Region's GI Effective Supply totalling 52.2ha. Boundary Road Narangba is the other major source of GI NVL in the Southern Region, totalling 14.1ha.
- The current supply of LI land is dispersed. LI Effective Supply is located across 14 zone precincts and totals 41.5ha in the Northern Region and 37.4ha in the Southern Region. This can be attributed to LI's common application as a buffer zone to manage potential land use conflict with adjacent residential or commercial areas. Bruce Highway Burpengary (25.1ha), Brendale (17.0ha) are the major areas of LI supply.
- The provision of MIBA is concentrated in North East Business Park. The major areas of MIBA Effective Supply include North East Business Park (63.0ha, or 43.4% of total MIBA), Boundary Road Narangba (19.8ha) and Old Gympie Road Narangba (17.6ha), Elimbah East (16.3ha) and Deception Bay Road (15.8ha) are the other major areas of MIBA supply.

Table 3.1 Urban Employment Land Supply by Zone Precinct, at June 2023 (ha)

Zone Precinct	Total Zoned Land	Gross Vacant Land	Net Vacant Land	Effective Supply
General Industry	984.9	480.3	282.9	234.2
Light Industry	416.2	198.5	118.9	78.9
Mixed Industry & Business	346.4	240.0	145.2	145.2
Other	60.9	9.3	6.7	6.7
Total	1,808.4	928.1	553.7	464.9

Source: CMB

Impact of Elimbah East and North East Business Park Development Approvals

Elimbah East is currently affected by a Preliminary Approval (Variation for the Elimbah East Masterplan) and NEBP is affected by Material Change of Use – Preliminary Approval (including a Variation Approval). As a result of these Approvals, CMB supports 87.0ha less GI and 39.6ha less MIBA Effective Supply than would otherwise be the case.

The approvals over North East Business Park have been acted upon, while development is yet to commence at Elimbah East, as previously noted.

Table 3.2 NVL and Effective Supply by Precincts and Zone Precinct, at June 2023

Precinct	General Industry	Light Industry	Mixed Industry & Business Other		NVL	Effective Supply
Northern Region						
(01) Elimbah East	127.3	3.9	16.3	-	147.5	147.5
(O2) Waraba	48.7*	21.9*	-	-	70.6	0.0
(03) Sandstone Point	-	-	-	0.0	0.0	0.0
(04) Bribie Island Road Caboolture	36.6	19.6**	-	-		38.0
(05) Henzell Road Caboolture	0.0	8.2	1.2	-	9.4	9.4
(06) First Avenue Bribie Island	-	1.0	-	-	1.0	1.0
(07) PAC Morayfield	-	1.7	-	-	1.7	1.7
(08) North East Business Park	-	-	63.0 -		63.0	63.0
(09) Bruce Highway Burpengary	-	25.1	6.8 -		31.9	31.9
Northern Region Total	212.5	81.5	87.3	0.0	381.4	292.6
Southern Region						
(10) Old Gympie Road Narangba	2.3	3.5	17.6 -		23.5	23.5
(11) Deception Bay	-	0.1	0.7 -		0.8	0.8
(12) Deception Bay Road	-	-	15.8 -		15.8	15.8
(13) Boundary Road Narangba	14.1	9.3	19.8 6.7		49.8	49.8
(14) Scarborough Marina	-	-	- 0.0		0.0	0.0
(15) Newport	-	-	- 0.0		0.0	0.0
(16) Rothwell	-	0.7	-	-		0.7
(17) Kippa Ring	-	0.0	-		0.0	0.0
(18) Clontarf	1.8	0.5	-		2.2	2.2
(19) Petrie	-	-	0.6	-	0.6	0.6
(20) Paisley Drive Lawnton	-	4.9	0.0	0.0	4.9	4.9
(21) Brendale	52.2	17.0	3.4	-	72.5	72.5
(22) The Hills District	-	1.6	-	-	1.6	1.6
Southern Region Total	70.3	37.4	58.0	6.7	172.3	172.3
Total Supply	282.9	118.9	145.2	6.7	553.7	464.9

Source: CMB

^{*48.7}ha GI and 21.9ha LI not in effective supply // **18.13 of LI in Bribie Island Road not in effective supply.

Table 3.3 Supply Share by Precincts and Zone Precinct, as at June 2023

Precinct	General Industry	Light Industry	Mixed Industry & Business	Other	NVL	Effective Supply	
Northern Region							
(01) Elimbah East	45.0%	3.3%	11.2%	-	26.6%	31.7%	
(02) Waraba	17.2%	18.4%	-	-	12.8%	0.0%	
(03) Sandstone Point	-	-	-	0.0%	0.0%	0.0%	
(04) Bribie Island Road Caboolture	12.9%	16.5%	-	-	10.1%	8.2%	
(05) Henzell Road Caboolture	0.0%	6.9%	0.8%	-	1.7%	2.0%	
(06) First Avenue Bribie Island	-	0.9%	-	-	0.2%	0.2%	
(07) PAC Morayfield	-	1.5%	-	-	0.3%	0.4%	
(08) North East Business Park	-	-	43.4%	-	11.4%	13.5%	
(09) Bruce Highway Burpengary	-	21.1%	4.7%		5.8%	6.9%	
Northern Region Total	75.1%	68.6%	60.1%	0.0%	68.9%	62.9%	
Southern Region							
(10) Old Gympie Road Narangba	0.8%	2.9%	12.1% -		4.2%	5.0%	
(11) Deception Bay	-	0.0%	0.5%	0.5% -		0.2%	
(12) Deception Bay Road	-	-	10.9%	-	2.9%	3.4%	
(13) Boundary Road Narangba	5.0%	7.8%	13.6%	100.0%	9.0%	10.7%	
(14) Scarborough Marina	-	-	-	0.0%	0.0%	0.0%	
(15) Newport	-	-	-	0.0%	0.0%	0.0%	
(16) Rothwell	-	0.6%	-	-	0.1%	0.1%	
(17) Kippa Ring	-	0.0%	-	-	0.0%	0.0%	
(18) Clontarf	0.6%	0.4%	-		0.4%	0.5%	
(19) Petrie	-	-	0.4%	-	0.1%	0.1%	
(20) Paisley Drive Lawnton	-	4.1%	0.0%	0.0%	0.9%	1.0%	
(21) Brendale	18.4%	14.3%	2.3%	-	13.1%	15.6%	
(22) The Hills District	-	1.3%	-	-	0.3%	0.3%	
Southern Region Total	24.9%	31.4%	39.9%	100.0%	31.1%	37.1%	

Source: CMB

Note: Figures have been rounded

3.3 Recent Take-up

Recent industrial take-up trends in CMB can be understood by reviewing Council's Vacant, Underutilised and Taken (VUT) data.

In Council's VUT assessments, a land parcel is categorised as be 'taken-up' when it:

- Contains an active land use and built form for the purposes of an industrial or other use, or
- Supports the construction of an improvement/building that has commenced but may not be completed.

Across the six (6) years to 2023 (year ending June) the average annual take-up of industrial land in CMB was 22.7ha. Around half of the land consumed across this time period was in the GI zone precinct (11.3ha or 49.6% of total annual average take-up). In contrast, MIBA land accounted for 5.0ha of annual average take-up (or 21.1%) and Light Industry land accounted for 4.5ha of annual average take-up (or 19.9%). The balance of average annual take-up (2.0ha or 8.7%) was attributed to Marine Industry and Restricted Industry land.

Note that the average take-up over ten years to 2021 was slightly higher at 24.5ha pa, as outlined in the LSDM.

Potential exists in supply constrained markets for actual demand to be higher than reflected by take-up trends. In such instances, a lack of appropriate sites (for sale or lease) results in prospective industrial developers or occupiers seeking sites elsewhere (in other markets) or not at all. In supply constrained markets, the amount of demand that is latent (unrealised) is difficult to determine with certainty.

CMB's Economic Development Unit plays a role in assisting entities seeking vacant industrial sites. It is understood that in the last 2.5 years they have received approximately 33 solid enquires that have an industrial land requirement, with six (18%) being placed. Conversation with CMB's Economic Development Unit also indicate that enquiries for land in the Northern Region has increased due to the lack of supply in the Southern Region.

Table 3.4 Annual Employment Land Take-Up, by Zone Precinct (Year ending June)

Zone Precinct	2018	2019	2020	2021	2022	2023	Annual Avg. Take-up 2018 - 2023
Hectares (ha)							
General Industry	6.0	12.4	15.0	15.0	8.2	11.1	11.3
Light Industry	3.0	2.7	5.9	5.9	1.8	7.8	4.5
Marine Industry	0.2	1.2	0.1	0.1	0.0	0.1	0.3
Mixed Industry & Business Area	6.5	5.1	4.1	4.1	6.9	3.1	5.0
Restricted Industry	2.3	5.0	0.5	0.5	0.0	2.0	1.7
Total	17.9	26.3	25.6	25.6	16.9	24.1	22.7
Share (%)							
General Industry	33.7%	46.9%	58.7%	58.7%	48.7%	46.0%	49.6%
Light Industry	16.6%	10.3%	23.2%	23.2%	10.4%	32.4%	19.9%
Marine Industry	0.8%	4.4%	0.2%	0.2%	0.2%	0.3%	1.1%
Mixed Industry & Business Area	36.1%	19.3%	16.0%	16.0%	40.6%	13.0%	21.8%
Restricted Industry	12.9%	19.1%	2.0%	2.0%	0.0%	8.4%	7.6%

Source: CMB; Ethos Urban

4.0 Demand Scenarios

This chapter estimates future demand for industrial land in CMB to 2053.

Key Findings:

- The modelling of industrial land demand undertaken comprises:
 - Two demand components:
 - Population Growth Demand (PGD) assumes a continuation of the current relationship between industrial demand and population growth. This is estimated by maintaining a constant ratio of occupied land per capita between 2023 and 2053.
 - New Business Demand (NBD) refers to demand over and above a fixed per capita supply level. NBD
 could be attributed to a range of factors including demand transfer from neighbouring
 municipalities, and aggressive attraction initiatives from Council's Economic Development.
 - Three demand Scenarios Base, Low and High by varying NBD.
- PGD is projected to average 21.8ha pa between 2024 and 2053 under all Scenarios.
- **NBD** is projected to average 12.8ha pa between 2024 and 2053 under the Base Scenario, increasing from 8.2ha pa at the start of the period (2024-2028) to 17.6ha pa between 2049 and 2053.
- **Total industrial demand** is projected to average 34.6ha pa between 2024 and 2053 under the Base Scenario, increasing from 28.2ha pa between 2024 and 2028 to 40.8ha pa between 2049 and 2053.
 - Average industrial demand pa between 2024 and 2053 under the Low and High Scenarios is 27.0ha and 42.3ha, respectively.
- **By zone precinct**, projected demand pa for industrial land under the Base Scenario for the 2024 to 2053 period averages:
 - 19.2ha of GI land
 - 8.2ha of MIBA land
 - 6.1ha of Light Industry land
 - 1.1ha of Other.

4.1 Model

Model Demand Drivers

Industrial land take-up in CMB will likely be underpinned by a range of demand drivers, including:

- Population growth generating demand for land accommodating urban services, such as building supplies and auto repair shops.
- Businesses with broader markets than a local area, such as: warehousing and logistics centres; manufacturers of products supplied to national and international markets; marine servicing specialists; or construction firms supporting major infrastructure projects.
- Industrial land demand transfer from Brisbane, and to a lesser extent the Sunshine Coast. That is, overflow demand generated by companies wishing to establish or expand in SEQ, but unable to secure appropriately priced, sized or located land in either Brisbane or the Sunshine Coast, and regard available supply in CMB as a suitable substitute.

Accordingly, future industrial land demand is modelled based on two separate components:

- **Population Growth Demand (PGD).** PGD assumes a continuation of the current relationship between industrial demand and population growth. It is the main component of demand and is estimated by applying a ratio of occupied land per capita.
- **New Business Demand (NBD).** NBD represents the industrial demand premium above the prevailing demand profile (which can be described by applying a ratio of occupied land per capita). NBD could be attributed to a range of factors including:
 - Demand transfer from neighbouring municipalities with supply constraints (i.e. Brisbane, and to a lesser extent Sunshine Coast).
 - Aggressive attraction initiatives from Council's Economic Development unit (relative to historic trends).
 - Infrastructure investment that increases CMB's desirability for industrial occupiers.

Modelling Scenarios

The future demand for industrial land in CMB is uncertain. Having regard for this and based on available information, three demand Scenarios (Low, Base and High) have been prepared to:

- Provide a <u>line of sight</u> regarding what future industrial demand might be across the 30 years to 2053
- Inform the planning for industrial land.

It is intended that these predictions will be updated regularly (say, every three to four years) as new information comes to light and the understanding of the industrial sector evolves.

Both components of the modelling – PGD and NBD – are informed by aspects that may materialise differently than currently envisaged. PGD could be different than projected due to lower or higher population growth occurring than anticipated by the ShapingSEQ 2023 population projections.

Additionally, the level of NBD will depend, at least partly, on market circumstances in areas beyond the boundaries of CMB. For example, Brisbane's industrial land supply is projected to be exhausted within six years (refer to Section 2.5). Similarly, potential exists for demand transfer from Sunshine Coast as its industrial market becomes more supply constrained.

Although some demand transfer from neighbouring municipalities will almost certainly occur, the extent of this transfer is difficult to predict due to a range of factors, including:

- The extent of redevelopment and consolidation that occurs is industrial neighbouring markets when vacant land supply is extinguished. This includes underutilised sites or lower order industrial facilities being redeveloped for more intensive industrial uses.
- The extent that available industrial supply in CMB can meet the locational requirements of prospective occupiers who otherwise would have located in neighbouring municipalities. For example, occupiers seeking a convenient supply chain linkage to Sydney and Melbourne will be less likely to establish in CMB, noting that future supply will likely be concentrated in the northern portion of the municipality.

The NBD assumptions for the three demand Scenarios adopted for analysis were as follows:

- Base. NBD premium would reach 25.0% by 2053.
- Low. NBD premium would reach 10.0% by 2053.
- High. NBD premium would 40.0% by 2053.

4.2 Demand Model Methodology

The main steps in constructing the demand models are:

- 1. Forecast population growth in CMB's Northern and Southern regions (refer Chapter 2.2).
- 2. Estimate total occupied industrial land per '000 population, using CMB data sourced from the 2023 VUT analysis, adjustments for underutilised land and CMB's 2023 population.
 - The 2023 ratio of total occupied industrial land per '000 persons was 1.72ha. For reference, the original UAELI (2022) assumed that this ratio would increase slightly from 1.62 (the estimate in 2021) to 1.64 across the 30-year projection period.
- 3. Estimate Population Growth Demand (PGD). In estimating PGD
 - As noted, total occupied land per '000 was 1.72ha in 2023.
 - This level of PGD was held constant over the projection period to 2053, divided into 5-year blocks.
- 4. Estimate NBD premiums at the end of each 5-year block, quantifying the margin by which future total demand exceeds PGD.
 - New Business Demand Calculation: NBD_y = NBP_y*PGD*P_y, where:
 - NBD = New Business Demand in a defined year.
 - o NBP_b = New Business Premium per 1,000 persons in a defined year.
 - o PGD = Population Growth Demand per 1,000 persons = 1.72
 - o Py = City of Moreton Bay's population in a defined year.
- 5. Distribute PGD and NBD into industrial zones as follows:
 - General Industry 50% of PGD and 65% of NBD

- Mixed Industry and Business Area 20% of PGD and 30% of NBD
- Light Industry- 25% of PGD and 5% of NBD
- Other (Restricted Industry and Marine Industry) 5% of PGD and 0% of NBD

Model Limitations

All models, which are simplified representations of very complex real-world interactions, have practical limitations. In this instance, there are a number of factors that could impact the modelled projected patterns of industrial demand in Moreton Bay. These factors have the potential to impact the quantity, mix and timing of demand for industrial land. Accordingly, the results of this demand modelling approach should be regarded as indicative.

4.3 Demand Summary

CMB's industrial land demand projections are summarised as follows (refer Figure 4.1 and Table 4.1).

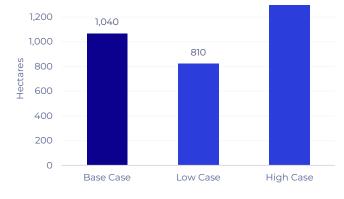
- PGD is projected to average 21.8ha pa between 2024 and 2053 under all Scenarios.
- **NBD** is projected to average 12.8ha pa over the 2024 to 2053 period under the Base Scenario, ranging from 5.1ha under the Low Scenario to 20.5ha under the High Scenario.

1,400

Total industrial demand projections under the three Scenarios are as follows:

- Base Scenario demand would average 34.6ha pa, generating a requirement for approximately 1,040ha over the period 2024 and 2053.

 Demand is projected to average 28.2ha pa between 2024 and 2028, before increasing over subsequent periods to average 40.8ha pa between 2049 and 2053.
- Low Scenario demand would average 27.0ha
 pa, generating a requirement for approximately
 810ha over the period 2024 and 2053. Demand
 is projected to average 23.3ha pa between 2024
 and 2028, before increasing to 30.2ha pa
 between 2049 and 2053.



1.270

Figure 4.1 Total Industrial Land Demand between 2024 and 2053, by Scenario

• **High Scenario** – demand would average 42.3ha pa, generating a requirement for approximately 1,270ha over the period 2024 and 2053. Demand is projected to average 33.1ha pa between 2024 and 2028, before increasing to 51.4ha pa between 2049 and 2053.

The High Scenario has been prepared having regard to the potential for demand transfer from neighbouring LGA's, noting that this is inherently uncertain. Under this Scenario the NBP would average 14.5ha pa between 2024 and 2033, before increasing to 20.3ha between 2034 and 2043, and 26.7ha between 2044 and 2053.

Brisbane LGA's industrial supply will be exhausted after around 2027, based on take-up trends between 2011 and 2021 (refer Section 2.3). At this time, Sunshine Coast LGA would have around 10 years of supply remaining. By, say 2034 the NBP would be approximately 32.2% of Brisbane's historic take-up trends at 18.9ha pa.

Indicatively, the High Scenario's NBP could comprise:

- Approximately 11.7ha of demand transfer from Brisbane LGA (i.e. equivalent to 20% of historic take-up in Brisbane LGA (58.6ha)).
- Approximately 1.3ha of demand transfer from Sunshine Coast LGA (i.e. equivalent 10% of current take-up in Sunshine Coast LGA)
- The balance of 5.8ha attributed to other aspects, such more aggressive tenant attraction initiatives. Note 5.8ha of demand is equivalent to roughly six 5,000m² warehouses/plants.

Total industrial demand pa by **industrial zone precinct** (refer Table 4.2) is projected to average the following under the Base Scenario between 2024 and 2053:

- 19.2ha for GI land
- 8.2ha for MIBA land
- 6.1ha for Light Industry land
- 1.1ha for Other land (Marine Industry and Restricted Industry).

Table 4.3, Table 4.4 and Table 4.5 provide a detailed over of CMB's industrial demand by PGD and NBD.

Table 4.1 Projected Annual Population Based Demand and New Business Demand Summary, by hectare

Category	#24-28	#29-33	#34-38	#39-43	#44-48	#49-53	#24-53
Population Growth Demand	20.0	21.2	22.1	21.4	23.1	23.2	21.8
New Business Demand							
Base	8.2	9.9	11.8	13.5	15.7	17.6	12.8
Low	3.3	4.0	4.7	5.4	6.3	7.0	5.1
High	13.1	15.9	18.9	21.7	25.1	28.2	20.5
Total Industrial Demand							
Base	28.2	31.2	33.9	34.9	38.8	40.8	34.6
Low	23.3	25.2	26.8	26.8	29.4	30.2	27.0
High	33.1	37.2	41.0	43.1	48.3	51.4	42.3

Source: Ethos Urban

Table 4.2 Projected Annual Demand (ha) by Industrial Zone Precinct

Scenario	Zone Precinct	#24-28	#29-33	#34-38	#39-43	#44-48	#49-53	#24-53
	General Industry	15.3	17.1	18.7	19.5	21.8	23.0	19.2
	MIBA	6.5	7.2	8.0	8.3	9.3	9.9	8.2
Base	Light Industry	5.4	5.8	6.1	6.0	6.6	6.7	6.1
	Other	1.0	1.1	1.1	1.1	1.2	1.2	1.1
	Total Demand	28.2	31.2	33.9	34.9	38.8	40.8	34.6
	General Industry	12.1	13.2	14.1	14.2	15.6	16.2	14.2
	MIBA	5.0	5.4	5.8	5.9	6.5	6.7	5.9
Low	Light Industry	5.2	5.5	5.8	5.6	6.1	6.1	5.7
	Other	1.0	1.1	1.1	1.1	1.2	1.2	1.1
	Total Demand	23.3	25.2	26.8	26.8	29.4	30.2	27.0
	General Industry	18.5	21.0	23.3	24.8	27.9	29.9	24.2
	MIBA	7.9	9.0	10.1	10.8	12.2	13.1	10.5
High	Light Industry	5.7	6.1	6.5	6.4	7.0	7.2	6.5
	Other	1.0	1.1	1.1	1.1	1.2	1.2	1.1
	Total Demand	33.1	37.2	41.0	43.1	48.3	51.4	42.3

Table 4.3 Projected CMB Urban Industrial Land Demand Detailed Overview, 2023 to 2053 – <u>Base Scenario</u>

Factor	Unit		Time Periods					
Annual Forecast Demand								
			2024-2028	2029-2033	2034-2038	2039-2043	2044-2048	2049-2053
Population Based Demand	ha pa		20.0	21.2	22.1	21.4	23.1	23.2
New Business Demand	ha pa		8.2	9.9	11.8	13.5	15.7	17.6
Total Demand	ha pa		28.2	31.2	33.9	34.9	38.8	40.8
Total Forecast Demand								
			2024-2028	2029-2033	2034-2038	2039-2043	2044-2048	2049-2053
Population Based Demand	ha		100.2	106.2	110.5	106.9	115.7	115.8
New Business Demand	ha		40.8	49.7	59.1	67.7	78.4	88.1
Total Demand	ha		141.0	155.9	169.6	174.6	194.1	203.9
New Business Share	%		28.9%	31.9%	34.8%	38.8%	40.4%	43.2%
Per Capita Occupied Industrial Land								
		2023	2028	2033	2038	2043	2048	2053
Projected Population	'000	510.1	568.2	629.8	693.9	755.9	823.0	890.2
Occupied Industrial Land								
Population Based	ha	879.6	979.8	1,086.0	1,196.5	1,303.5	1,419.2	1,535.0
New Businesses	ha	0.0	40.8	90.5	149.6	217.2	295.7	383.7
Total	ha	879.6	1,020.6	1,176.5	1,346.1	1,520.7	1,714.8	1,918.7
Occupied Industrial Land per '000								
Population Based		1.72	1.72	1.72	1.72	1.72	1.72	1.72
New Businesses		0.00	0.07	0.14	0.22	0.29	0.36	0.43
Total		1.72	1.80	1.87	1.94	2.01	2.08	2.16
New Business Premiums								
		2023	2028	2033	2038	2043	2048	2053
New Business Premium		0.0%	4.2%	8.3%	12.5%	16.7%	20.8%	25.0%
Aggregate New Business Premium								58.6%
Distribution of Annual Take Up to In	dustrial Zones							
			2024-2028	2029-2033	2034-2038	2039-2043	2044-2048	2049-2053
GI			15.3	17.1	18.7	19.5	21.8	23.0
MIBA			6.5	7.2	8.0	8.3	9.3	9.9
LI			5.4	5.8	6.1	6.0	6.6	6.7
Other			1.0	1.1	1.1	1.1	1.2	1.2

Table 4.4 Projected CMB Urban Industrial Land Demand Detailed Overview, 2023 to 2053 – Low Scenario

Factor	Unit		Time Periods					
Annual Forecast Demand								
			2024-2028	2029-2033	2034-2038	2039-2043	2044-2048	2049-2053
Population Based Demand	ha pa		20.0	21.2	22.1	21.4	23.1	23.2
New Business Demand	ha pa		3.3	4.0	4.7	5.4	6.3	7.0
Total Demand	ha pa		23.3	25.2	26.8	26.8	29.4	30.2
Total Forecast Demand								
			2024-2028	2029-2033	2034-2038	2039-2043	2044-2048	2049-2053
Population Based Demand	ha		100.2	106.2	110.5	106.9	115.7	115.8
New Business Demand	ha		16.3	19.9	23.6	27.1	31.4	35.2
Total Demand	ha		116.5	126.1	134.1	134.0	147.1	151.1
New Business Share	%		14.0%	15.8%	17.6%	20.2%	21.3%	23.3%
Per Capita Occupied Industrial Land								
		2023	2028	2033	2038	2043	2048	2053
Projected Population	'000	510.1	568.2	629.8	693.9	755.9	823.0	890.2
Occupied Industrial Land								
Population Based	ha	879.6	979.8	1,086.0	1,196.5	1,303.5	1,419.2	1,535.0
New Businesses	ha	0.0	16.3	36.2	59.8	86.9	118.3	153.5
Total	ha	879.6	996.1	1,122.2	1,256.4	1,390.4	1,537.4	1,688.5
Occupied Industrial Land per '000					-		-	
Population Based		1.72	1.72	1.72	1.72	1.72	1.72	1.72
New Businesses		0.00	0.03	0.06	0.09	0.11	0.14	0.17
Total		1.72	1.75	1.78	1.81	1.84	1.87	1.90
New Business Premiums								
		2023	2028	2033	2038	2043	2048	2053
New Business Premium		0.0%	1.7%	3.3%	5.0%	6.7%	8.3%	10.0%
Aggregate New Business Premium								23.4%
Distribution of Annual Take Up to Inc	dustrial Zones							
			2024-2028	2029-2033	2034-2038	2039-2043	2044-2048	2049-2053
GI			12.1	13.2	14.1	14.2	15.6	16.2
MIBA			5.0	5.4	5.8	5.9	6.5	6.7
LI			5.2	5.5	5.8	5.6	6.1	6.1
Other			1.0	1.1	1.1	1.1	1.2	1.2

Table 4.5 Projected CMB Urban Industrial Land Demand Detailed Overview, 2023 to 2053 – <u>High Scenario</u>

Factor	Unit		Time Periods					
Annual Forecast Demand								
			2024-2028	2029-2033	2034-2038	2039-2043	2044-2048	2049-2053
Population Based Demand	ha pa		20.0	21.2	22.1	21.4	23.1	23.2
New Business Demand	ha pa		13.1	15.9	18.9	21.7	25.1	28.2
Total Demand	ha pa		33.1	37.2	41.0	43.1	48.3	51.4
Total Forecast Demand								
			2024-2028	2029-2033	2034-2038	2039-2043	2044-2048	2049-2053
Population Based Demand	ha		100.2	106.2	110.5	106.9	115.7	115.8
New Business Demand	ha		65.4	79.5	94.5	108.4	125.6	141.0
Total Demand	ha		165.6	185.8	205.0	215.3	241.3	256.9
New Business Share	%		39.5%	42.8%	46.1%	50.3%	52.0%	54.9%
Per Capita Occupied Industrial Land								
		2023	2028	2033	2038	2043	2048	2053
Projected Population	'000	510.1	568.2	629.8	693.9	755.9	823.0	890.2
Occupied Industrial Land								
Population Based	ha	879.6	979.8	1,086.0	1,196.5	1,303.5	1,419.2	1,535.0
New Businesses	ha	0.0	65.4	144.9	239.4	347.8	473.3	614.4
Total	ha	879.6	1,045.2	1,230.9	1,435.9	1,651.2	1,892.5	2,149.4
Occupied Industrial Land per '000								
Population Based		1.72	1.72	1.72	1.72	1.72	1.72	1.72
New Businesses		0.00	0.12	0.23	0.35	0.46	0.58	0.69
Total		1.72	1.84	1.95	2.07	2.18	2.30	2.41
New Business Premiums								
		2023	2028	2033	2038	2043	2048	2053
New Business Premium		0.0%	6.7%	13.3%	20.0%	26.7%	33.4%	40.0%
Aggregate New Business Premium								93.7%
Distribution of Annual Take Up to In-	dustrial Zones							
			2024-2028	2029-2033	2034-2038	2039-2043	2044-2048	2049-2053
GI			18.5	21.0	23.3	24.8	27.9	29.9
MIBA			7.9	9.0	10.1	10.8	12.2	13.1
LI			5.7	6.1	6.5	6.4	7.0	7.2
Other			1.0	1.1	1.1	1.1	1.2	1.2

5.0 Supply Adequacy and Timing

This chapter evaluates CMB's adequacy of industrial land supply over the next 30 years and considers the indictive timing of industrial precincts.

Key Findings:

- CMB's adequacy of supply (in years) is calculated by dividing Effective Supply by projected demand. The municipality's industrial supply should be equivalent to at least 15-years for it to be considered adequate.
- Broadly speaking, 15-years is considered a suitable supply buffer for new industrial supply to be identified, planned, serviced, and brought to market.
- Overall, CMB's total Effective Supply is equivalent to approximately 15 years of demand under the Base Scenario. This reduces to approximately 13 years of supply under the High Scenario.
- Broken down the individual zone precincts, assuming no demand transfer between zone precincts, there is an estimated:
 - 14 years of General Industry supply
 - 20 years of Mixed Industry and Business Area supply
 - 14 years of Light Industry supply
 - 11 years of Other supply (i.e. Marine Industry and Restricted Industry)
- Accordingly, additional GI, LI and Other supply needs to be identified and planned to ensure CMB's
 industrial market remains competitive and responsive demand drivers (including significant projected
 population growth) and economic development opportunities.
- The modelling undertaken provides a high-level indication of the required timing of individual industrial precincts. This analysis is undertaken for NVL (rather than Effective Supply) to include Waraba and Bribie Island Road. Under the Base Case, the key findings for the timing of remaining undeveloped precincts are:
 - GI supply will be exhausted by 2031 in the Southern Region.
 - Elimbah East is required to come online in 2024 and will be critical to CMB's industrial land supply going forward. Approximately 26.6% of total industrial demand is projected to flow to Elimbah East (out of current total NVL supply).
 - MIBA supply is required to come online at NEBP by around 2026, noting that preliminary development works have already commenced at this precinct.
 - Gl industrial land in Waraba is required by around 2036.

5.1 Adequacy of Supply

Approach

An adequate supply is considered to be at least 15 years of Effective Supply (i.e. supply that is appropriately zoned and able to be serviced). This approach has been adopted because it is considered best practice for local governments to maintain at least 15-years of Effective Supply of industrial land, to:

- Accommodate demand
- Allow for necessary infrastructure planning and delivery
- Provide a buffer while additional land supplies are being identified, investigated, and potentially re-zoned, before supply is exhausted
- Avoid placing undue upward pressure on land prices.

As outlined in Section 1.3, ShapingSEQ 2022 has a strategy to "plan for a local supply of suitable land for industrial uses that considers anticipated demand within the LGA, constraints of the land, surrounding land uses and proximity to essential infrastructure required to service industrial development" (Strategy 5.7).

This replaced previous guidance in ShapingSEQ 2017 that a minimum threshold of 15-years supply that is appropriately zoned and able to be serviced be planned for at municipal level.

In the consultant's view, a minimum threshold of 15-years remains the most appropriate test for adequacy of supply in CMB, having regard for:

- CMB's context as a major growth corridor
- The likelihood of spillover demand from neighbouring municipalities (such as Brisbane LGA) that are supply constrained and have minimal or no areas vacant for new industrial estates to be planned and developed.

Key Findings - Adequacy of Total Industrial Supply

CMB's total industrial supply is equivalent to approximately 15.0 years of demand (i.e. total Effective Supply / total average demand across all zone precincts). Under the High Scenario, CMB's industrial land is equivalent to 12.8 years of demand. The adequacy of total Effective Supply under the Base, High and Low Scenario is shown by Figure 5.2, while Figure 5.1 depicts the exhaustion rate under the Base Scenario.

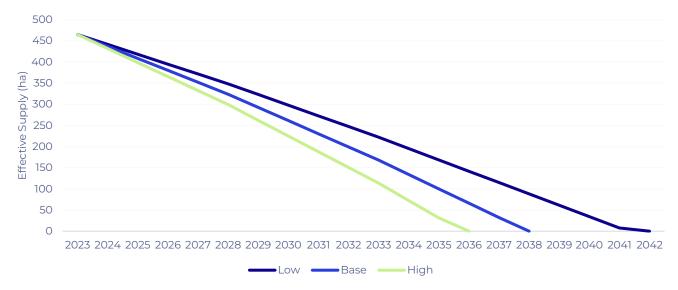


Figure 5.1 CMB's Industrial Land Exhaustion Rates

Source: Ethos Urban

Note: This assumes 100% demand transfer between industrial zone precincts

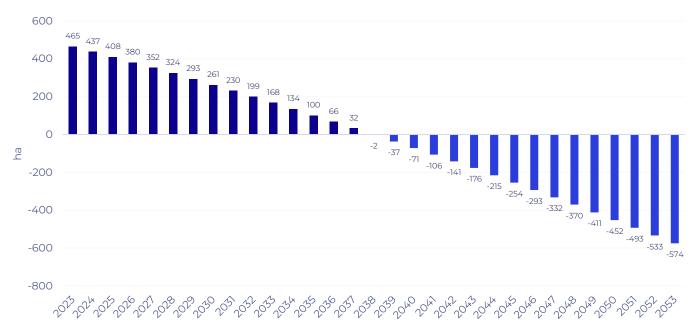


Figure 5.2 CMB's Total Industrial Effective Supply vs Total Industrial Demand, Base Scenario

Source: Ethos Urban

Note: This assumes 100% demand transfer between industrial zone precincts

5.2 Precinct Timing and Take-Up

Methodology

To model the pattern of take up of industrial land during the period 2023 to 2053 is a significantly more complex task and is described in more detail in Appendix A1. A key outcome of the modelling was to estimate when supply would be exhausted in individual areas and when newer areas would be required to come onstream to account for various levels of demand.

In broad terms the rules adopted to allocate demand to individual zones and precincts accounted for:

- Population growth patterns between the defined Northern and Southern Region, determining the broad share of demand allocated to each region.
- An assumed development sequence among areas, nominating the order in which specific areas would be developed.
- Allocation, sharing and overflow patterns of demand between individual areas.

As a result of this methodology, the following adequacy of supply analysis may not line up with projected demand estimated in Section 4.3. This creates **residual demand**, which represents demand that exceeds supply however cannot be allocated to an individual precinct.

Note, for the purpose of this assessment it is assumed that there is no industrial land transfer between zone precincts.

Key Findings by Industrial Zone – Effective Supply

CMB's adequacy of supply at the zone precinct level under the Base Scenario is as follows (refer Table 5.1 and Figure 5.3):

- 14 years of GI supply
- 20 years of MIBA supply
- 14 years of LI supply
- 11 years of Other

Figure 5.4 and Figure 5.5 highlight CMB's adequacy of supply by zone precinct under the High and Low Scenarios, respectively.

Note this analysis applies the average annual demand for each five-year period annually. Residual demand results where demand exceeds supply and therefore demand cannot be allocated to an individual precinct. Base Scenario residuals are highlighted in Table 5.2.

Note, the supply of Marine Industry land has been exhausted, meaning that the only remaining Other supply is Restricted Industry.

The 15-year threshold is of less relevance to the Restricted and Marine Industry zone precincts due to the unique nature of the industrial activities that establish in these precincts. Notwithstanding this, it is apparent additional Restricted Industry and Marine Industry supply is needed.

Overall, significant additional GI and LI supply needs to be identified and planned to ensure CMB's industrial market remains competitive and responsive to economic growth and economic development opportunities. Detailed planning implications flowing from this analysis are discussed in Chapter 6.

Impact of Elimbah East and North East Business Park Approvals

Planning approvals at Elimbah East and NEBP have resulted in the following reduction in Effective Supply at the municipal level:

- 87.0ha of General Industry
- 39.6ha of MIBA.

If the approvals are realised in their current form, then the impacts would be a reduction of five years of GI and MIBA supply under the Base Scenario than would otherwise be the case.

Table 5.1 Years of Effective Supply at 2023 by Zone Precinct and Demand Scenario

Zone/Demand Scenario	General Industry	MIBA	Light Industry	Other
Effective Supply (ha)	234.2	145.2	78.9	6.7
Years of Supply				
Base Case	14	20	14	11
Low Growth	18	26	15	11
High Growth	12	16	14	11
Year Exhausted				
Base Case	2037	2043	2037	2034
Low Growth	2041	2049	2038	2034
High Growth	2035	2039	2037	2034

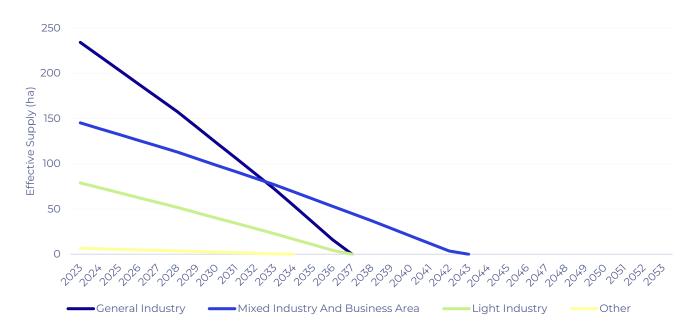


Figure 5.3 CMB's Industrial Land Exhaustion Rates, by Industrial Zone, Base Scenario

Source: Ethos Urban

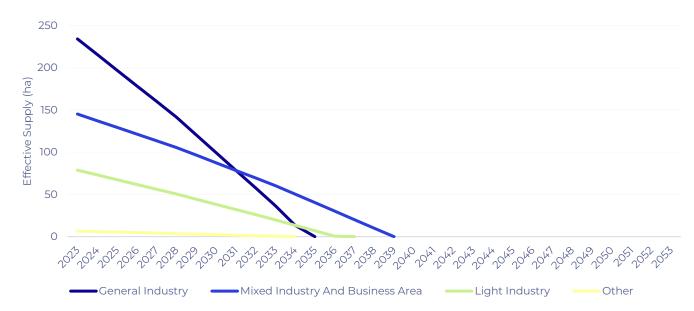


Figure 5.4 CMB's Industrial Land Exhaustion Rates, by Industrial Zone, High Scenario

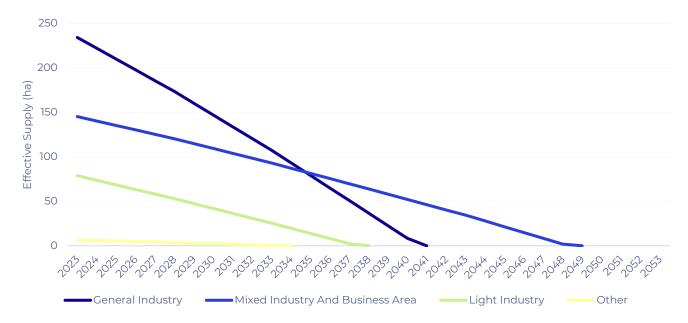


Figure 5.5 CMB's Industrial Land Exhaustion Rates, by Industrial Zone, Low Scenario

Table 5.2 CMB's Residual Annual Demand (ha) – Modelled Demand vs Projected Demand, Base Scenario

Category / Zone	#24-28	#29-33	#34-38	#39-43	#44-48	#49-53
Modelled Demand						
General Industry	15.3	17.1	14.4	0.0	0.0	0.0
MIBA	6.5	7.2	8.0	7.4	0.0	0.0
Light Industry	5.4	5.8	4.5	0.0	0.0	0.0
Other	0.6	0.6	0.1	0.0	0.0	0.0
Total	27.8	30.8	27.0	7.4	0.0	0.0
Projected Demand						
General Industry	15.3	17.1	18.7	19.5	21.8	23.0
MIBA	6.5	7.2	8.0	8.3	9.3	9.9
Light Industry	5.4	5.8	6.1	6.0	6.6	6.7
Other	1.0	1.1	1.1	1.1	1.2	1.2
Total	28.2	31.2	33.9	34.9	38.8	40.8
Residual Demand						
General Industry	0.0	0.0	-4.3	-19.5	-21.8	-23.0
MIBA	0.0	0.0	0.0	-0.9	-9.3	-9.9
Light Industry	0.0	0.0	-1.6	-6.0	-6.6	-6.7
Other	-0.4	-0.4	-1.0	-1.1	-1.2	-1.2
Total	-0.4	-0.4	-6.9	-27.5	-38.8	-40.8

Source: Ethos Urban

Key Findings by Industrial Zone and Precinct - NVL

The modelling undertaken provides a high-level indication of the required timing of individual industrial precincts.

This analysis considers NVL (rather than Effective Supply) and therefore includes precincts such as Waraba and Bribie Island Road that were excluded from Effective Supply. Including these precincts in the analysis provides an indication of when they would be required to inform Council's strategic planning.

The key findings for the timing of remaining undeveloped precincts under the Base Scenario include:

- **GI supply will be exhausted by 2031 in the Southern Region.** Brendale is the Southern Region's primary source of GI supply and is projected to be exhausted by 2031.
- Elimbah East is critical to CMB's industrial land supply. Approximately 26.6% of CMB's annual projected demand will flow to Elimbah East (out of current total NVL supply). Elimbah East has 147.5ha of NVL under current zoning, including 127.3ha of GI supply. This GI land is required to come online in 2024 under the demand modelling.
- MIBA supply is required to come online at NEBP by around 2026, noting that preliminary development works have already commenced at this precinct.
- **GI industrial land in Waraba is projected to be required by around 2036** as industrial land becomes increasingly constrained in CMB. The GI supply at Waraba would be exhausted approximately five-years after coming online if additional supply options are not secured.

Table 5.3, Table 5.4 and Table 5.5 highlight each industrial precinct's timing and projected take-up under each scenario.

Table 5.3 Individual Precinct Supply Timing under the <u>Base Scenario</u>, CMB

Region	Net Vacant Land		To	tal Projecte	d Demand ((ha)	
Precinct Name	2023	#24-28	#29-33	#34-38	#39-43	#44-48	#49-53
Northern Region							
(01) Elimbah East	147.5	30.7	39.7	65.7	11.4	-	-
(02) Waraba	70.6	-	-	28.1	40.5	2.0	-
(03) Sandstone Point	-	-	-	-	-	-	-
(04) Bribie Island Road Caboolture	56.2	-	23.7	23.3	9.2	-	-
(05) Henzell Road Caboolture	9.4	8.8	0.6	-	-	-	-
(06) First Avenue Bribie Island	1.0	-	-	-	1.0	-	-
(07) PAC Morayfield	1.7	-	-	1.7	-	-	-
(08) North East Business Park	63.0	4.9	14.5	11.5	32.1	-	-
(09) Bruce Highway Burpengary	31.9	10.1	8.7	13.2	-	-	-
Southern Region							
(10) Old Gympie Road Narangba	23.5	1.9	17.6	4.0	-	-	-
(11) Deception Bay	0.8	-	0.7	-	-	-	-
(12) Deception Bay Road	15.8	-	2.2	13.7	-	-	-
(13) Boundary Road Narangba	49.8	35.7	13.6	0.5	-	-	-
(14) Scarborough Marina	0.0	-	-	-	-	-	-
(15) Newport	0.0	-	-	-	-	-	-
(16) Rothwell	0.7	-	-	0.7	-	-	-
(17) Kippa Ring	0.0	-	-	-	-	-	-
(18) Clontarf	2.2	-	2.2	0.1	-	-	-
(19) Petrie Mill	0.6	-	-	0.6	-	-	-
(20) Paisley Drive Lawnton	4.9	-	4.9	-	-	-	-
(21) Brendale	72.5	46.9	25.6	-	-	-	-
(22) The Hills District	1.6	-	-	1.6	-	-	-
Total	553.7	139.0	153.8	164.5	94.3	2.0	0.0
Total Residual Demand over 5yı	Period	-2.0	-2.1	-5.1	-80.3	-192.1	-203.9
Total Projected Demand over 5	Syr Period	141.0	155.9	169.6	174.6	194.1	203.9

Table 5.4 Individual Precinct Supply Timing under the <u>Low Scenario</u>, CMB

Region	Net Vacant Land		Tot	tal Projecte	d Demand ((ha)	
Precinct Name	2023	#24-28	#29-33	#34-38	#39-43	#44-48	#49-53
Northern Region							
(01) Elimbah East	147.5	24.3	26.2	46.8	44.4	5.8	-
(02) Waraba	70.6	-	-	-	48.9	21.7	-
(03) Sandstone Point	-	-	-	-	-	-	-
(04) Bribie Island Road Caboolture	56.2	-	8.1	34.4	13.7	-	-
(05) Henzell Road Caboolture	9.4	8.4	1.0	-	-	-	-
(06) First Avenue Bribie Island	1.0	-	-	-	1.0	-	-
(07) PAC Morayfield	1.7	-	-	1.7	-	-	-
(08) North East Business Park	63.0	2.0	10.9	11.7	8.9	27.7	1.8
(09) Bruce Highway Burpengary	31.9	9.9	7.8	14.2	-	-	-
Southern Region							
(10) Old Gympie Road Narangba	23.5	-	12.6	9.4	1.5	-	-
(11) Deception Bay	0.8	-	-	0.7	-	-	-
(12) Deception Bay Road	15.8	-	-	5.8	9.7	0.3	-
(13) Boundary Road Narangba	49.8	26.5	22.8	0.5	-	-	-
(14) Scarborough Marina	0.0	-	-	-	-	-	-
(15) Newport	0.0	-	-	-	-	-	-
(16) Rothwell	0.7	-	-	0.7	-	-	-
(17) Kippa Ring	0.0	-	-	-	-	-	-
(18) Clontarf	2.2	-	1.8	0.5	-	-	-
(19) Petrie Mill	0.6	-	-	-	0.6	-	-
(20) Paisley Drive Lawnton	4.9	-	3.7	1.2	-	-	-
(21) Brendale	72.5	43.4	29.1	-	-	-	-
(22) The Hills District	1.6	-	-	1.6	-	-	-
Total	553.7	114.5	124.0	129.1	128.7	55.5	1.8
Total Residual Demand over 5yı	Period	-2.0	-2.1	-5.1	-5.3	-91.5	-149.2
Total Projected Demand over 5	Syr Period	116.5	126.1	134.1	134.0	147.1	151.1

Table 5.5 Individual Precinct Supply Timing under the <u>High Scenario</u>, CMB

Region	Net Vacant Land		Tot	tal Projecte	d Demand ((ha)	
Precinct Name	2023	#24-28	#29-33	#34-38	#39-43	#44-48	#49-53
Northern Region							
(01) Elimbah East	147.5	37.0	58.9	51.5	-	-	-
(02) Waraba	70.6	-	-	48.7	21.9	-	-
(03) Sandstone Point	-	-	-	-	-	-	-
(04) Bribie Island Road Caboolture	56.2	-	36.6	13.9	5.7	-	-
(05) Henzell Road Caboolture	9.4	9.1	0.3	-	-	-	-
(06) First Avenue Bribie Island	1.0	-	-	1.0	-	-	-
(07) PAC Morayfield	1.7	-	-	1.7	-	-	-
(08) North East Business Park	63.0	7.9	16.2	28.9	10.0	-	-
(09) Bruce Highway Burpengary	31.9	10.2	8.3	13.5	-	-	-
Southern Region							
(10) Old Gympie Road Narangba	23.5	2.4	21.1	-	-	-	-
(11) Deception Bay	0.8	-	0.7	-	-	-	-
(12) Deception Bay Road	15.8	-	8.7	7.1	-	-	-
(13) Boundary Road Narangba	49.8	40.2	9.2	0.5	-	-	-
(14) Scarborough Marina	0.0	-	-	-	-	-	-
(15) Newport	0.0	-	-	-	-	-	-
(16) Rothwell	0.7	-	0.2	0.5	-	-	-
(17) Kippa Ring	0.0	-	-	-	-	-	-
(18) Clontarf	2.2	-	2.2	-	-	-	-
(19) Petrie Mill	0.6	-	0.6	-	-	-	-
(20) Paisley Drive Lawnton	4.9	-	4.9	-	-	-	-
(21) Brendale	72.5	56.8	15.7	-	-	-	-
(22) The Hills District	1.6	-	-	1.6	-	-	-
Total	553.7	163.6	183.6	168.7	37.7	0.0	0.0
Total Residual Demand over 5yı	r Period	-2.0	-2.1	-36.3	-177.6	-241.3	-256.9
Total Projected Demand over !	5yr Period	165.6	185.8	205.0	215.3	241.3	256.9

6.0 Estimated Employment and Value Added

The estimated employment and value added that would be supported by occupied industrial land in CMB under the Base Scenario is summarised in this chapter.

6.1 Supported Employment under the Base Scenario

Estimates of the jobs supported by industrial land to 2053 have been prepared for the Base demand Scenario.

These estimates are high-level. The purpose is to provide a broad understanding of the number of the additional jobs that could be supported in CMB if all projected industrial demand was accommodated.

Employment estimates for industrial land over a timeframe of 30+ years represent a long-term forecast and contain a significant level of uncertainty given the potential for different industry sectors to be transformed by technology and other factors.

The activities, functions and jobs supported by industrial land in 2053 could be quite different to what is observed today, for a wide variety of reasons, many of which are unforeseen at this point of time.

Methodology

Consistent with the UAELI 2022, the following assumptions have been employed:

- Average site coverage of 50% and a plot ratio of 70% for all industrial land
- Floorspace to employment ratios of:
 - GI 225m² of floorspace per job
 - MIBA 100m² of floorspace per job
 - Light Industry 100m² of floorspace per job
 - Restricted Industry 80m² of floorspace per job
 - Marine Industry 80m² of floorspace per job.

Though potential exists that employment densities in specific industries will change over time, for the purposes of this high-level assessment employment densities have been held constant.

Findings

On this basis, Table 6.1 shows that, if all Base Scenario demand was accommodated to 2053, CMB could support an additional 20,840 jobs in the Northern Region and 4,580 jobs in the Southern Region.

The employment projections assume that all residual demand would be accommodated in the Northern Region by additional supply that is not yet planned (assuming there's no potential for additional industrial supply in the Southern Region).

Comparison against Shaping SEQ2023 Employment Projections

ShapingSEQ 2023 released employment planning baselines for all municipalities. These reflect Queensland Government projections of possible future employment growth based on available information and are considered to provide a minimum provision for the purposes of local government land use and infrastructure planning.

The ShapingSEQ 2023 municipal wide employment projections for CMB are forecast to grow at +1.8% pa between 2021 and 2046. Comparatively, it is projected that CMB's industrial area employment would increase at approximately +2.4% pa between 2023 and 2053 under the Base Scenario. Note, this assumes current employment of 24,690 jobs within CMB's industrial employment applying the same floorspace to employment ratios (outlined above) for comparative purposes.

Table 6.1 Estimated Cumulative Additional Employment Supported under the Base Scenario

Region/Precinct	2023-2028	2028-2033	2033-2038	2038-2043	2043-2048	2048-2053
Northern Region						
General Industry	480	1,490	2,940	4,460	6,150	7,940
MIBA	450	960	1,790	3,250	4,890	6,620
Light Industry	380	790	1,750	2,800	3,950	5,120
Other	90	180	420	660	910	1,160
Total	1,400	3,420	6,900	11,170	15,900	20,840
Southern Region						
General Industry	720	1,030	1,030	1,030	1,030	1,030
MIBA	680	1,440	1,990	1,990	1,990	1,990
Light Industry	570	1,180	1,290	1,290	1,290	1,290
Other	130	270	270	270	270	270
Total	2,100	3,920	4,580	4,580	4,580	4,580
Total						
General Industry	1,200	2,520	3,970	5,490	7,180	8,970
MIBA	1,130	2,400	3,780	5,240	6,880	8,610
Light Industry	950	1,970	3,040	4,090	5,240	6,410
Other	220	450	690	930	1,180	1,430
Total	3,500	7,340	11,480	15,750	20,480	25,420

Source: Ethos Urban Note: Figures rounded

Note: Employment projections assume that all residual demand would be accommodated in the Northern Precinct by additional supply that is not yet planned.

6.2 Estimated Value Added

Estimates of value added generated by urban area employment land to 2053 have been prepared for the Base Scenario. These estimates are based on employment projections and Ethos Urban's proprietary input output (IO) model. This IO model is based on ABS National Accounts data and has been developed to comply with best practice guidelines (refer to Appendix A2 for additional information on the methodology).

This assessment measures the direct and indirect economic contribution. The **direct** economic contribution is a representation of the flow from labour and capital committed in the economic activity. The **indirect** economic contribution is a measure of the demand for goods and services produced in other sectors as a result of demand generated by the direct economic activity.

The estimates provided in Table 6.2 are total cumulative value added generated by industrial development that is projected to occur after 2023.

New businesses established in industrial precincts after 2023 are projected to generate \$4.6 billion in cumulative direct value added and \$4.2 billion in cumulative indirect value added.

Table 6.2 Cumulative Additional Value Added (\$m) by Zone Precinct under the Base Scenario (\$2024)

Category	2028	2033	2038	2043	2048	2053
Direct Value Added						
General Industry	\$238.8	\$501.4	\$789.9	\$1,092.4	\$1,428.6	\$1,784.8
Light Industry	\$157.6	\$326.8	\$504.3	\$678.5	\$869.3	\$1,063.4
MIBA	\$187.5	\$398.1	\$627.1	\$869.3	\$1,141.3	\$1,428.3
Other	\$44.7	\$91.4	\$140.1	\$188.8	\$239.6	\$290.3
Total Direct Value Added	\$628.5	\$1,317.7	\$2,061.4	\$2,828.9	\$3,678.8	\$4,566.8
Indirect Value Added						
General Industry	\$219.1	\$460.1	\$724.9	\$1,002.4	\$1,310.9	\$1,637.8
Light Industry	\$132.4	\$274.6	\$423.7	\$570.1	\$730.4	\$893.4
MIBA	\$157.5	\$334.5	\$526.9	\$730.4	\$958.9	\$1,200.1
Other	\$67.2	\$137.5	\$210.8	\$284.1	\$360.4	\$436.8
Total Indirect Value Added	\$576.2	\$1,206.7	\$1,886.2	\$2,586.9	\$3,360.7	\$4,168.1
Total Value Added						
General Industry	\$457.9	\$961.5	\$1,514.8	\$2,094.7	\$2,739.6	\$3,422.5
Light Industry	\$290.0	\$601.4	\$928.0	\$1,248.6	\$1,599.6	\$1,956.8
MIBA	\$345.0	\$732.7	\$1,153.9	\$1,599.6	\$2,100.3	\$2,628.4
Other	\$111.9	\$228.8	\$350.8	\$472.9	\$600.0	\$727.1
Total Value Added	\$1,204.7	\$2,524.4	\$3,947.6	\$5,415.8	\$7,039.5	\$8,734.9

Source: ABS National Accounts; Ethos Urban

7.0 Considerations for Future Planning

Key considerations for the planning of industrial land in CMB are discussed in this chapter.

7.1 The Demand and Supply Situation is Acute

CMB's demand and supply situation for industrial land is now more acute the outlined in the UAELI 2022. In particular:

- The significantly higher population growth envisaged by the ShapingSEQ 2023 projections is anticipated to drive significantly stronger demand than previous envisaged. Across the 30-years to 2051, approximately 720.0ha or demand was projected by the UAELI 2022 under the Base Scenario, compared to 1,040ha in this study for the 30-years to 2053.
- At the same time, CMB's Effective Supply is some 188.2ha lower than estimated in the UAELI 2022 due to takeup, the effect of planning approvals at Elimbah East and NEBP and adjustments to Waraba.

In effect, the reduced amount of remaining Effective Supply will now be consumed more quickly than previously anticipated.

CMB was equal to or under the 15-year adequacy of supply threshold for GI and LI in 2023 (at 14 years respectively) and urgently needs to identify and plan for additional supply in these zone precincts. Consideration also needs to be given to sourcing additional Restricted Industry and Marine Industry supply in appropriate locations.

The total industrial zoned supply in CMB is equivalent to approximately 15 years of demand (dividing total effective supply by total average demand over the relevant periods).

7.2 The Key Concern Identified in the UAELI 2022 Report Remains Relevant

The UAELI 2022 identified that CMB has an 'eggs in one basket' supply problem. At that at the time Elimbah East and NEBP were the only new greenfield area for GI and MIBA Effective Supply that were yet to come online. Relying on these precincts as the sole future reservoirs of GI and MIBA supply was seen to pose a significant risk if they didn't come online or develop as planned.

Recent planning approvals have reduced the supply of GI at Elimbah East and MIBA at NEBP, as previously outlined. Though, it can be argued that planning approval at Elimbah East will result in connection to civil infrastructure sooner than would otherwise be the case, thereby unlocking the precinct for development.

However, the original problem remains. CMB is currently too reliant on the supply at Elimbah East and NEBP, and additional precincts need to be identified and planned to ensure:

- CMB has a competitive industrial market in the long-term that is able to absorb projected demand.
- CMB's supply framework is flexible and supports a range of future supply options. This would reduce the supply risk at the municipal level if individual precincts do not develop as planned.

7.3 The Level of Future Demand is Uncertain

The three demand Scenarios (Low, Base and High) are intended to provide a 'line a sight' regarding what future industrial demand might be across the 30 years to 2053 to inform future planning. A Scenarios based approach to projecting demand has been used because there are a range of factors which cannot be exactly predicted that could determine the level of future demand in CMB. These include, for example:

- Actual population growth trends and changes in the ratio of residents to occupied industrial land.
- The extent of demand transfer from neighbouring municipalities
- Additional demand unlocked by future economic development endeavours.

For this reason, Council should continue:

- Reviewing the demand Scenarios regularly (say, every three to four years).
- Monitoring take-up (via the VUT survey)
- Remaining abreast of market trends and intel from real estate agents.

• Keeping track of enquiries for sites (and recording information such as the land use, land area, preferred zone precinct and where the enquiry originated from).

7.4 Additional Supply Needs to be Identified and Planned

We understand that subsequent the UAELI 2022, Council have been advancing a process to identify and plan new industrial supply precincts.

The need for this process to produce results is more pressing. If it doesn't, CMB could have no GI and LI Effective Supply by 2037 under the Base Scenario.

Accordingly, we recommend that Council:

- Explores avenues to bring online (NVL) supply at Waraba as soon as practicable, acknowledging that the sequencing of the broader Waraba PDA will likely have implications for when the future industrial precinct at Waraba would be serviced.
- Protect the opportunity to deliver industrial supply in Elimbah SEQ Development Area, irrespective of whether an Intermodal freight hub is ultimately planned for this location.
- Complete the investigation regarding the suitability of the Rural Residential Investigation area (RRIA) at Narangba East to accommodate industrial uses.
- Identify and plan other options for industrial supply, with a particular emphasis on delivering additional GI, LI and Restricted Industry supply.
- Explore options for additional Marine Servicing land where appropriately located.
- Undertake an assessment of renewal and redevelopment opportunities in the Brendale and Narangba industrial precincts.
- Ensure that future supply options can be cost effectively connected to civil infrastructure and investigate options to deliver civil infrastructure to unlock existing supply that is not serviced.

Previous analysis by Ethos Urban for Council regarding options to activate vacant industrial land highlighted that the need and scale of infrastructure to be delivered was a key factor that influenced developers' decisions to buy and develop vacant industrial land⁴.

⁴ Refer report titled: MBRC Vacant Industrial Policy Options Assessment 2023

Appendices Al: Methodology and Assumptions

Land Supply Assessment Methodology

Key Data Sources

VUT Database

As part of an agreement with State Development, Infrastructure, Local Government and Planning Department (SDILGP), Council assembles a 'Vacant, Underutilised, Taken-up' (VUT) database, which classifies each industrial land parcel in the municipality into one of these three categories. To assemble a VUT database, Council visually assessed aerial imagery and applied guidelines set out by the SDILGP in SEQ Planned Industrial Land Supply: Process, Methodology and Visual Guide (August 2020).

The digital GIS VUT databases for the years 2016, 2018, 2019, 2021 and 2023 were the core datasets on which the analysis of land supply and take-up were based. As well as the VUT status of each industrial land parcel, the databases contained fields showing:

- Area names
- Formal zoning status
- · Primary land use
- Area (in hectares).

The QLD Treasury guidelines for developing VUT databases does not provide rules for identifying High, Medium or Low Impact industrial uses on occupied industrial land. Accordingly, it was out of this investigation's scope to generate detailed information about High/Medium/Low Impact uses at a precinct level.

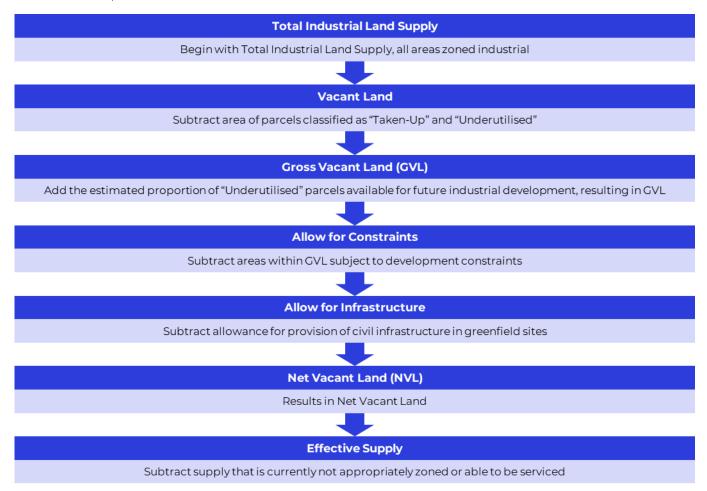
While the VUT databases were an important source of core data for the supply analysis, they have some inherent weaknesses, including the need rely on aerial imagery to assess the VUT status of particular land parcels and the lack of detail about built form and the nature of businesses operating on industrial land.

These weaknesses could be addressed through detailed on-the-ground inspections of industrial land parcels, which would verify parcel status and add to the range of information available.

Land Supply Assessment Methodology

Methodology Overview

The methodology to estimate the future supply of developable industrial land in the municipality, at precinct level and overall, is summarised below:



Net Vacant Land (NVL) vs Effective Supply

Net Vacant Land is gross vacant land less constrained land and Less civil Infrastructure allowance for greenfield sites. This definition of NVL is intended to measure the volume of industrial land that is vacant and available to be developed to meet future demand. NVL does not measure market availability, that is, it does not identify land available for sale or lease at the time of assessment.

NVL represents the total volume of industrial land available for future industrial purposes and therefore includes some land that is not appropriately zoned for development and/or able to be serviced. For the purposes of this assessment NVL is used to model the indicative timing of all precincts (including those precincts that are not yet appropriately zoned or able to be serviced).

Effective Supply is NVL that <u>is</u> appropriately zoned for development and able to be serviced. Approximately 18.1ha of NVL at Bribie Island Road and the entire NVL at Waraba (70.6ha) has been categorised as <u>not</u> appropriately zoned or able to be serviced and has therefore been excluded from Effective Supply.

For the purposes of this assessment, Effective Supply is the appropriate baseline to measure the adequacy of supply (i.e. how many years of supply remain at a given time).

Non-employment Uses

Land identified for non-employment uses (or employment uses not included in the scope of this study) was identified and excluded from further calculations.

All urban employment land was then aggregated into Total Industrial Land Supply.

Taken-up Land

Parcels marked as 'taken-up' in the VUT database were completely excluded from future supply.

In practice, some of these taken-up land parcels may be able to absorb future demand for land or industrial floorspace through increases in building density or redevelopment. However, the potential for existing taken-up industrial sites to accommodate future demand was out of the scope for this study.

Underutilised Land

Land identified as underutilised was assessed through a visual assessment of aerial imagery. Land classified as underutilised was primarily:

- **A Temporary storage yard** used for the temporary storage of materials, machinery, vehicles, etc that does not contain any permanent structures; or
- Land not used to its full potential i.e. containing a significant proportion of open space associated with industrial built form or operation.

This is broadly consistent with SDILGP guidelines in the LSDM 2020. However, the UAELI applies a narrower definition of uses considered to present an underutilisation of sites compared to the SDILGP guidelines. For example, the uses listed below are considered to represent an underutilisation of a sites based on the SDILGP guidelines, but they are considered taken-up in this assessment:

- Automotive wreckers
- New and used vehicle storage
- Permanent storage yards and depots
- · Heavy vehicle turning and queueing area
- On-site environmental management areas.

The UAELI applied this approach because the SDILGP guidelines were considered to categorise some uses as underutilised that are necessary for servicing the needs of local residents and businesses.

As noted above, GVL is calculated by adjusting Total Industrial Land Supply for Taken-up and Underutilised lots. GVL is a measure of the volume of industrial land that is vacant or underutilised before allowing for planning constraints or civil infrastructure requirements.

As per the SDILGP guidelines, sites categorised as vacant include:

- Vacant land (for industrial purposes): land that does not contain significant built-form or evidence of an industrial operation.
- Dwelling house: dwelling on a small, medium to larger lot, with elements of vacant land and is zoned for and has the potential to be used for future industrial use; or
- Rural, farming or land-based agricultural operations: land that is being used for rural, farming or agricultural operations.

Constraints

The assessment of constraints land was undertaken internally by Council, and based on GIS layers showing areas subject to physical conditions or planning classifications that may limit the extent of future development. For example, physical constraints include:

- Landslide hazards (>15% slope)
- High risk flood areas
- Overflow land path
- Erosion prone areas.

Planning constraints include:

- Matters of State environmental significance
- Landscape heritage areas.

Constraints were categorised as hard, high, moderate, limited and no (significant) constraint, initially consistent with the methodology outlined in the SDILGP Land Supply and Development Monitor (LSDM) for 2020.

Based on the SDILGP LSDM 2020 methodology, the following allowances for the proportion of non-developable/developable land within a constrained area were applied:

- Hard Constraint 100% undevelopable; 0% able to be developed
- High Constraint 75% undevelopable; 25% able to be developed
- Moderate Constraint 50% undevelopable; 50% able to be developed
- Limited Constraint 25% undevelopable; 75% able to be developed
- No (significant) Constraint 0% undevelopable; 100% able to be developed.

In the GIS layers analysed there were multiple instances where areas were subject to more than one constraint (e.g., Landslide Hazard Area (>15% Slope) - Hard Constraint plus Overland Flow Path - Limited Constraint).

In the instances where more than one constraint overlapped the same land segment, the 'hardest' constraint (i.e., with the greatest percentage of undevelopable land) was adopted.

Accordingly, this approach does not allow for overlapping constraints to accumulate limitations on developable land. In practice, this method has the potential to underestimate constraints on developability since the confluence of constraints may have cumulative consequences. However, without site specific details and informed engineering advice, it is considered difficult to estimate the cumulative consequences for every combination of overlapping constraints. From a modelling perspective, adopting the hardest constraint is, in our view, logical and the simplest method to assess constraint impacts.

Note, this approach does not align with the LSDM 2020 methodology which accounts for the cumulative impacts of multiple constraints. In our view the LSDM 2020 methodology has the potential to overestimate the volume of land unavailable for development by considering cumulative impacts.

Civil infrastructure Allowance

Greenfield sites, namely land zoned industrial but yet to be developed, will require civil infrastructure to service future tenants. Civil infrastructure includes internal and access road, paths, water, sewage and electricity supply easements.

Greenfield sites requiring civil infrastructure were identified via a review of arial imagery. Sites requiring infrastructure are defined as those that:

- Are clearly greenfield sites based on a review of aerial imagery (i.e. areas where development is yet to occur);
- Individual vacant sites (larger than 5ha) located in active industrial precincts.

For the purpose of this assessment, the share of greenfield land attributed to civil infrastructure was assumed to average 25%, noting that this requirement may be higher or lower depending on the topological characteristics of particular sites. Notwithstanding specific site characteristics, 25% is considered an appropriate allowance and is a widely used benchmark for greenfield development planning.

Adequacy of Supply and Timing of Precincts

In modelling the timing of induvial precinct, we have sought to address a number of important issues relevant to Council's strategic and statutory planning, including when:

- Council would face 15-years or less of future supply of land that is appropriately zoned and able to be serviced.
- Supply within particular precincts is likely to be exhausted.
- Demand would theoretically be pushed to specific precincts due to constrained supply.

The dimensions of the task complicate the modelling, with the following elements incorporated in the take-up model:

- Three demand scenarios
- Five zone precinct types (GI, MIBA, Light Industry, Restricted Industry, Marine Industry)
- 22 precincts
- 30 years.

A number of practical and simplifying assumptions have been adopted in constructing the simulation, and these assumptions along with the basic workings of the model are described below:

- 1. Assemble 2023 NVL (supply) by zone precinct type, divided into northern and southern regions.
- 2. Assemble total demand to 2053 by zone precinct type and northern/southern region, filtered by Base/High/Low demand scenarios.
- 3. Distribute demand by zone to single years to 2053 by taking the annual average of demand within time period blocks.
- 4. Calculate cumulative demand to 2053.
- 5. Calculate 'Effective Supply' i.e. supply that is 'appropriately zoned and able to be serviced' for the purposes of calculating the ShapingSEQ 15-year minimum supply threshold.
- 6. Calculate Effective Supply surplus/deficit at northern/southern region level, and when overall Effective Supply in the south is exhausted, transfer future demand to the north.
- 7. Calculate years of Effective Supply per zone precinct remaining for each year to 2053.
- 8. Sequence precincts in likely order of development, taking Effective Supply, extent of existing developments and potential readiness for development of new sites, including adequacy of civil and internal infrastructure.
- 9. Distribute demand to individual precincts within northern/southern region as per the sequencing.
- 10. If the capacity of a precinct reduces to 30% of the initial NVL, transfer 50% of the following year's demand to the next precinct in the sequence. This demand transfer between precincts recognises that as the NVL in a precinct approaches exhaustion, demand usually slows down. Prime sites are likely to have been already occupied and remaining sites are generally less desirable.
- 11. Calculate when zones within specific precincts either need to come on stream, are exhausted or retain NVL capacity beyond 2053.

An important output of the model is the likely timing of development of different precincts based on projected demand, precinct sequencing and projected demand.

A key assumption is that when capacity of a precinct reaches 70% of initial NVL (i.e., 30% of initial NVL remains), some demand is pushed to the next precinct in the sequence. In reality, development could occur earlier than the timing identified due to a range of factors such as a developer seeking to bring new supply to market in a new location to provide a point of difference in the market.

Model Limitations

As noted earlier, models of the real-world have practical limitations. Factors that would influence the take-up of industrial land in CMB include:

- Spare capacity embedded in developed land parcels could be utilised to absorb increasing demand without requiring new land to be developed. For example, a manufacturing business could increase production capacity by adding to a current line within the footprint of their existing shed.
- The definition of NVL measures vacant land and does not account for vacant premises. It is feasible that vacant buildings could absorb some proportion of increasing demand before new land is required.
- Older developed sites currently zoned industrial could be renewed. Industrial zoned land, that could be repurposed or redeveloped, could reduce the requirement for new industrial land.
- In practice, sites zoned for industrial are simultaneously released, developed and occupied, depending on infrastructure availability amongst other considerations.
- Finally, and importantly, owners of vacant sites may choose to withhold land parcels from the market for a variety of reasons. This factor would potentially reduce the volume of available developable land.

These factors have the potential to impact the timing of the release of new supply to market. Some factors would bring forward the release of new land (e.g., lack of large sites) while others would delay release of new land (e.g., spare capacity, redevelopment potential).

Accordingly, the results of the modelling approach in this report should be regarded as indicative.

A2: I/O Modelling

Economic impacts associated with future industrial land has been prepared with input-output modelling undertaken with reference and compliance to best-practice guidelines.

Input-output tables are a 'map' of the economy that track the flow of products, services, and payments through the many industries, households, government organisations and foreign transactions that make up the Australian economy.

Every industry requires inputs from many other industries, plus the inputs of workers and machinery and equipment to produce output. Input-output modelling uses averages derived from the ABS Input Output Tables to estimate the impact on all industries when one industry expands its production. The modelling used in this report is based on the 2020/21 ABS National Accounts release.

As with all economic models, input-output models (I/O models) have a number of limitations, which include the following inherent assumptions: unlimited supplies of all resources including labour and capital, prices remaining constant, technology is fixed in all industries, and import shares are fixed.

Having regard for these limitations, the modelling used for the purposes of this assessment applies the **Simple Multiplier effect measure**. The Simple Multiplier effects measure estimates the expansion of other industries required to support the initial (direct) increase in the original industry; and does not include the additional impacts of extra wages and employment income being spent across the economy (spill-over effects).

Use of the Simple Multiplier effect measure is in-line with best practice industry standards and reflects a more conservative position. As consumption induced effects are tentative and unobservable, it is considered good practice to exclude them from I/O impact analysis, using the 'simple multiplier' instead of the 'total multiplier' (which includes the 'simple multiplier' plus consumption induced effects).

Results from the modelling should be interpreted as indicative of the potential impact on the Australian economy.

The modelling provides estimates of direct and indirect value added.

Value Added is defined as the wages, salaries, and supplements plus gross operating surplus (income earned by businesses) required in producing the <u>extra output</u> (construction investment and operating output/turnover). This represents the standard measure of economic contribution, that is, the increase in economic activity as measured by gross domestic product (GDP).