

Bass Coast Industrial Lands Study

Economic Analysis, Demand and Supply Assessment



Bass Coast Shire Council

January 2022

Document Control

Project Manager: Jacob Vince
Email: Jacob.vince@atlasurbaneconomics.com
Telephone: 03 7036 0385

Job ID: J182
Job Name: Bass Coast Industrial Lands
Studies

Client: Bass Coast Shire Council
Client Contact: Austin Cram

Document Name: Bass Coast Industrial Lands Study draft

Last Saved: 1/03/2022 2:44 PM

Version	Date	Prepared by	Reviewed by
Draft	24 January 2022	Jacob Vince	Esther Cheong
Final	28 February 2022	Jacob Vince	Esther Cheong

Liability limited by a scheme approved under Professional Standards Legislation

All care and diligence has been exercised in the preparation of this report. Forecasts or projections developed as part of the analysis are based on adopted assumptions and can be affected by unforeseen variables. Consequently, Atlas Urban Economics Pty Ltd does not warrant that a particular outcome will result and accepts no responsibility for any loss or damage that may be suffered as a result of reliance on this information

Executive Summary

BACKGROUND

The Bass Coast Shire local government area (LGA) is located immediately south-east of the Greater Melbourne metropolitan area and forms part of the broader Gippsland Region. Benefitting from a significant visitor economy, the population of Bass Coast Shire (interchangeably referred to as 'the Shire' and 'Bass Coast') has grown considerably in recent years and is projected to rise by almost 15,000 residents in the two decades to 2036.

To support the long-term economic sustainability of the Shire, the Bass Coast Shire Council is preparing the Bass Coast Industry Land Use Strategy (BILUS). The BILUS will identify existing and future industrial land requirements for the Shire (the Study Area) based on a robust and contemporary evidence base.

Atlas Economics (Atlas) have been engaged by Bass Coast Shire Council (Council) to prepare the Economic Analysis and Industrial Land Supply and Demand Assessment (the Study) to assist Council in the development of the BILUS.

This Study is carried out in two parts:

- **Part A: Economic Analysis** examines the existing and future economic context of Bass Coast and how this will influence demand for industrial land in the coming decades.
- **Part B: Industrial Land Supply and Demand Analysis** consider the existing and future supply of industrial land and compares this against projected demand to 2036.

The Study concludes with a set of Shire-wide and precinct-specific recommendations for consideration in the BILUS.

BASS COAST BASELINE POSITION

The Local Economy

The population of Bass Coast grew by some 20% over the 2014-2020 period, expanding a faster rate than both Gippsland and Greater Melbourne. This significant rate of population growth has been a major driver for the local economy.

Bass Coast employed just over 12,000 workers in 2021 and has a clear specialisation in the tourism and agriculture sectors. The economy has been growing in recent years with GRP up by some 11% over 2017-2020.

The construction sector has emerged as the key source of economic and employment activity in the past 5-years with this directly linked to population growth. Traditional industrial sectors are not major drivers of economic activity and account for ~14% of local employment. That said, they remain important sources of employment for local residents.

The industrial precincts play an accommodative role beyond traditional industrial sectors. For instance, construction businesses (defined as a 'population-serving' industry) are major occupiers across the Study Area. Large format retailers, recreational businesses (e.g. gyms) and urban services (e.g. smash repairs, cleaners) who service local residents are also key sources of demand for industrial land and property.

As the population of Bass Coast grows over the coming decades, these types of industries will grow commensurate and elicit further demand for industrial property. Accordingly, the demand drivers for industrial land in Bass Coast is broad.

The Industrial Market

The Bass Coast industrial market has experienced strong market conditions over the past 24-months, with demand outstripping supply over this period. All existing industrial precincts are tightly held, with landowners and occupants aware of the limited supply of industrial land/premises across the Shire.

Whilst demand has been relatively diverse, strong interest has been observed from construction, 'lifestyle uses' (e.g., small food wholesalers/manufacturers, gyms, etc) and urban service businesses. Demand is primarily observed from SMEs.

Very little new industrial development has been observed in recent years. Together with a lack of new supply, strong market dynamics have resulted in upward pressure on property values and rents. This is likely to lead to affordability issues, with small businesses particularly sensitive to accommodation costs.

The localised role of Bass Coast's industrial precincts (and the broader economy) forms a competitive counterweight to other neighbouring industrial areas. Industrial occupiers in Bass Coast, for the most part, require a 'Bass Coast address' to effectively service their customers. This is true for businesses with either local or retail (public) customers.

Bass Coast's competitor precincts will however have implications on the capacity of the Shire to retain and attract new business and industry. More affordable precincts with significant land supply elsewhere have the capacity to attract businesses which play a more export-orientated role (in terms of either products or services) away from Bass Coast.

Overall, the outlook for Bass Coast's industrial precincts is positive. Ongoing population growth, a strengthening visitor economy and regional growth in emerging industries collectively present opportunities for business. The key impediment to the Bass Coast capitalising on these positive market conditions is a lack of available industrial land.

Stakeholder Engagement

Detailed stakeholder engagement with local businesses, real estate agents and business associations was carried out to understand the issues facing local industry and businesses in Bass Coast's industrial precincts. A total of 32 stakeholders were approached during the engagement period, with some 20 interviews carried out.

Feedback from stakeholders identified common factors that underpin the desirability of Bass Coast's industrial precincts:

- Proximity to primary customer base (both business and retail customers).
- Proximity to labour.
- Historically affordable cost of accommodation (either cost of purchase or rental cost).
- Strong growth in the residential construction sector spurring demand for a mix of services during the construction phase and subsequently population-driven services.
- Limited restrictions on the hours of operation.

Almost all weaknesses and threats identified were attributed or related to a lack of available supply (either land or property) which is limiting the ability of existing businesses to expand and the Shire's ability to attract new businesses.

The Impact of Current and Emerging Trends

The Study carried out a detailed analysis of the industry, economic and property market trends influencing the supply and demand of industrial property at a national, regional and local level.

A trends matrix was developed to rank the likelihood and magnitude of impact that various demographic, economic and market trends could have on future demand for industrial land. The analysis concluded that population growth and demographic trends will have the greatest level of impact on future demand for industrial land across the Shire, driving demand for service industries who locate in industrial precincts that are accessible to/ from their service catchments.

The trend analysis informed the development of demand projections used to estimate the quantum of industrial land needed across Bass Coast over the coming decades.

EXISTING AND FUTURE SUPPLY

There are two industrial land use zones which apply across Bass Coast – Industrial 1 Zone (IN1Z) and Industrial 3 Zone (IN3Z). Both zones permit a broad range of industrial uses, though the range of permissible land uses differs slightly:

- The **IN1Z** primarily provides for manufacturing industry, the storage and distribution of goods and associated uses in a manner that does not affect the safety and amenity of local communities.

A broad range of industrial activity is permitted in the IN1Z. The majority of the Shire's industrial land is zoned IN1Z.

- The **IN3Z** provides for industries and associated uses where special consideration of the nature and impacts of industrial uses is required to avoid inter-industry conflict and to allow limited retailing in appropriate locations.

A more limited range of industrial activity is permissible in the IN3Z compared to the IN1Z.

Existing Supply

There is approximately 90ha of zoned industrial land in Bass Coast, comprising ~72ha of land zoned IN1Z and ~18ha of land zoned IN3Z. Of this ~90ha of zoned industrial land, ~65ha is currently occupied.

Table ES. 1 details the existing supply of industrial land across the Bass Coast Shire as at Q4 2021.

Table ES. 1: Existing Supply of Industrial Land, Bass Coast Shire

Precinct	Zone	Zoned Land Area (ha)	No. Lots	Occupied Land Area (ha)	Vacant Land Area (ha)	Floor Area (sqm)	Avg. Plot Ratio*
Eastern Area Industrial Estate (Bass Highway)	IN1Z	45.9	78	34.6	11.3	27,387	0.08
White Rd/McKenzie St	IN1Z	11.6	22	7.6	4.0	15,035	0.20
Korumburra Rd	IN1Z	3.7	29	3.7	-	12,667	0.34
Inverloch	IN3Z	7.2	50	6.8	0.4	16,292	0.24
Cowes	IN3Z	11.2	120	9.0	2.2	29,778	0.33
Newhaven	IN1Z	2.9	22	2.9	-	5,103	0.18
Grantville	IN1Z	7.9	12	0.3	7.6	2,268	0.76
Total		90.4	337	64.8	25.5	108,530	0.17

Source: Atlas Economics/Bass Coast Shire Council

Figure ES.1 depicts the location of the various industrial precincts across the Shire (shown in green).

Figure ES.1: Existing Supply of Industrial Land, Bass Coast Shire



Source: Bass Coast Shire Council

Undeveloped Stock

There are approximately 43 undeveloped zoned industrial lots in the industrial precincts, totalling ~26ha of industrial land. Although vacant, many undeveloped lots are subject to planning permits (thereby not 'true' vacant blocks). When excluding these sites from the count of vacant stock, there is approx. 8ha of remaining undeveloped land.

Table ES.2 shows the remaining supply of zoned industrial land by precinct.

Table ES.2: Remaining Supply of Zoned Industrial Land, Bass Coast Shire

Precinct	Zone	No. Vacant Lots	Total Vacant Land (ha)	Vacant Land with No Permit (ha)	Total Vacant Undeveloped Lot Sizes (ha)				
					<0.1	0.1 to 0.5	0.5 to 1.0	1.0 to 5.0	>5.0
Eastern Area Industrial Estate (Bass Highway)	IN1Z	15	11.3	3.9	3	8	2	-	1
White Rd/McKenzie St	IN1Z	3	4.0	-	-	1	-	2	-
Korumburra Rd	IN1Z	-	-	-	Not applicable				
Inverloch	IN3Z	4	0.4	0.3	-	4	-	-	-
Cowes	IN3Z	15	2.2	0.6	2	13	-	-	-
Newhaven	IN1Z	-	-	-	Not applicable				
Grantville	IN1Z	3	7.6	3.6	-	-	1	2	-
Total		43	25.5	8.4					

Source: Atlas Economics/Bass Coast Shire Council

Figure ES. 2 illustrates the distribution of remaining industrial land supply in the Eastern Area Industrial Estate (Wonthaggi), Grantville and Cowes with undeveloped industrial land shaded in red.

Figure ES. 2: Remaining Supply of Zoned Industrial Land, Eastern Area Industrial Estate, Grantville and Cowes





Source: Atlas Economics/Bass Coast Shire Council

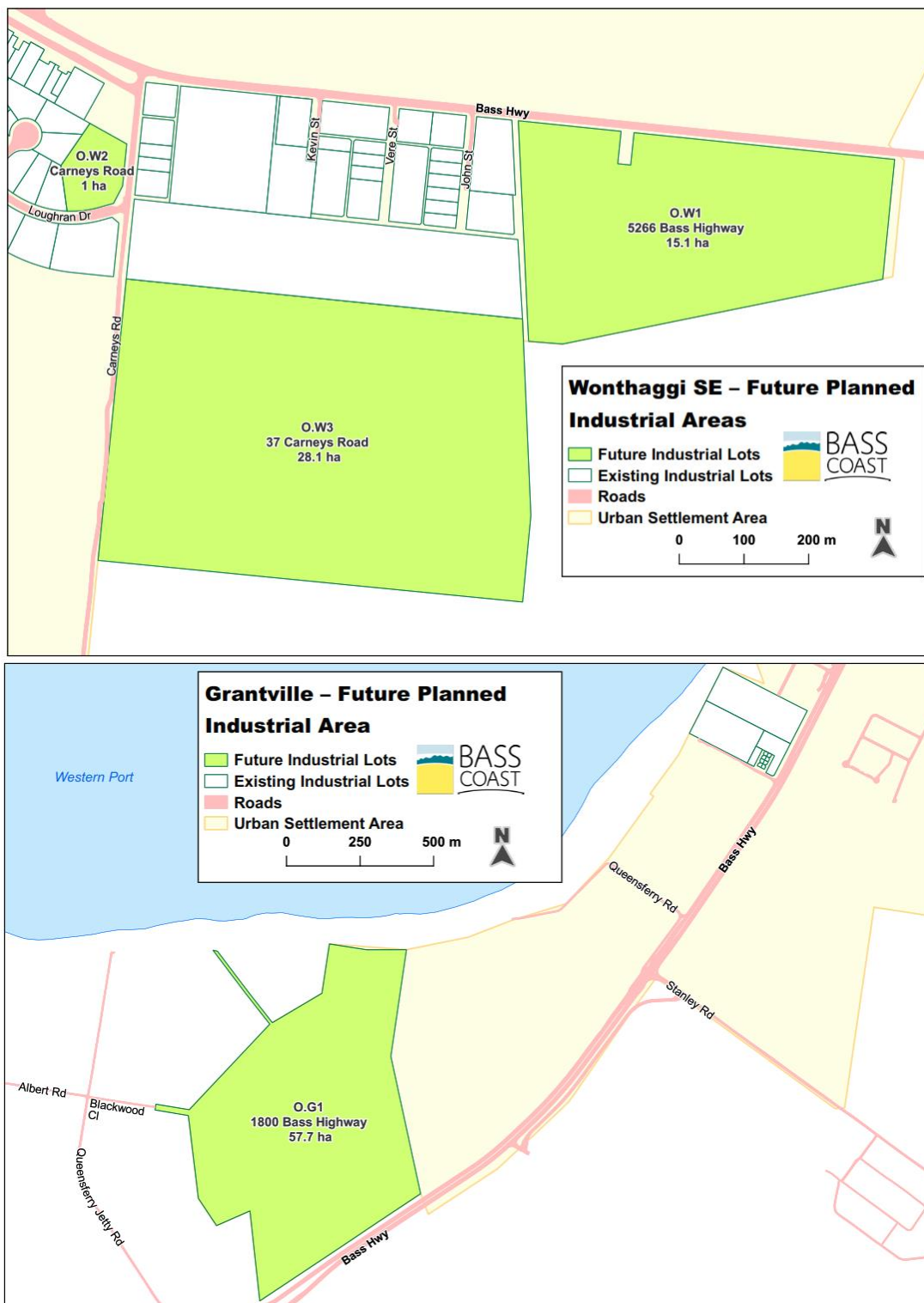
Future Supply

Two precincts have been identified by Council for future industrial supply – Wonthaggi and Grantville. In total, these two precincts measure a gross area of ~102ha of industrial land.

The status of planning for both precincts is different. Planning in Wonthaggi is well-advanced and forms part of the Wonthaggi North East PSP. Limited planning in Grantville has occurred to date and its future development is uncertain given its environmental constraints.

Figure ES. 3 illustrates the location of the future industrial release areas in Wonthaggi and Grantville

Figure ES. 3: Future Industrial Release Area, Wonthaggi and Grantville



Source: Bass Coast Shire Council

Total Potential Supply

Based on remaining undeveloped stock and future industrial land planned for release, there is approx. ~110ha of land.

A common misconception is that if land is zoned urban it will be developed. In reality not all urban land will be developed due to environmental, market or economic constraints that can impede development. Accordingly, it is unlikely that *all* of this ~110ha of industrial supply will be delivered for a variety of reasons. Sufficient supply buffers are therefore required.

DEMAND PROJECTIONS

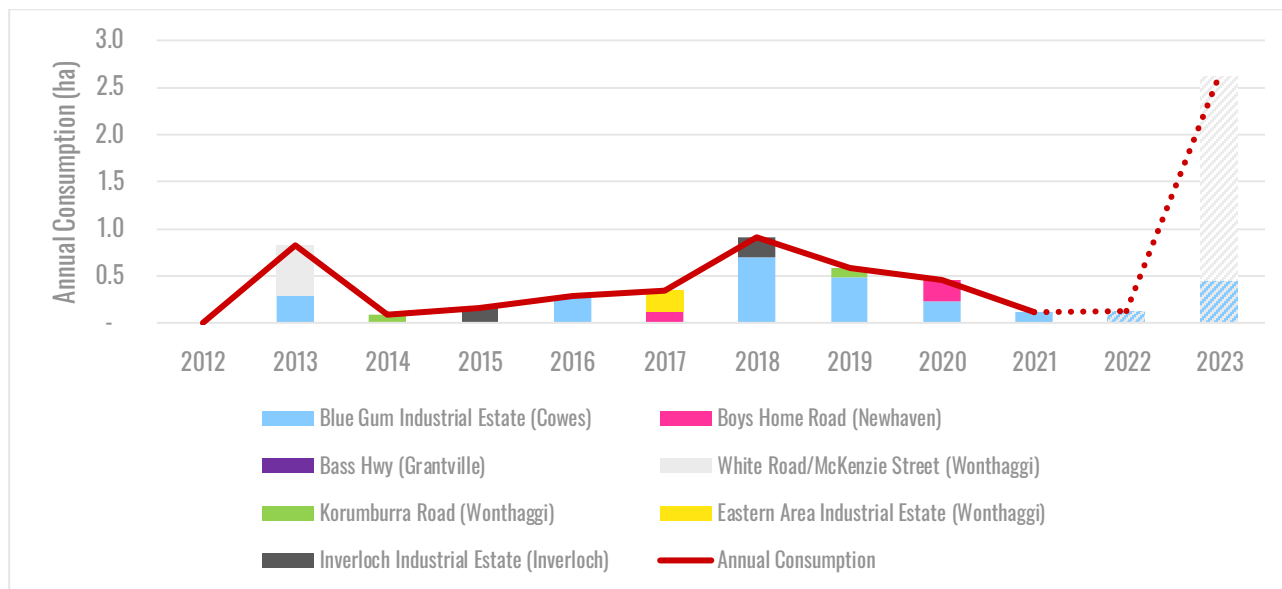
Historical Consumption

Over the 2012-2021 period, approx. ~20ha was developed at an average of 2ha per annum. Much of this consumption was driven by the completion of the Wonthaggi Secondary College in Wonthaggi's Eastern Area Industrial Estate (some 16ha). If excluded from the consumption analysis, the annual consumption rate over 2012-2021 would decline to 0.4ha per annum.

Based on existing planning permits and construction activity, it is estimated that an additional ~3ha of industrial land will be developed over the 2022-2023 period. The majority of this will comprise the proposed Bunnings Warehouse hardware store in Wonthaggi. Consumption of ~3ha over 2022-2023 would be *greater* than total consumption in 2016-2021.

Figure ES. 4 depicts the historical and forecast consumption of industrial land across Bass Coast.

Figure ES. 4: Historical Consumption of Industrial Land (Ex. Wonthaggi Secondary College), Bass Coast Shire



Source: Atlas Economics

Future Demand for Industrial Land

Future demand for industrial demand across Bass Coast is expected to be driven by a mix of different industries and sectors. Some of these sectors will directly respond to population growth (e.g., urban services) whereas others will be influenced by broader economic and industry factors at global or national scale.

Many industries service a mix of local residents and businesses, so are influenced by changes in the local population and broader economic growth. Accordingly, consideration of both future population and employment growth is required to forecast the likely future demand for industrial land. The demographic and economic impacts of COVID-19 are still being understood, making the economic outlook difficult to discern. Projecting economic and employment activity long-term with any degree of accuracy is therefore problematic.

Notwithstanding the difficulty of forecasting employment at a small area level in the current economic climate, three high-level demand scenarios are developed to estimate the amount of industrial land that could be needed in the Shire. These scenarios consider employment and population growth expectations as well as historical consumption trends.

The results of the scenarios suggest that demand for industrial land across Bass Coast over the coming years to 2036 could range from **26ha to 36ha of gross industrial land**, reflecting net demand of between ~1ha and ~2ha per annum.

FUTURE NEEDS AND RECOMMENDATIONS

Future Supply v Projected Demand

Demand projections identified there could be a need for between ~26ha (Lower End) and 36ha (Upper End) of industrial land over the coming years to 2036.

Whilst an important consideration, historical consumption in Bass Coast will be a poor predictor of future demand for industrial land. Having regard to the trends identified in Part A and the findings of research and engagement, the Study considers it appropriate to rely on the upper band of estimated demand, that is 36ha in gross area required to 2036.

With approx. 8ha of remaining stock and potential future supply of 102ha, there is, on paper (in theory), likely to be sufficient supply of industrial land to meet future demand (to 2036). That said, the future supply of 102ha is not yet available for development and use as industrial land. Interventions are therefore necessary to swiftly bring this future supply online.

Furthermore, it is a reality that not all zoned land will be developed. Ensuring an appropriate 'buffer' of supply will be critical to enable demand to be met. An 'overprovision' of industrial land would provide opportunity for the Shire to attract larger operators to the region from key industries such as construction, waste and recycling, manufacturing or renewable energy.

Guiding Principles

As the Bass Coast economy grows and evolves, a range of business uses needs to be provided for, subject to not compromising existing occupiers to precipitate their relocation. It is recommended Council consider some guiding principles:

- **Prioritise the release of additional industrial land** in the Wonthaggi North East Growth Area as soon as practicable. This will help address underlying demand for industrial land from local businesses.
- **Retain all existing industrial precincts in the short to medium term.** Due to the evolving nature of industrial activities and the growing need for population-serving businesses, planning controls should be flexible enough to enable this transition. Surplus capacity in the local industrial market will enable future employment growth to be accommodated.
- **Support businesses located in fragmented industrial precincts.** Maintain isolated precincts which perform a functional role for as long as they are required by businesses in-situ. **In the longer term, investigate alternate land uses**, as precincts that abut residential could struggle to attract new occupiers, particularly when current occupiers vacate.

Shire-wide Recommendations

Table ES.3 outlines the six Shire-wide recommendations that could be considered for adoption in the BILUS.

Table ES.3: Shire-Wide Recommendations

Recommendations	Actions
Recommendation 1: Implement the BILUS	• The BILUS should reflect the findings of this Study and be implemented as soon as practicable to provide certainty to the market and landowners around future supply of industrial land.
Recommendation 2: Prioritise the Release of Future Industrial Land Supply	• Prioritise the release of the future Wonthaggi Industrial Release Area. • Given the cited feasibility challenges in the precinct, Council and the VPA should liaise with the landowners and SGW to explore options to deliver required water and sewerage infrastructure. ◦ To validate claims of feasibility issues, the VPA/Council could commission a feasibility study to examine the impact of infrastructure charges on the viability of development. • Council should investigate alternative industrial land release locations in the case that the Grantville Future Release Area is identified as inappropriate for urban development.
Recommendation 3: Balance Land Use Flexibility with Existing Industrial User Needs	• Given the anticipated growth in population-serving industries, review permitted land uses in select precincts to ensure a level of flexibility is provided whilst protecting the integrity of existing industrial uses. • Smaller industrial precincts which are unlikely to remain viable in the long-term should be identified and initial planning around their transition to other employment zones should be carried out.
Recommendation 4: Monitor Industrial Activity through the Land Use and Register Tracker (LURT)	• Council should periodically review the health, role, and function of industrial lands as an ongoing priority using the Land Use and Register Tracker (LURT) Database. This will become increasingly relevant with time and in response to population growth, infrastructure provision, and an evolving local economy. • Council should also monitor and track the development of industrial type uses outside of existing industrial areas to understand the drivers of this activity.

Recommendations	Actions
Recommendation 5: Continue to Advocate for Major and Local Road Upgrades	- Council should continue to advocate to the Victorian Government for funding of upgrades to the Bass Highway given its strategic importance for local industrial occupiers. - The existing local road upgrade programme should continue to be funded with a focus on improving accessibility into the Shire's existing industrial areas.
Recommendation 6: Align BILUS with the future ED Framework	Ensure the recommendations and actions of the BILUS align with those of the future Economic Development Framework, including consideration of any investment attraction strategies.

Source: Atlas Economics

Precinct-specific Recommendations

The unique characteristics of the individual precincts require a tailored set of recommendations to ensure their long-term economic sustainability. **Table ES. 4** outlines the precinct-specific recommendations which could be considered in the BILUS.

Table ES. 4: Precinct-Specific Recommendations

Precinct (Township)	Zoning	Recommendations
Eastern Area Industrial Estate (Wonthaggi)	IN1Z	- Retain existing IN1Z zone and policy objectives which promote industrial activity in Bass Coast to be located in Wonthaggi. - In the medium to longer term, consider the appropriateness of a IN3Z or commercial zone in the small industrial area along Webb Drive given its proximity to residential uses.
White Road/McKenzie Street (Wonthaggi)	IN1Z	- Retain existing IN1Z zone and policy objectives which promote industrial activity in Bass Coast to be located in Wonthaggi. - Review the impact of the future Bunnings store on access and traffic on existing industrial occupiers in the medium-term.
Korumburra Road (Wonthaggi)	IN1Z	- Retain existing IN1Z zone and policy objectives which promote industrial activity in Bass Coast to be located in Wonthaggi. - Consider alternative land uses in line with the Wonthaggi Activity Centre Plan in the longer term, subject to the addition of further industrial land releases elsewhere in the Shire.
Inverloch Industrial Estate (Inverloch)	IN3Z	Retain existing IN3Z zone, ensure flexibility in permitted land uses (subject to impact on existing industrial occupiers) given role of the precinct in supporting the visitor economy.
Blue Gum Industrial Park (Cowes)	IN3Z	- Retain existing IN3Z zone. - Investigate upgrades to Coghlan Road to improve safety and accessibility. - Prepare a Freight Plan for the Blue Gum Industrial Park, leveraging existing analysis carried out as part of the Cowes Access and Movement Study. - Ensure level of flexibility in permitted land uses (subject to impact on existing industrial occupiers) given role of the precinct in supporting the local visitor economy.
Boys Home Road (Newhaven)	IN1Z	- Retain existing IN1Z zone. - Longer-term consideration should be given to the appropriateness of the existing IN1Z subject to the addition of further industrial land releases elsewhere in the Shire.
Bass Highway (Grantville)	IN1Z	- Retain existing IN1Z zone and policy objectives to support manufacturing and processing industries that use sand and ancillary products as raw materials to locate in Grantville. - Recognise strategic importance of Grantville given its proximity to the Greater Melbourne's metropolitan freeway network.
Wonthaggi Future Release (Wonthaggi)	FZ (IN3Z)	- Rezone the Wonthaggi Future Release Area to IN3Z as a matter of priority given its role in meeting underlying industrial demand in the short-term. - Investigate implications of infrastructure servicing costs on feasibility, work with landowners, VPA and SGW to overcome any issues which may hinder development.
Grantville Future Release (Grantville)	FZ	- Commence investigations to identify the environmental capacity of the Grantville Future Release area to accommodate industrial uses. - Liaise with the landowner to understand their short, medium and long-term objectives.

Source: Atlas Economics

Table of Contents

Document Control	i
Executive Summary	i
Table of Contents	x
Abbreviations	xii
PART A: ECONOMIC AND MARKET ANALYSIS	xiii
1. Introduction	1
1.1 Background	1
1.2 Purpose and Approach	1
1.3 Assumptions and Limitations	2
2. Strategic Context	3
2.1 Location	3
2.2 The Study Area	4
2.3 Road and Freight Network	6
2.4 Infrastructure Programme	7
2.5 State Planning Policy	7
2.6 Local Planning Policy and Strategies	12
3. Socio-Economic Profile Review	15
3.1 Demographic Characteristics	15
3.2 Employment Profile	17
3.3 Economic Value	20
3.4 Implications for Study Area	23
4. Economic and Industrial Trends	24
4.1 Business and Industry Trends	24
4.2 Regional Economic Trends	30
4.3 Local Economic Drivers	32
4.4 Implications for Study Area	33
5. Property Market Review	34
5.1 General Market Overview	34
5.2 Greater Melbourne Industrial Market	34
5.3 Local Market Activity	36
5.4 Implications and Future Outlook	39
6. Challenges and Opportunities for Growth	40
6.1 Stakeholder Feedback	40
6.2 Trends Matrix	41
6.3 Implications for Study Area	44

PART B: SUPPLY AND DEMAND ANALYSIS..... 45

7. Consumption and Supply Analysis 46

 7.1 Regional Consumption 46

 7.2 Local Consumption 47

 7.3 Existing and Remaining Supply 49

 7.4 Future Supply 53

 7.5 Key Findings and Implications 54

8. Growth Scenarios and Demand Projections 55

 8.1 Population Projections 55

 8.2 Employment Projections..... 56

 8.3 Future Demand for Industrial Land..... 57

 8.4 Summary of Findings..... 61

9. Future Needs and Recommendations 62

 9.1 Future Demand and Remaining Supply 62

 9.2 Future Industrial Requirements..... 63

 9.3 Recommendations 63

References..... 66

Abbreviations

ABS	Australian Bureau of Statistics
ANZSIC	Australian New Zealand Standard Industry Classification
BIC	Broad Industry Classification
BILUS	Bass Coast Industrial Land Use Strategy
C2Z	Commercial 2 Zone
DELWP	Department of Environment, Water, Land and Planning
ERP	Estimated Resident Population
FZ	Farm Zone
LURT	Land Use and Register Tracker
IN1Z	Industrial 1 Zone
IN3Z	Industrial 3 Zone
MUZ	Mixed Use Zone
NSC	National Skills Commission
PFN	Principal Freight Network
PSP	Precinct Structure Plan
RSIP	Regionally Significant Industrial Precinct
SME	Small and Medium Sized Enterprises
SSIP	State Significant Industrial Precinct
TZ	Township Zone
VBA	Victorian Building Authority
VPA	Victorian Planning Authority



PART A: ECONOMIC AND MARKET ANALYSIS

1. Introduction

1.1 Background

The Bass Coast Shire local government area (LGA) is located immediately south-east of the Greater Melbourne metropolitan area and forms part of the broader Gippsland Region. Benefitting from a significant visitor economy, the population of Bass Coast Shire (interchangeably referred to as 'the Shire' and 'Bass Coast') has grown considerably in recent years and is projected to rise by almost 15,000 residents in the two decades to 2036.

To support the long-term economic sustainability of the Shire, the Bass Coast Shire Council is preparing the Bass Coast Industry Land Use Strategy (BILUS). The BILUS will identify existing and future industrial land requirements for the Shire based on a robust and contemporary evidence base.

Four background studies are being prepared to support development of the BILUS, including:

- Baseline Background Data Analysis;
- Infrastructure Service Analysis;
- Economic Analysis; and
- Industrial Land Supply and Demand Assessment.

Atlas Economics (Atlas) have been engaged by Bass Coast Shire Council (Council) to prepare the Economic Analysis and Industrial Land Supply and Demand Assessment (the Study) to assist Council in the development of the BILUS.

1.2 Purpose and Approach

The overarching objective of the BILUS is to effectively plan for management of industrial land supply across the Shire (the Study Area) to support local economic activity and provide for local employment opportunities.

This Study provides a robust and contemporary evidence base and is carried out in two parts - the Economic Analysis and Industrial Land Supply and Demand Analysis. The following tasks have been undertaken in each part:

Part A: Economic Analysis

Part A examines the economic trends and drivers influencing the use and development of industrial land across Bass Coast now and into the coming decades. Findings from Part A will be used to inform Part B.

- Literature review of relevant State and local strategies, plans, policies and other technical studies.
- Baseline economic profiling of the Bass Coast Shire economy and individual industrial precincts through analysis of historical and contemporary demographic and socio-economic data.
- Regional and industrial land use trends analysis to identify potential implications for industrial demand and utilisation.
- Detailed land use audit of each industrial precinct to identify property characteristics, industry composition and vacancy levels at a precinct and lot-level.
- Stakeholder consultation with Council, business associations, landowners, occupiers and real estate agents.
- Property market appraisal to understand local trends and demand drivers, occupier requirements, market activity (sales and leasing activity) and development activity.
- Competitive analysis to understand the industrial precincts which compete for occupiers and investment in Bass Coast.
- SWOT analysis for each industrial precinct to ascertain the impediments to maximising their economic potential.
- Matrix assessment on the likelihood of key regional and industrial land use trends influencing industrial activity in Bass Coast and their implications for land requirements moving forward.

Part B: Supply and Demand Assessment

Part B forecasts the quantum of industrial land which could be needed to meet demand over the coming decades and compares this against existing and future stock across the Shire. Findings of this analysis are then used to inform specific recommendations for consideration in the BILUS.

- Supply analysis of existing and planned industrial land across the Shire to identify the quantum and characteristics of remaining industrial land.
- Consumption analysis to quantify the historical annual take-up of industrial land across the Shire over the past decade and how this compares to other regions.
- Demand projection scenarios which consider the planned demand for industrial land across Bass Coast over the coming years to 2036, including consideration of the likely industrial typologies to be sought.
- Gap analysis to identify whether existing and proposed industrial land stocks are sufficient and/or suitable to meet projected industrial demand.
- Planning recommendations to support Bass Coast meeting anticipated industrial demand over the coming decades.

The findings of this Study will inform the subsequent preparation of the Bass Coast Industrial Lands Strategy.

1.3 Assumptions and Limitations

Atlas acknowledges several assumptions and limitations associated with this Study.

- At the time of writing, the fallout from the COVID-19 pandemic across the Victorian economy is still playing out. The medium to long-term implications for regional population and employment growth are yet to be fully understood.
- Economic and employment data used in this Study is obtained from a mix of sources, including the Australian Bureau of Statistics (ABS), the National Institute of Economic and Industry Research (NIEIR) and REMPLAN. Data from third party sources is assumed to be correct and is not verified.
- Analysis of employment (jobs) at a precinct level is carried out using Census (2016) data at the Destination Zone (DZ) geography - these being the smallest geographies to analyse small area employment activity. The most recent data available for these small areas is from the 2016 Census – nearly five years ago. Whilst the 2021 Census was completed in August 2021, demographic data (population, households, dwellings) will not be released until late-2022.
- The Study includes qualitative research in the form of consultation with various stakeholders. Interviews with a sample of local businesses were carried out. As such, the consultation findings only represent a sample of business feedback.
- Population projections relied upon in this Study were prepared by the Department of Environment, Water, Land and Planning (DELWP) in 2019. Accordingly, these projections pre-date the outbreak of the COVID-19 in March 2020.
- A site inspection of individual industrial precincts was conducted in November 2021. The inspections were carried out on a kerbside basis.
- Quantitative sales and leasing data are sourced from third parties and is supplemented with qualitative data sourced from local market participants.

Notwithstanding the above, all due care, skill and diligence has been applied to this Study as is reasonably expected.

2. Strategic Context

This Chapter provides a strategic overview of the Shire, including its locational context, the Study Area, existing and future infrastructure, relevant planning policy and key relevant findings from previous industrial studies.

2.1 Location

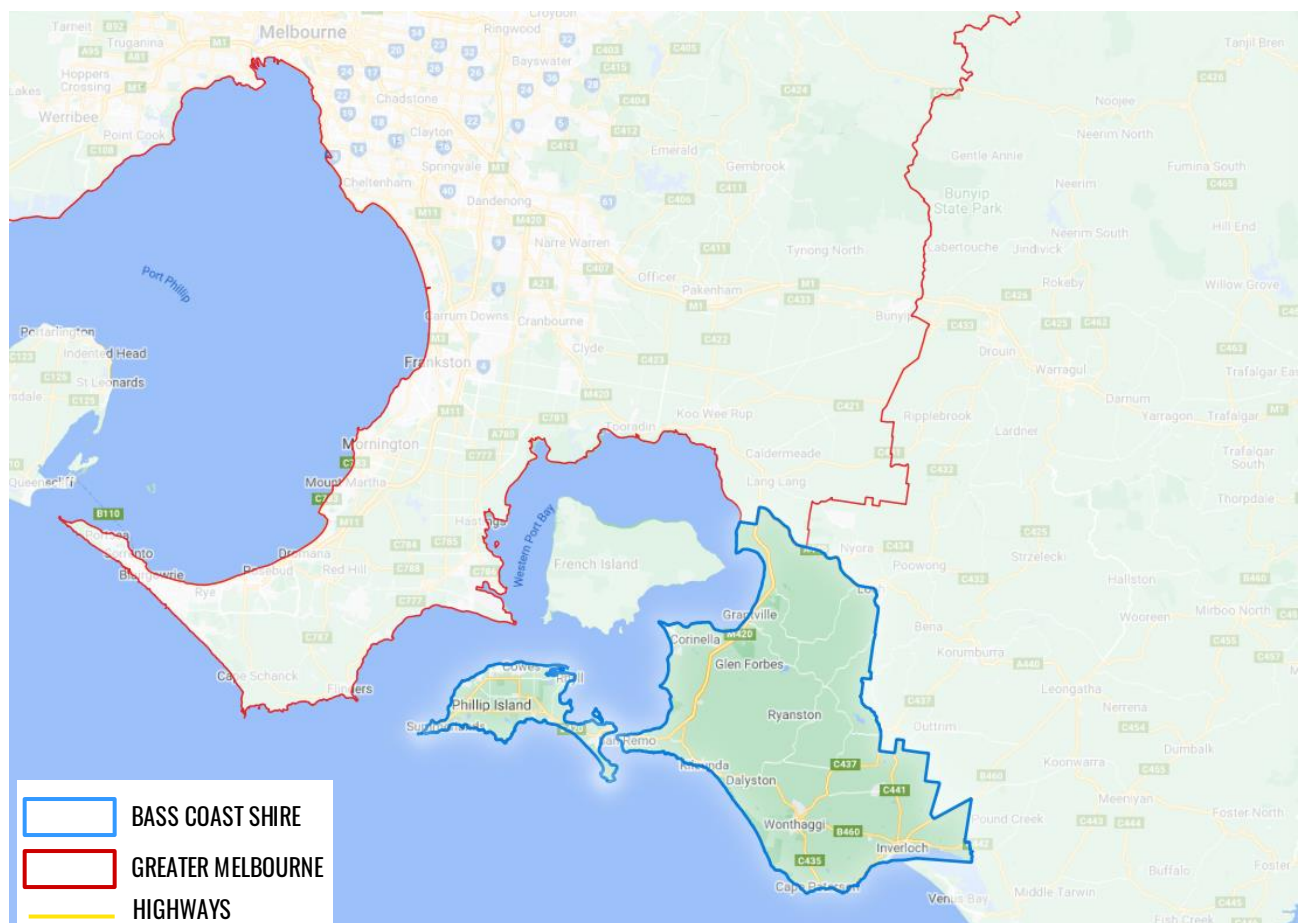
Situated on the south-eastern edge of the Greater Melbourne metropolitan area along the coastlines of Western Port and the Bass Strait, the Bass Coast LGA is located approximately 130km south-east of the Melbourne CBD. Spanning over 800km² and home to some 37,400 residents, the Shire is bounded by Western Port to the north and west, Cardinia Shire in the north-west, South Gippsland Shire in the east and Bass Strait in the south (ABS, 2021).

The Shire comprises a network of regional centres, townships and villages. Wonthaggi is the Shire's primary commercial, retail and civic hub and sole Regional Centre, with smaller towns such as Cowes, San Remo, Inverloch and Grantville playing more localised roles. It is a major international and domestic tourism destination, with its coastline, hinterland and world-renowned Phillip Island major drivers for the local visitor economy. The Shire attracts approximately 3.4 million visitors per annum, with the local population expanding by ~120% to ~80,000 residents in peak holiday periods (Bass Coast Shire, 2021).

Bass Coast forms part of Victoria's broader Gippsland Region. Encompassing much of Victoria's east and north-east and spanning some 41,500km² across six LGAs, the Gippsland Region has significant agricultural and natural resource assets which are key drivers of economic activity. Gippsland produces the majority of Victoria's electricity and around 97% of the state's natural gas supply, whilst also encompassing around 28% of Victoria's food and fibre land area (RDV, 2020). Similar to the Shire, Gippsland has a major visitor economy with multiple strategic tourism assets.

Figure 2.1 illustrates the locational context of the Bass Coast Shire.

Figure 2.1: Locational Context Map



Source: Atlas Economics

2.2 The Study Area

The focus of this Study is on all industrial zoned land across the Shire. Industrial land is zoned a mix of Industrial 1 Zone and Industrial 3 Zone and is distributed across seven industrial precincts and two future release areas in the townships of Wonthaggi, Inverloch, Newhaven, Cowes and Grantville. Collectively, these precincts are referred to as the 'Study Area'.

The Study Area is characterised by a mix of uses and built forms of varying sizes, quality, layout and age, which together typify the growth and evolution of the area over time.

Table 2.1 provides a brief overview of the key characteristics in each individual precinct.

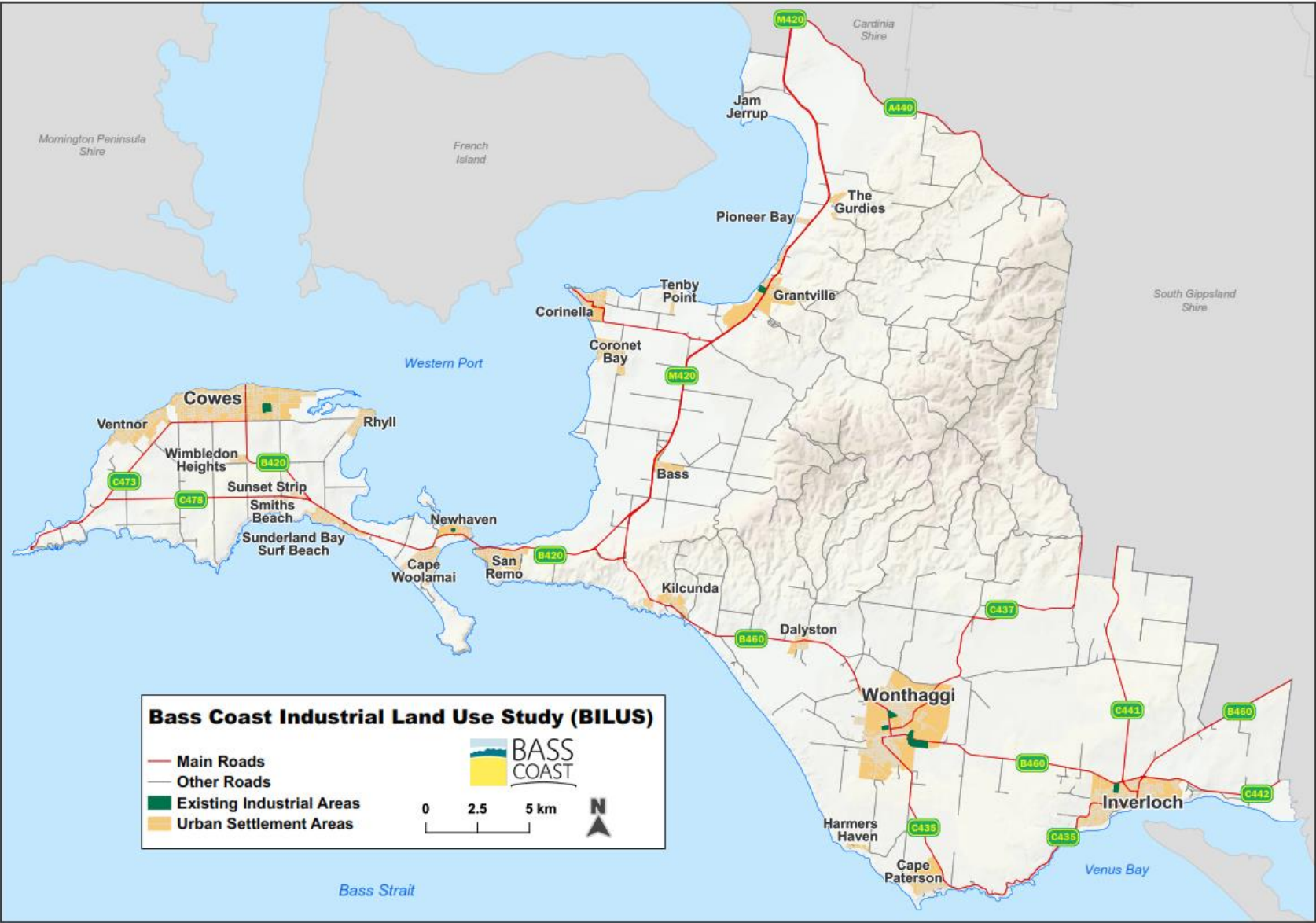
Table 2.1: High-Level Overview, Study Area

Precinct (Township)	Land Area (ha)	Zoning	Common Building Typologies	No. Properties	Key Occupiers
Eastern Area Industrial Estate (Wonthaggi)	45.9	IN1Z	- Warehouses - Industrial suites - Storage units - Retail showrooms - Depots	78	- Wonthaggi Recycling - South Coast Bus - AG Warehouse
White Road/McKenzie Street (Wonthaggi)	11.6	IN1Z	- Small warehouses - Factory units - Retail showrooms	22	- Voyage Fitness - Bunnings (future)
Korumburra Road (Wonthaggi)	3.7	IN1Z	- Small warehouses - Industrial suites - Retail showrooms	29	- MediPharm Labs - TS Constructions - Rotaret
Inverloch Industrial Estate (Inverloch)	7.2	IN3Z	- Storage units - Small warehouses - Factory units	50	- Mitre 10 - Everlast Heavy Industry - Inverloch Gas & Hire
Blue Gum Industrial Park (Cowes)	11.2	IN3Z	- Warehouses - Industrial suites - Storage units - Retail showrooms - Depots	120	- South Coast Bus - Bowens - Ambulance Victoria
Boys Home Road (Newhaven)	2.9	IN1Z	Industrial suites	22	- Bass Strait Direct - South Coast Kitchens
Bass Highway (Grantville)	7.9	IN1Z	Industrial suites	12	Bass Coast Stock Feeds
Wonthaggi Future Release (Wonthaggi)	44.2	FZ	Nil, currently vacant	2	Nil
Grantville Future Release (Grantville)	57.7	FZ	Nil, currently vacant	1	Nil

Source: Atlas Economics

Figure 2.2 depicts the location of the various industrial precincts across the Shire (shown in green).

Figure 2.2: Study Area



Source: Bass Coast Shire Council

2.3 Road and Freight Network

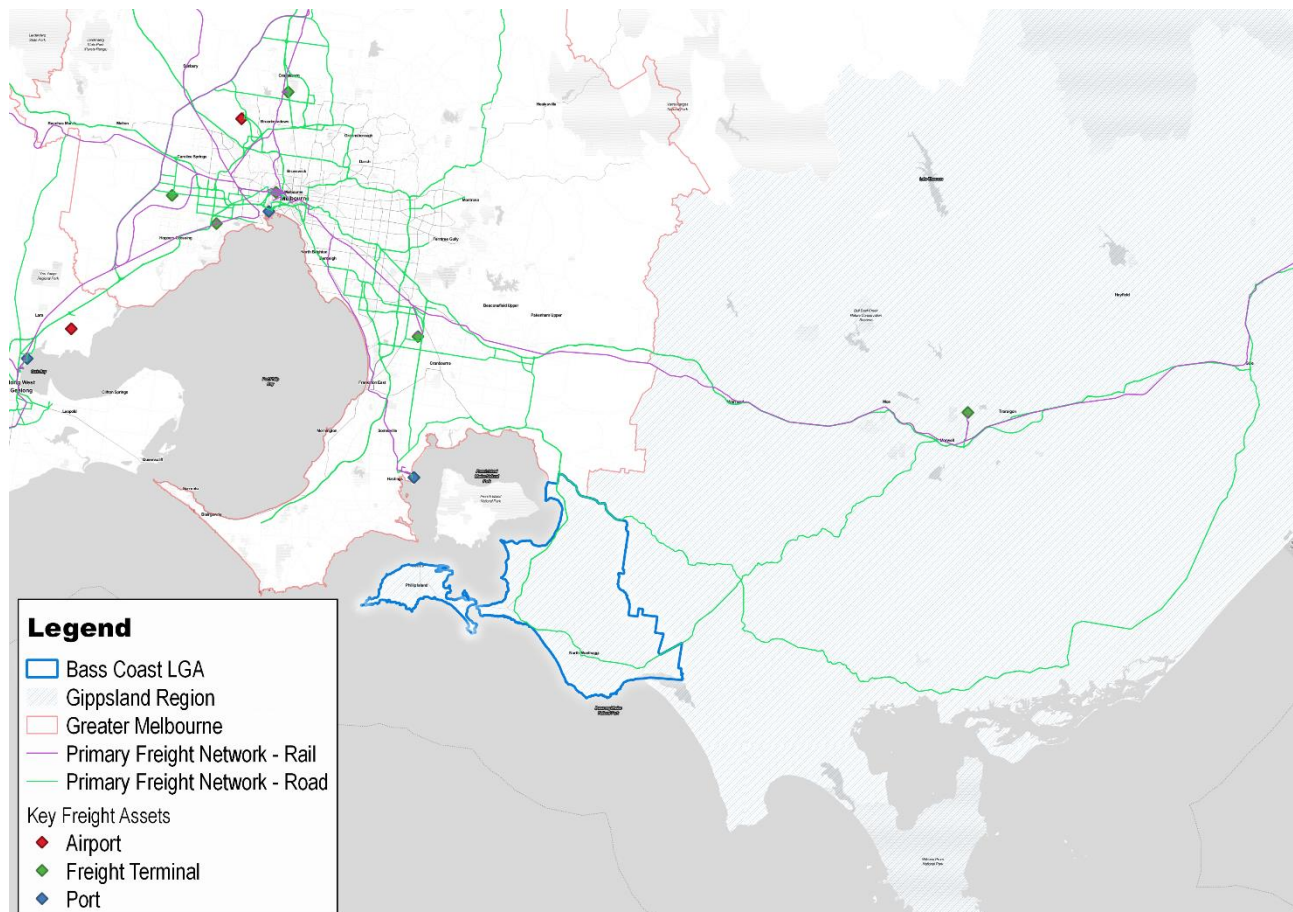
Access to Bass Coast is primarily via Bass Highway, which extends from Leongatha to Lang Lang via Inverloch, Wonthaggi, and Grantville. It is the Shire's primary link to Greater Melbourne via its direct connection to the South Gippsland Highway (Lang Lang) and the Princes Freeway via Healesville-Koo Wee Rup Road. Bass Coast also provides the primary linkages throughout the Shire, linking Inverloch in the east to Wonthaggi and San Remo (via Phillip Island Road) in the west.

Other key arterial roads which provide linkages across the Shire include Phillip Island Road, Korumburra - Wonthaggi Road, Inverloch-Kongwak Road and Cape Paterson-Inverloch Road. Along with Bass Highway, these arterial roads are the primary access points from heavy freight (B-double) vehicles across the Shire in accordance with *Victoria's Gazetted B-Double Network*. A series of local roads permit B-double access into some of the Shire's industrial precincts, including Bear Street (Inverloch), Settlement Road and Dunsmore Road (Cowes).

The Bass Coast Highway and South Gippsland Highway are Bass Coast's two major freight routes which form part of Victoria's Principal Freight Network (PFN). Other major freight assets proximate the Shire include the Port of Hastings and the Dandenong South Inland Port. The Port of Melbourne is approximately 2 hours from the Shire's largest regional centre of Wonthaggi and around 1.75 hours from Grantville.

Bass Coast does not benefit from passenger or freight rail, with the nearest lines being the Gippsland Line and the Stony Point Line. **Figure 2.3** illustrates Bass Coast's position within Victoria's PFN.

Figure 2.3: Primary Freight Network



Source: Atlas Economics

2.4 Infrastructure Programme

Bass Coast has benefitted from a series of State and local government infrastructure investments over the past decade, which have contributed to economic and industrial activity across the Shire. The largest of these was the Victorian Desalination Plant which was completed in 2012.

Looking forward, Bass Coast is positioned to benefit from a variety of major and local infrastructure projects in various stages of planning and delivery. These are discussed in **Table 2.2**.

Table 2.2: Relevant Infrastructure Projects, Bass Coast Shire and Surrounds

Project	Description
South East Melbourne Airport	Plan Melbourne identified the potential for a third airport in Melbourne's South East to the north-east of Lang Lang (Shire of Cardinia) in order to meet the long-term needs of Melbourne's South East and the Gippsland Region. It is anticipated that the airport would be developed and operated by the private sector. It is understood that preliminary proposals to construct the airport have been received by the Victorian Airport from a mix of private investment funds. To date, a formal proposal has yet to be received by the Victorian or Commonwealth Government. The Bass Coast could significantly benefit from proximity to any future passenger or commercial airport in Melbourne's South East, improving better access to domestic and international visitors and airfreight connections from local exports.
Bass Highway Corridor	Given the significant increase in population anticipated in Bass Coast over the coming decades, the Victorian Government is currently investigating options to upgrade sections of the Bass Highway. Extensive community consultation was carried out by Regional Roads Victoria (RRV) in 2017-2018 to identify existing issues along Bass Highway between Anderson and Leongatha. RRV have proposed a series of initial upgrades, including a series of upgrades in Kilcunda to improve pedestrian safety and a potential overtaking lane between Kilcunda and Dalyston.
Wonthaggi Hospital Expansion	The \$115 million of the Wonthaggi Hospital commenced in 2021. The expansion will comprise three new operating theatres plus a procedure room, a new emergency department with 18 additional treatment spaces, and a new 32-bed inpatient ward. This will significantly increase the capacity of the hospital and is direct response to the strong population growth anticipated across the Shire over the coming decades.
Wonthaggi Bypass	A future bypass road is envisaged which would extend east from Heslop Road and reconnect with the Bass Highway via a future north-south connector road. The Wonthaggi Bypass would avoid traffic entering through the Wonthaggi township a potentially significantly improve travel times. It is understood that the future bypass is not intended to be delivered as part of the Wonthaggi North East Precinct Structure Plan (PSP) – an initial upgrade of Heslop Road is instead proposed with completion of the bypass carried out in subsequent stages. The Wonthaggi Bypass will be important for existing and future industrial precincts within Wonthaggi through preserving efficient access to Bass Highway.
Local Road Upgrades	Numerous local road upgrades are being planned and delivered by Bass Coast Shire Council and VicRoads. These include Korumburra Road (Wonthaggi), Settlement Road and Coghlan Road (Cowes) and Boys Home Road (Newhaven). The Wonthaggi North East PSP also envisages a new road network to enable connections from the future industrial precinct to Bass Highway. It is anticipated that these will largely be developed by private proponents.

Source: Atlas Economics

2.5 State Planning Policy

2.5.1 Plan Melbourne 2017-2050 (2017)

Plan Melbourne 2017-2050 (Plan Melbourne) is the Victorian Government's principal planning strategy and long-term land use, infrastructure and transport plan. It provides a series of visions, objectives and directions to meet the projected growth of Greater Melbourne over the coming decades.

Seven core outcomes are detailed in Plan Melbourne, with each supported by a series of key directions and policies. Of relevance to Bass Coast is Outcome 7.

Outcome 7: Regional Victoria is productive, sustainable and supports jobs and economic growth

Outcome 7 recognises the importance of improving accessibility to infrastructure and services across Regional Victoria. Improving connectivity between Greater Melbourne and Regional Victoria is identified as critical for regional economies to better reach international markets. Sectors anticipated and/or capable of strong growth over the coming decades were identified as renewable energy, agriculture, tourism, international education and healthcare and social assistance.

The key directions and policies identified under Outcome 7 are summarised in **Table 2.3**.

Table 2.3: Plan Melbourne, Relevant Directions and Policies

Direction	Policies	Implications for Bass Coast
Invest in regional Victoria to support housing and economic growth	- Stimulate employment and growth in regional cities - Support planning for growing towns in peri-urban areas	Wonthaggi is one of the key growth areas anticipated to deliver new housing over the coming decades through the Wonthaggi North East Structure Plan. The Victorian Government in partnership with Bass Coast Council is currently finalising the Structure Plan for this precinct with development anticipated in the medium-term.
Improve connections between cities and regions	- Improve transport and digital connectivity for regional Victoria - Strengthen transport links on national networks for the movement of commodities	Future investment into high-speed internet connectivity will be important as the uptake of technology by industry grows. Ensuring this provision will be critical to Bass Coast retaining and attracting business. Equally, future upgrades to the Bass Coast Highway and South Gippsland Highway could improve the capacity for regional exports from Bass Coast.

Source: DELWP (2017)

The directions and policies for Regional Victoria outlined in Plan Melbourne pre-dated the outbreak of COVID-19 in March 2020. Accordingly, the shift in migration patterns away from metropolitan areas to regional areas was not fully anticipated to the extent observed over the past 24-months.

It remains uncertain whether the uptick in population growth across parts of Regional Victoria will persist over the medium to long-term. If a long-term structural trend, the importance of the directions and policies outlined in Plan Melbourne for Regional Victoria will be significant.

Distribution of Industrial and Employment Land

Plan Melbourne identifies the planned distribution of employment and industrial land across Greater Melbourne. Areas of state-significance are identified as to be the focus of future investment and development given their existing scale of economic and employment activity, location and/or proximity to major assets and infrastructure.

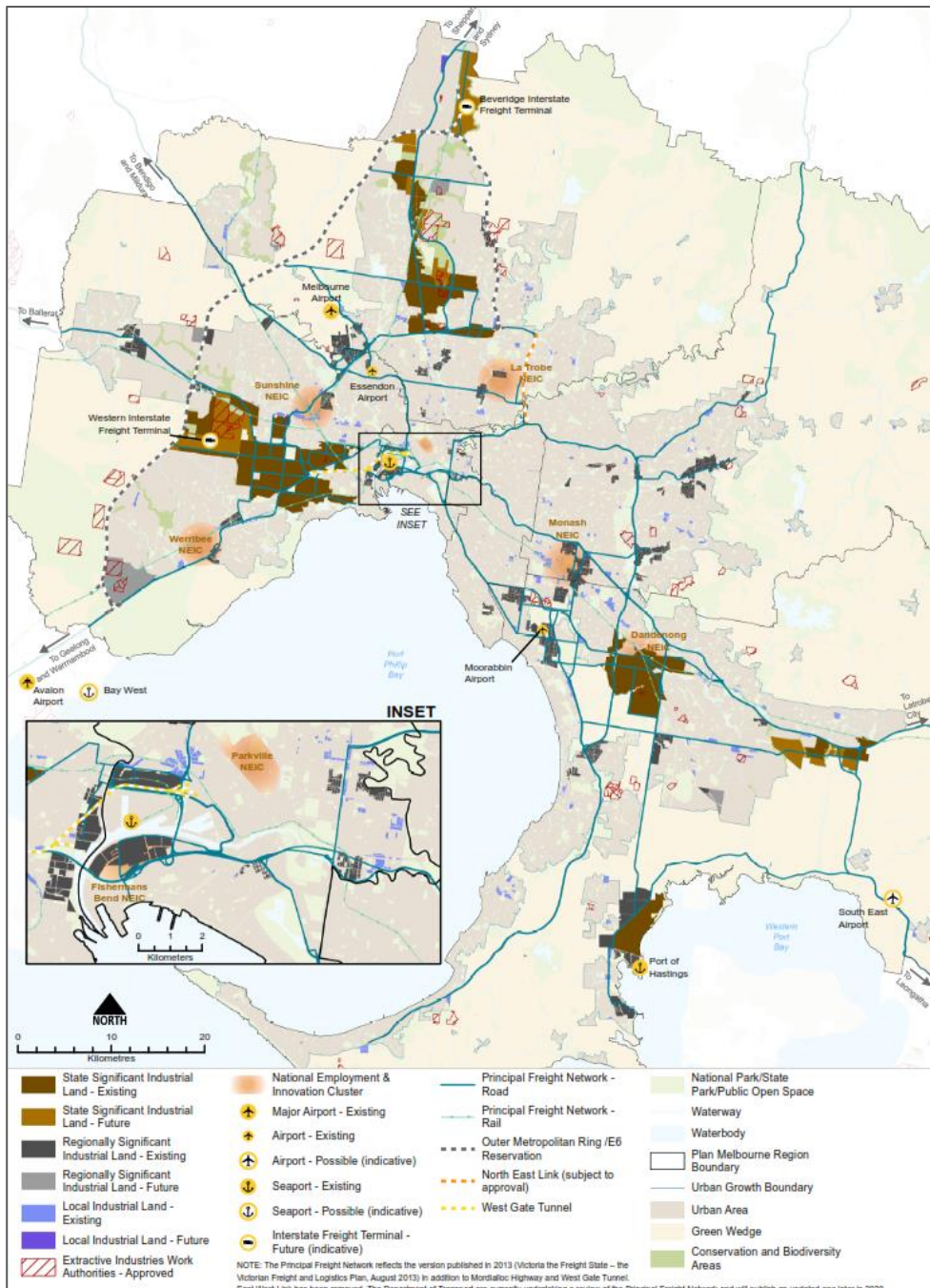
Key industrial areas identified in Plan Melbourne are referred to 'State Significant Industrial Precincts' (SSIPs) and 'Regionally Significant Industrial Precincts' (RSIPs). There are five SSIPs identified across Greater Melbourne - Western SSIP, Northern SSIP, Southern SSIP, Officer-Pakenham SSIP and Hastings SSIP. The Southern and Office-Pakenham SSIPs are the closest SSIPs to the Bass Coast Shire.

Several future industrial precincts are identified in Plan Melbourne of relevance to Bass Coast. These include Cranbourne West, Casey Fields South and the Officer-Pakenham Business Corridor.

Multiple RSIPs are located throughout Greater Melbourne, including several immediately northeast of Bass Coast in the neighbouring LGAs of Cardinia and Casey.

Figure 2.4 illustrates the major industrial and employment precincts as identified in Plan Melbourne.

Figure 2.4: Key Industrial Precincts, Greater Melbourne



Source: DELWP (2018)

2.5.2 Gippsland Regional Plan (2020)

The Gippsland Regional Plan (the Regional Plan) outlines the long-term economic, social, cultural and environmental vision for the Gippsland Region, prepared by Regional Development Victoria with local councils, including Bass Coast.

The long-term vision for Gippsland as identified in the Regional Plan is for Gippsland to be the liveable region in Australia by 2040. The Regional Plan recognises that the achievement of this vision is closely tied to the delivery of a series of future initiatives and projects which have transformative potential for the local economy, including Bass Coast. Key 'gamechangers' identified in the Regional Plan of key relevance to Bass Coast include:

- Progressing major transport infrastructure and services to open Gippsland to new business, visitors, and residents, such as a third Victorian international airport southeast of Melbourne.
- Encouraging innovation and investment to sustainably grow our key industries, including food and fibre, new energy, health services, advanced manufacturing and knowledge services.

- Hero tourism destinations and Traditional Owner and Aboriginal cultural tourism.
- Increasing digital connectivity.

The Regional Plan is organised into six main themes, each with key directions and initiatives. Those relevant to the BILUS given their implications for the demand for and utilisation of industrial land in the Shire are identified in **Table 2.4**.

Table 2.4: Gippsland Regional Plan, Relevant Directions and Initiatives

Theme	Direction	Initiative
Theme 1 – Collaborators and Partners	A globally recognised, unified and competitive regional economy	Develop a regional identity, style guide and marketing plan Develop a yearly advocacy program and marketing collateral for priority initiatives and projects
	Supporting decision making	Incorporate the principles and priorities in this strategy in regional growth plans and local planning schemes
Theme 2 – Carers of our Country, environment & natural assets	Addressing climate change and managing land and water for a sustainable future	Progress sustainable renewable and clean energy investments through Gippsland Review and update policy, planning and regulatory settings to enable, <i>inter alia</i> , the embedding of circular economy and resource recovery principles and requirements
	Using Gippsland's resources responsibly and efficiently	Progress geothermal opportunities in agriculture, tourism, and energy throughout Gippsland
		Progress sustainable and efficient land, water and resource use, reuse and recovery, including, <i>inter alia</i> , fishing and aquaculture and resource recovery.
		Progress regional waste and recycling recovery and processing facilities, including value-adding partnerships and servicing catchments beyond Gippsland.
Theme 3 – Creators of a new economy	Attracting investment	Develop a Gippsland Innovation and Investment Strategy and Prospectus, including: • Industry specific data collection and sharing • Business expert/advisory input and capital access/raising mechanism for SMEs • A region-wide innovation framework, methodology and implementation plan • A more business-friendly regulation and funding framework
		Progress key new and alternative resource use projects, subject to environmental and government approval, including: • Earth resources • Lignite / gas to hydrogen and products • Sustainable timber products • Waste to energy initiatives
	Strengthening the economy and growing jobs	
	Innovating, value-adding and boosting capacity	Expand innovation collaborations involving industry, education institutions, government, and community, in sectors including: • Health • Food and fibre • Advanced manufacturing • New energy • Resource and environment management
Theme 4 – A connected Gippsland	Harnessing our digital potential	In coordination with the Gippsland Regional Digital Plan, increase access to and usage of digital technologies throughout Gippsland.
	World-class freight, passenger and export infrastructure	Progress major transport initiatives, including: • A third international airport southeast of Melbourne • Port of Hastings expansion for multiple user bulk, break bulk and container capacity • Princes Highway improvements including the Traralgon Bypass • Freight network capability improvements • Township visitor traffic initiatives
Theme 5 – Highly educated & skilled people, lifelong learners	Building skills and knowledge for the future workforce	Support the development of centres of excellence in Gippsland's fields of strength and knowledge, including: • Allied and community health • New energy • Carbon innovation • Biomanufacturing • Emergency and land management and rehabilitation

Source: RDV (2020)

2.5.3 Wonthaggi North East Precinct Structure Plan (2020)

The Wonthaggi North East Growth Area is existing rural land situated immediately northeast of the Wonthaggi township. The Victorian Planning Authority and Council have been progressing precinct planning for the area for several years, culminating in the initial exhibition of the Wonthaggi North East Precinct Structure Plan (PSP) in late-2020.

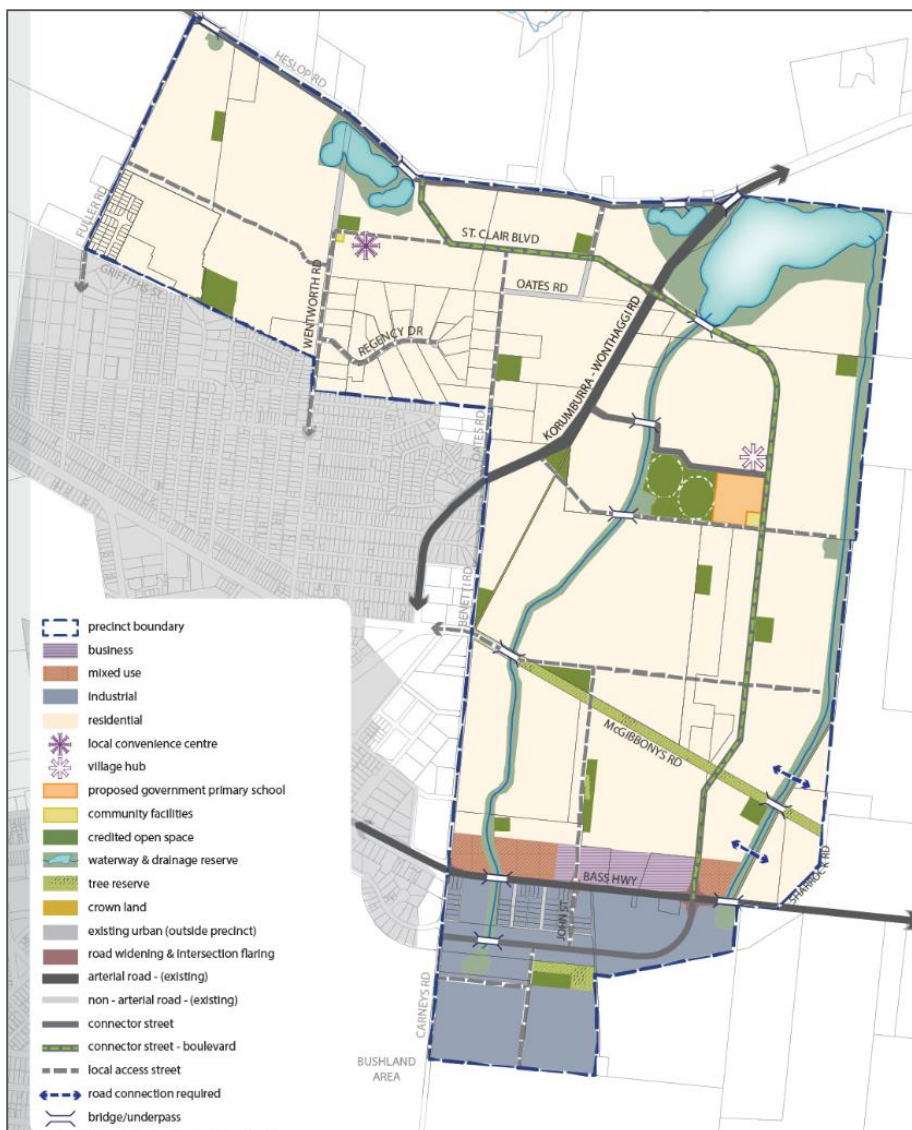
The Wonthaggi North East PSP envisages the progressive development of a mix of residential, employment and recreational land uses over the coming 30 to 50 years. The PSP will facilitate some 5,000 new houses, resulting in the Wonthaggi township growing from some 8,000 residents to over 20,000 at build-out (VPA, 2021).

The PSP identifies approximately 62.4ha of employment land to be focused along the southern end of the Growth Area to the south of Bass Highway. Some 44.2ha is envisaged to be zoned for Industrial uses.

Development of the Growth Area will have significant implications for the Shire's local industrial market – meeting demand for population-serving services whilst substantially increasing the supply of industrial land.

Figure 2.5 depicts the boundary and envisaged land uses of the Wonthaggi North East PSP.

Figure 2.5: Wonthaggi North East PSP (November 2021)



Source: VPA (2021)

The PSP was placed on public exhibition in late-2020 with landowner, stakeholder and community feedback received over the course of 2021. The PSP has continued to be refined over this period to reflect this feedback.

2.6 Local Planning Policy and Strategies

2.6.1 Bass Coast Planning Scheme

The Bass Coast Planning Scheme (BCPS) is the principal planning instrument governing land use and development in the Bass Coast Shire.

This section summarises the relevant strategies and controls within the BCPS which influence industrial land use activity and development across the Shire.

Strategic Framework Plans

The BCPS includes individual Strategic Framework Plans (SFPs) for Bass Coast's network of centres and villages. Land use strategies are included to guide land use activity and development within each defined SFP area.

Table 2.5 includes a summary of the industrial land use strategies which apply in certain SFP areas across the Shire.

Table 2.5: Industrial Strategies from Relevant Strategic Framework Plans, Bass Coast Planning Scheme

Centre/Town	Industrial Strategies
Wonthaggi	• Encourage a consolidated industrial precinct located to the south of Inverloch Road and bounded by the proposed bypass road. • Encourage industrial and associated uses to locate away from residential and recreational areas. • Encouraging the relocation of existing industrial uses to areas zoned for this purpose.
Cowes and Silverleaves	• Maintain existing supplies of industrial zoned land and direct new industrial uses to areas within the Shire that have the capacity and suitability to accommodate future demand.
Grantville	• Encourage the relocation of the existing industrial area to the south of the expanded Grantville settlement and east of the Bass Highway. • Following the relocation of the industrial area, remediate any potential land contamination prior to developing the land for low density residential development. • Ensure that buffers are implemented to mitigate any potential interface issues between new residential development areas and land utilised for sand extraction. • Designate internal road layouts that limit access points to the highway. • Encourage 'clean green' and service-related industries to relocate to Grantville.
Inverloch	• Support ongoing local job opportunities through the protection of the industrially zoned land.

Source: BCPS

Land Use Zones

There are two principal industrial land use zones which apply across Bass Coast – Industrial 1 Zone (IN1Z) and Industrial 3 Zone (IN3Z). Both zones permit a broad range of industrial uses, though the range of permissible land uses differs slightly:

- The **IN1Z** primarily provides for manufacturing industry, the storage and distribution of goods and associated uses in a manner that does not affect the safety and amenity of local communities.

A broad range of industrial activity is permitted in the IN1Z. The majority of the Shire's industrial land is zoned IN1Z.

- The **IN3Z** provides for industries and associated uses where special consideration of the nature and impacts of industrial uses is required to avoid inter-industry conflict and to allow limited retailing in appropriate locations.

A more limited range of industrial activity is permissible in the IN3Z compared to the IN1Z.

Several other land use zones (industry, warehouse) in the BCPS permit some forms of industrial land uses, including the Mixed Use Zone (MUZ), Township Zone (TZ), Commercial 1 Zone (C1Z), Commercial 2 Zone (C2Z) and Farming Zone (FZ).

The permissibility of these land uses is subject to the ability of development to address a variety of criteria, notably the capacity to mitigate any adverse impacts to surrounding land uses.

Other Relevant Clauses

Several other clauses within the BCPS influence industrial land use and development activity across the Shire. Key clauses of relevance include:

- **Cl. 02.03-7: Economic Development**

Clause 02.03-7 recognises the important of industrial and construction industries to the local Bass Coast economy. Accordingly, Council seeks to:

- Facilitate the establishment and further development of industry in the Shire.
- Encourage industrial development in Wonthaggi to build on the existing infrastructure and industrial base.
- Encourage industrial activities to be responsive to the environment and surrounding land uses.

- **Cl. 17.03-1S: Industrial Land Supply**

The core objective of Clause 17.03-1S is to ensure the adequate supply of land for industry. The clause outlines a series of strategies to enable this objective, including:

- Provide an adequate supply of industrial land in appropriate locations including sufficient stocks of large sites for strategic investment.
- Identify land for industrial development in urban growth areas where:
 - Good access for employees, freight and road transport is available.
 - Appropriate buffer areas can be provided between the proposed industrial land and nearby sensitive uses.
- Protect and carefully plan existing industrial areas to, where possible, facilitate further industrial development.
- Avoid approving non-industrial land uses that will prejudice the availability of land in identified industrial areas for future industrial use.

- **Cl. 17.03-1L: Industrial Land Supply**

Clause 17.03-1L outlines a further series of specific strategies for industrial land supply within Bass Coast, including:

- Encourage industry to locate within existing or planned industrial estates where all physical infrastructure and access to transport networks are available.
- Encourage the relocation of industrial activities from predominantly residential areas to industrial estates.
- Encourage the consolidation of industrial uses within the northern part of the Shire, in Grantville.
- Encourage manufacturing and processing industries that use sand and ancillary products as raw materials to locate in Grantville.

Collectively, the various strategies and planning controls within the BCPS influence the nature of industrial land use and development activity.

2.6.2 Historical Amendments to Bass Coast Planning Scheme

Various amendments to the BCPS over the past 10-15 years have resulted in an increase of industrial and commercial land across the Shire, including an additional ~18ha of industrial land (INZ1) and ~30ha of commercial land. This included two major rezonings and three site-specific rezonings. This section provides a brief overview of these amendments.

- In 2009, **Amendment C92** rezoned a single property (3.5ha) from the former Business 4 Zone to the former Business 1 Zone (now C1Z) to facilitate the development of the Wonthaggi Plaza Shopping Centre.
- In 2011, **Amendment C100** rezoned some 10.9ha of land near the Bass Highway at the north-western entrance to Wonthaggi from FZ to the MUZ and the former Business 4 Zone (now C2Z).
- Also in 2011, **Amendment C116** rezoned some 47ha of land along Inverloch Rd to the east of Wonthaggi from FZ to the Business 4 Zone (29ha) and the IN1Z (18ha). This is the most recent addition of industrial land in the Shire.
- **Amendment C126** was implemented in 2013 and rezoned a single property from the former Business 4 Zone to C1Z to facilitate the development of a large liquor retailer in Wonthaggi.
- In 2014, **Amendment C138** rezoned a single property in Wonthaggi (5.8Hha) from FZ to C2Z. This property continues to be used as a trade supplies retailer.

2.6.3 Wonthaggi-Dalyston Structure Plan (2008) and Wonthaggi Structure Plan (2018)

The Wonthaggi Structure Plan 2018 superseded the Wonthaggi-Dalyston Structure Plan September 2008 and sets out a 20 year strategic framework to manage future growth options for Wonthaggi. Whilst the Wonthaggi-Dalyston Structure Plan is referenced in the Bass Coast Planning Scheme, the Wonthaggi Structure Plan is not.

The Wonthaggi Structure Plan identifies strong residential growth projections for the town and a lack of future residential land supply and a shortage of industrial and commercial land availability. Future growth (residential, commercial and industrial) is recommended to be directed to the Wonthaggi North East Growth Area.

2.6.4 Previous Industrial Studies

The two most recent studies that have previously investigated the demand and supply of industrial land across the Bass Coast Shire include the *Wonthaggi Industrial and Commercial Land Assessment* (Urban Enterprise, 2017) and the *Bass Coast Regional Industrial Report* (Spatial Economics, 2012 as part of the Urban Development Program).

This section provides a brief overview of the key findings of these two studies.

Wonthaggi Industrial and Commercial Land Assessment (2017)

The Wonthaggi Industrial and Commercial Land Assessment was prepared in 2017 to assess the need for commercial and industrial land in Wonthaggi to support the preparation of the Wonthaggi North East PSP. The scope of the Assessment was focused on the township of Wonthaggi and did not consider demand at a Shire-wide level.

The primary findings of the assessment of relevance to the BILUS include:

- Demand for industrial land across Wonthaggi was cited as being inconsistent with nominal land absorption rates.
- Whilst somewhat reflective of soft demand drivers, there was a clearly identified shortfall of suitable vacant land available for new businesses or existing business looking to expand. This was consistent across a mix of industries seeking a variety of smaller serviced lots and larger strategic landholdings.
- Demand projections (based on population-driven model) suggested a need for between 4ha and 10ha of industrial land over the 20 years to 2036. The upper end of projections (8ha-10a) was considered the most appropriate gauge of future demand in Wonthaggi.
- It was recommended that between 15ha and 17ha of industrial land be planned for in Wonthaggi, comprising 8ha-10ha of population-driven demand and 7ha to cater for larger, strategic sites.

The recommendations of the assessment were incorporated into the Wonthaggi North East PSP.

Bass Coast Regional Industrial Report (2012)

The Bass Coast Regional Industrial Report was prepared in 2012 as part of the Victorian Government's Urban Development Program (UDP). The report analysed existing industrial stock across the Shire, tracked historical consumption over the 2006-2012 period and modelled the likely remaining years of supply based on remaining undeveloped land.

Key findings from the report of relevance to the BILUS are detailed below:

- Some 66ha of industrial zoned land was identified across the Shire in March 2012.
- Some 40.3ha of future (unzoned) industrial land was identified (the entirety of this within Inverloch).
- Bass Coast recorded a historical average annual consumption rate of 0.4ha of industrial land over 2006-2012.
- Based on historical consumption rates over 2006-2012, it was concluded that there was more than 15 years of remaining supply of zoned and undeveloped industrial land across the Shire.
- When considering future stocks of industrial land, an additional 15 years of remaining supply was identified.

More contemporary analysis of supply and consumption is detailed later in this Study.

3. Socio-Economic Profile Review

This Chapter reviews the Shire's socio-economic profile to identify the characteristics that influence employment and business growth. The review of historical trends over the decade to 2016 also provides insight into the potential future levers and drivers that determine and affect the quantum and location of industrial floorspace demand.

3.1 Demographic Characteristics

This section considers key demographic characteristics of the Shire of most relevance to the BILUS, including historical population growth, occupation profile of local working residents, education levels and where local residents travel to work.

3.1.1 Population Growth

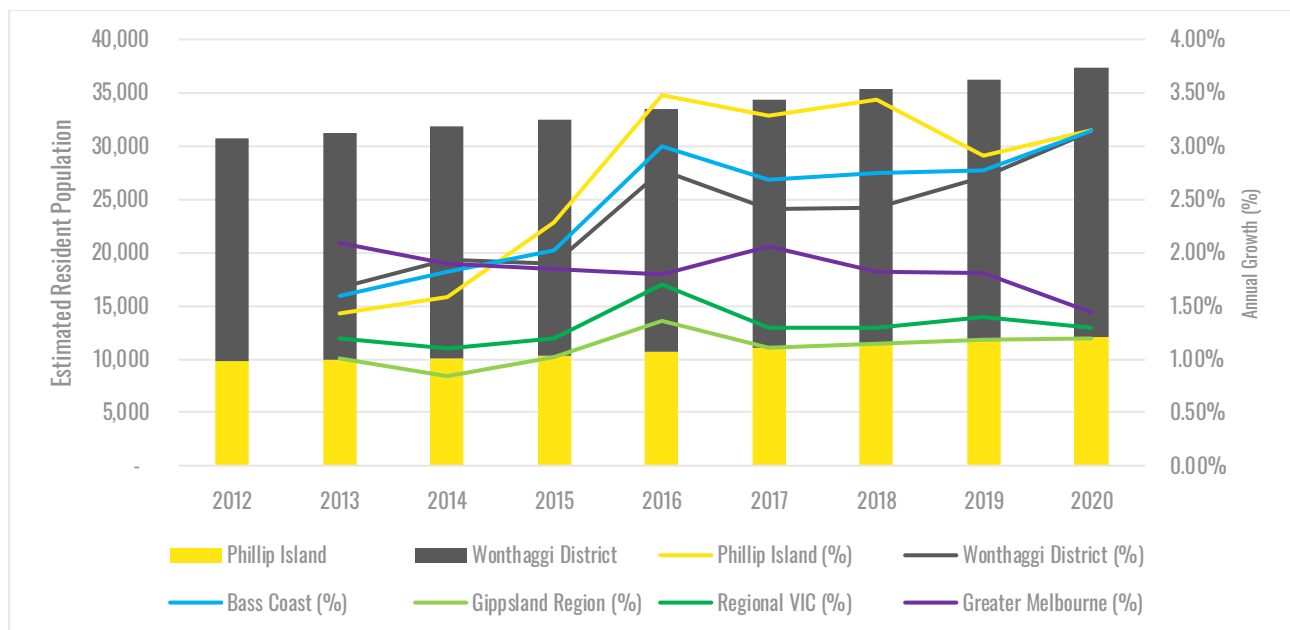
Bass Coast recorded a population of 37,400 residents in 2020. The Shire has grown considerably over the past six years, recording an additional ~5,500 residents over the 2014-2020 period. This reflects growth of almost 20% and an average annual growth rate of 2.8% (ABS, 2021a).

The distribution of population growth has remained relatively consistent over the past decade, with approximately 70% of Shire residents living within the Wonthaggi (mainland) district compared to ~30% on Phillip Island. That said, the rate of population growth over the 2016-2020 period has been markedly faster in Phillip Island with an average annual growth of 3.2% (compared to 2.7% in Wonthaggi District).

Population growth across Bass Coast has outpaced both the broader Gippsland Region and Regional Victoria. Notably, Bass Coast has also recorded a faster rate of population growth than Greater Melbourne since 2014.

Figure 3.1 illustrates historical population growth across the Shire over the 2012-2020 period.

Figure 3.1: Historical Population Growth (2012-2020)



Source: ABS (2021a)

3.1.2 Employment by Occupation

The occupation profile of Bass Coast provides insight into the ability of local industry to source labour from within the Shire.

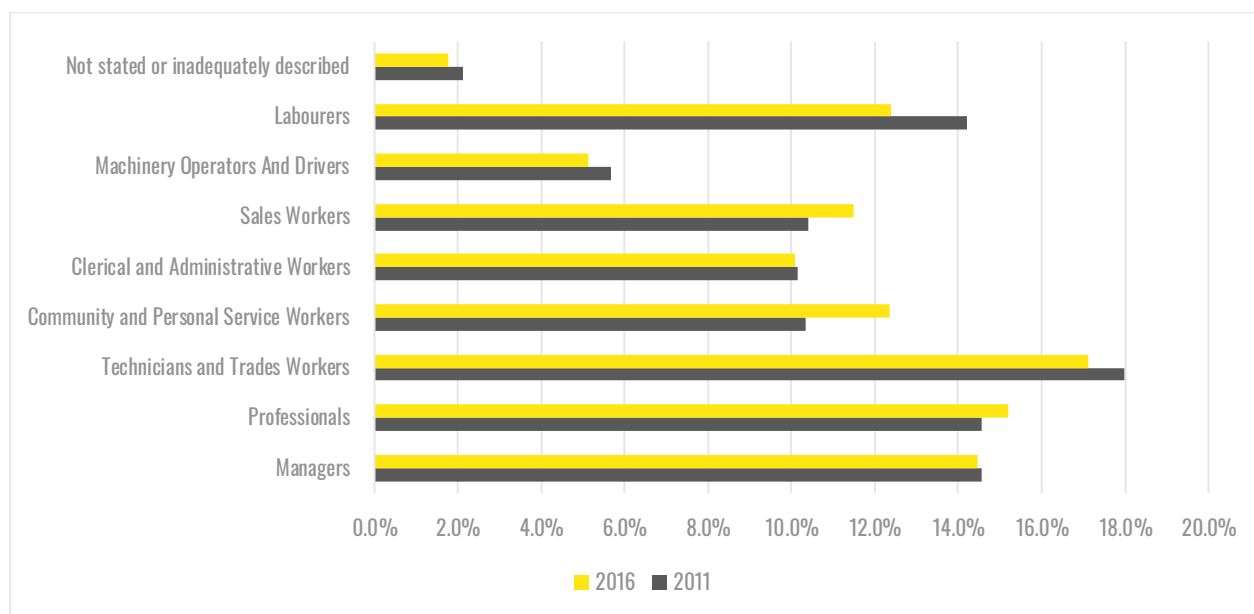
In 2016, just over 12,500 working residents were recorded in the Shire. Technicians and trades workers represented the most common occupation at this time at just over 17% of all working residents. This was closely followed by professionals (15.2%), managers (14.5%) and labourers (12.4%).

'White collar' workers such as professionals, managers and clerical and administrative workers account for some 40% of working residents, whereas traditional 'blue collar' occupations (i.e. technicians and trades workers, machinery operators and drivers, labourers) account for some 35%. This occupation profile generally aligns with the broader Gippsland Region.

The number of 'white collar' workers rose over the 2011-2016 period, whereas substantial declines in 'blue collar' workers were observed. Again, a similar trend was observed throughout Gippsland and is reflective of declines in key industries such as manufacturing over this period.

Figure 3.2 illustrates the occupation profile of working residents in the Shire over the 2011-2016 period.

Figure 3.2: Employment by Occupation (2011-2016), Bass Coast Shire



Source: ABS (2012, 2017)

3.1.3 Education Levels

Around 45% of Bass Coast residents have some formal qualification (i.e. certificate level or greater), with similar levels observed across the broader Gippsland Region.

The proportion of Bass Coast residents with a formal qualification has consistently been rising over the decade to 2016, with 35% of residents having formal qualifications in 2006. This growth has also aligned with a broader trend observed across Gippsland, with similar education levels also observed in 2006.

The proportion of residents with a tertiary degree (bachelor or higher) grew by 15.8% in 2006 to 22.3% in 2016. Residents with vocational or trade qualification also rose from 19.6% in 2006 to 23.1% in 2016. It is anticipated that further rises in education levels will be observed upon release of the 2021 Census.

This growth in education levels contributes to a growing pool of skilled labour from which local industries can source.

Table 3.1 shows the growth in education levels across Bass Coast and Gippsland Region over the 2006-2016 period.

Table 3.1: Levels of Qualification (2006-2016), Bass Coast LGA

Qualification	Bass Coast			Gippsland		
	2006	2011	2016	2006	2011	2016
Bachelor or Higher degree	9.4%	11.6%	13.3%	9.0%	10.7%	12.0%
Advanced Diploma or Diploma	6.2%	7.6%	9.0%	5.8%	7.0%	8.2%
Vocational	19.6%	22.1%	23.1%	20.2%	22.6%	24.1%
No qualification	49.0%	46.1%	41.8%	51.6%	48.3%	42.7%
Not stated	15.8%	12.6%	12.9%	13.4%	11.4%	13.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: ABS (2007, 2012, 2017)

3.1.4 Journey to Work

Understanding where residents in Bass Coast travel to work indicates the role of the local economy in providing employment opportunities for local residents.

In 2016, it is estimated that some 70% of residents in the Bass Coast Shire also worked in Shire, showing the local economy employs the vast majority of working residents.

Around 7% of working residents travelled to the neighbouring South Gippsland Shire for employment, with the LGAs of Cardinia, Casey and Greater Dandenong representing 5.4% of employment destinations for Shire residents. Some 7% of working residents identified they have no fixed address of employment.

3.2 Employment Profile

This section considers the employment profile of the Bass Coast Shire, including employment by industry, occupation and the self-sufficiency and self-containment rates of the local economy.

3.2.1 Industry Profile

The ABS categorises employment activity into 19 industry sectors referred to as ANZSICs (Australian New Zealand Standard Industry Classification). These are the most commonly utilised categories used when analysing the employment profile of a local economy.

That said, it is often more useful to consider employment composition in broader terms. Broad industry classifications (BICs) group the 19 ANZSIC sectors into four main industry categories - population-serving, knowledge-intensive, health and education and industrial. These BIC groupings and their corresponding ANZSICs are shown in **Table 3.2**.

Table 3.2: Broad Industry Classifications (BICs) by 19-Digit ANZSICs

Population Serving	Knowledge-Intensive	Health and Education	Industrial
• Construction • Retail Trade • Accommodation & Food Services • Arts & Recreation Services • Other Services	• Information, Media & Telecommunications • Financial & Insurance Services • Rental, Hiring & Real Estate Services • Professional, Scientific & Technical Services • Administrative & Support Services • Public Administration & Safety	• Education & Training • Health Care & Social Assistance	• Mining • Manufacturing • Electricity, Gas, Water & Waste Services • Wholesale Trade • Transport, Postal & Warehousing

Source: ABS/Atlas Economics

Employment by Industry

Bass Coast recorded a total of just over 12,000 workers in 2021 (NIEIR, 2021). This followed growth of some 180 additional workers over the 2016-2021 period, reflecting average annual growth of 0.3%. This rate of growth is slightly higher than that estimated in Greater Melbourne (0.2% per annum), where COVID-19-induced lockdowns had a more severe impact on employment activity.

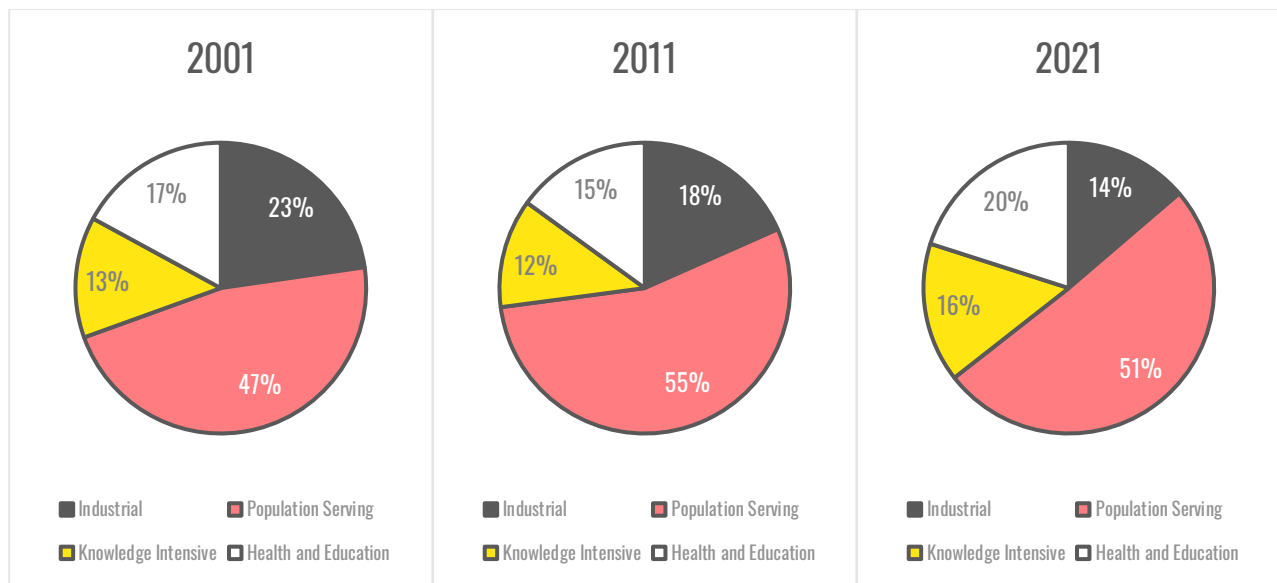
As at 2021, the largest employing industries in the Bass Coast LGA were construction, healthcare and social assistance, retail trade and accommodation and food services which collectively accounted for 52% of local employment. These four sectors have historically accounted for the majority of employment over the past decade, though construction accounted for majority of new employment over the 2016-2021 period with over 800 new jobs created.

From a BIC perspective, the Bass Coast LGA is characterised by population-serving employment which accounts for ~51% of total employment. This is largely attributed to the large construction workforce within the Shire. Health and education sectors represent around 21% of total employment whilst knowledge intensive industries accounting for about ~16%,

Industrial sectors are observed to account for just under 14% of local employment. The number and proportion of industrial employment across the Shire has been progressively falling over the past two decades – previously accounting for 23% of total employment in 2001, 18% in 2011 and 17% in 2016.

Figure 3.3 illustrates historical employment by BIC over 2001-2021 with more detailed analysis provided in Figure 3.3.

Figure 3.3: Employment by BIC (2006-2021)



Source: NIEIR (2021)

Table 3.3: Employment by Industry and BIC (2001-2021), Bass Coast Shire

	2001	2006	2011	2016	2021	Change		
						2001-2011	2011-16	2016-21
ANZSIC								
Agriculture, Forestry & Fishing	785	791	941	934	683	156	-7	-251
Mining	27	51	67	46	39	40	-21	-7
Manufacturing	657	713	694	513	544	36	-180	30
Electricity, Gas, Water & Waste Services	102	162	485	201	172	383	-284	-29
Construction	831	1,205	3,511	1,153	1,971	2,680	-2,357	818
Wholesale Trade	282	324	437	361	291	155	-76	-70
Retail Trade	1,066	1,387	1,307	1,565	1,399	241	258	-166
Accommodation & Food Services	850	1,000	1,347	1,368	1,286	497	21	-82
Transport, Postal & Warehousing	184	258	292	275	214	108	-18	-61
Information Media & Telecommunications	69	86	78	86	48	9	7	-38
Financial and Insurance Services	107	110	128	148	199	21	20	52
Rental, Hiring and Real Estate Services	150	176	207	219	194	57	12	-25
Professional, Scientific & Technical	219	307	451	462	503	232	11	41
Administrative & Support Services	214	269	314	505	445	100	191	-60
Public Administration & Safety	279	378	452	520	477	173	68	-43
Education & Training	436	582	705	851	838	269	146	-12
Health Care & Social Assistance	883	1,144	1,321	1,629	1,575	438	308	-54
Arts & Recreation Services	324	327	401	555	670	77	155	115
Other Services	262	308	357	457	481	95	100	24
Total	7,729	9,575	13,497	11,850	12,030	5,768	-1,648	180
BIC								
Industrial	1,755	1,975	2,480	1,970	1,652	724	-510	-318
Population Serving	3,616	4,550	7,360	5,460	6,098	3,744	-1,900	638
Knowledge Intensive	1,039	1,324	1,632	1,940	1,866	593	308	-74
Health and Education	1,319	1,726	2,026	2,480	2,414	707	454	-66
Total	7,729	9,575	13,497	11,850	12,030	5,768	-1,648	180

Source: NIEIR (2021)

Key Sectors of Change

A finer grain level of analysis into the industry sectors that have experienced the largest shifts in employment over the 2016-2021 period provides further insight into the changing employment profile of the Bass Coast LGA.

Agriculture recorded large declines (likely due in part to the closure of the Tabro Meat's processing plant in 2016), along with declines in the hospitality and retail sectors as a result of the COVID-19 pandemic. Construction-related sectors recorded strong growth, along with sports and recreational activities (e.g. gyms, fitness studios, etc).

Top 5 Growth Sectors

- Construction Services (+464 jobs)
- Heavy and Civil Engineering Construction (+213 jobs)
- Building Construction (+140 jobs)
- Sports and Recreation Activities (+133 jobs)
- Medical and Other Health Care Services (+106 jobs)

Top 5 Declining Sectors

- Agriculture (-212 jobs)
- Food Retailing (-109 jobs)
- Other Store-based Retailing (-109 jobs)
- Residential Care Services (-86 jobs)
- Food and Beverage Services (-82 jobs)

3.2.2 Occupation Profile

The most prominent occupation type for workers in the Bass Coast LGA recorded in 2021 was technicians and trades workers which accounted for some 20% of local workers – reflective of the Shire's large construction workforce. When considered with other 'blue collar' occupation types (e.g. machinery operators and drivers, labourers), blue collar occupations account for some ~40% of local workers. This is larger than that observed in the Shire's working resident profile.

Over the past two decades, the proportion of blue-collar workers has gradually been declining whilst the number and proportion of professionals has grown. The occupation profile of the Shire's residents is shown in **Table 3.4**.

Table 3.4: Employment by Occupation (2011-2021), Bass Coast Shire

Occupation	2001	2006	2011	2016	2021
Managers	13.8%	11.2%	13.1%	14.6%	13.4%
Professionals	13.4%	15.2%	11.8%	14.8%	16.8%
Technicians and Trades Workers	18.6%	19.8%	24.3%	16.5%	20.4%
Community and Personal Service Workers	8.9%	9.0%	8.7%	14.2%	11.1%
Clerical and Administrative Workers	9.0%	9.5%	8.3%	9.3%	9.6%
Sales Workers	13.1%	12.4%	8.7%	13.0%	13.7%
Machinery Operators and Drivers	7.8%	7.0%	5.9%	4.2%	4.8%
Labourers	15.3%	15.9%	19.2%	13.4%	10.3%

Source: NIEIR (2021)

3.2.3 Self-Containment and Self-Sufficiency

Self-containment and self-sufficiency are useful measures of the role and capacity of local economies. Self-containment measures the proportion of resident workers who are employed within the boundaries of a LGA or region. Self-sufficiency reflects the number of local jobs available to local working residents.

The Bass Coast Shire recorded a self-containment rate of 83% in 2016. A self-sufficiency rate of 93% was observed, indicating there is a relatively high number of local job opportunities for residents. By contrast, self-sufficiency rates in neighbouring LGAs such as South Gippsland, Baw Baw, Casey and Cardinia was 86%, 74%, 52% and 46% respectively.

Overall, Bass Coast has a high-level of both self-containment and self-sufficiency, reflecting the importance of the local economy to its residents.

3.3 Economic Value

This section considers the economic profile of the Bass Coast economy and how this has changed over time. Key metrics examined include Gross Regional Product, Value Added, imports and exports and the 'propulsive' sectors which drive economic activity.

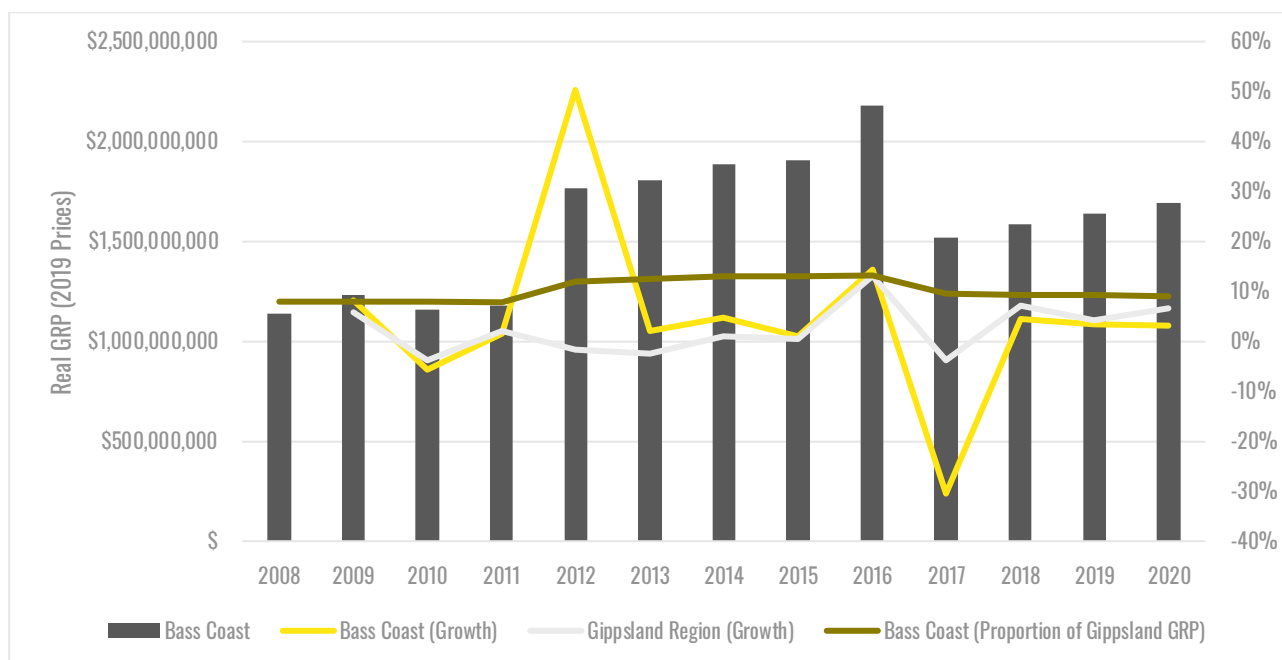
3.3.1 Gross Regional Product

Gross Regional Product (GRP) measures the value of output after deducting the cost of goods and services inputs in the production process, defining the net contribution in economic activity. Changes in GRP over time can reflect changes in employment, productivity or industry – most commonly a combination of all three.

In 2020, it is estimated that the Bass Coast economy generated a Real GRP of \$1.69 billion, accounting for around 8.9% of the broader Gippsland Region economy (REMPAN, 2020). Real GRP has been steadily growing since 2018 falling a marked decline in economic activity over the 2016-17 period. Changes in GRP have historically trended with the Gippsland Region, though much steeper rises and declines are observed in the local Bass Coast economy.

Figure 3.4 illustrates the change in Real GRP across the Bass Coast Shire over the 2008-2020 period.

Figure 3.4: Real GRP (2008-2020), Bass Coast Shire



Source: REMPLAN (2020)

3.3.2 Value Added

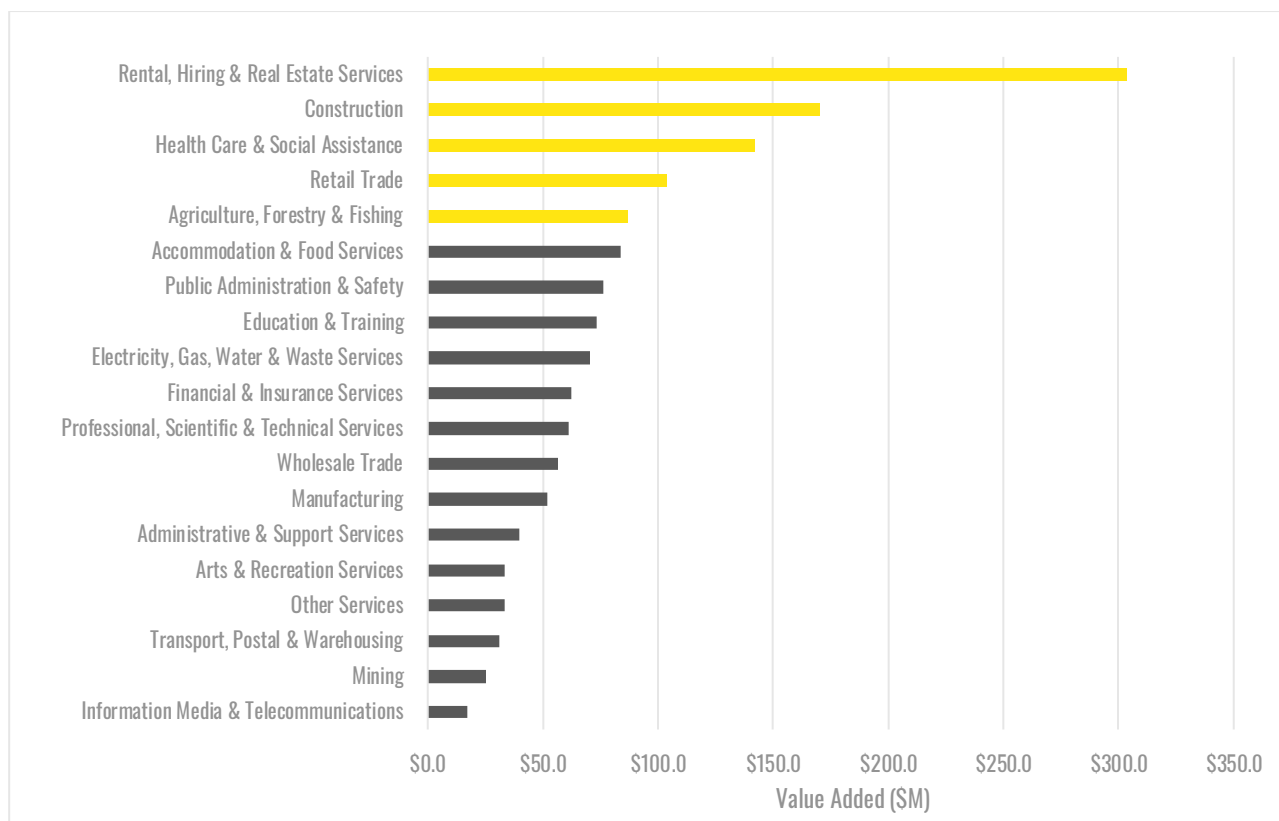
Value added is a more refined measurement of industry productivity and considers how productive each industry sector is at increasing the value of its inputs.

In 2020, the Bass Coast economy generated a total value added of \$1.522 billion. This represents ~8.7% of the total value added in the broader Gippsland Region. Five industries accounted for ~53% of value added across the economy, including:

- Rental, Hiring and Real Estate Services: 20% of value added (\$303.6 million)
- Construction: 11% of value added (\$170.4 million)
- Health Care and Social Assistance: 9% of value added (\$142.0 million)
- Retail Trade: 7% of value added (\$104.0 million)
- Agriculture, Forestry and Fishing: 6% of value added (\$86.7 million)

At a finer grain level, key sub-industries such as property services, construction services, residential building construction, health care services and sheep, grains, beef and dairy cattle were the key drivers of economic activity.

Figure 3.5: Value Added by Industry (2020), Bass Coast Shire



Source: REMPLAN (2020)

With the exception of Agriculture, Forestry and Fishing, Industrial industries (as per the BIC definition) were found to not be a major component of value added to the Bass Coast economy.

In total, Industrial industries accounted for ~21% of total value added. When excluding Agriculture, Forestry and Fishing, Industrial sectors represented ~15% of value added.

3.3.3 Exports and Imports

Regional imports and exports provide a unique insight into the nature of local economies. Regional exports reflect the value of goods and services produced by local industries which are sold to consumers, businesses, and governments outside Bass Coast. Regional imports refer to the intermediate goods and services which are imported into the Shire.

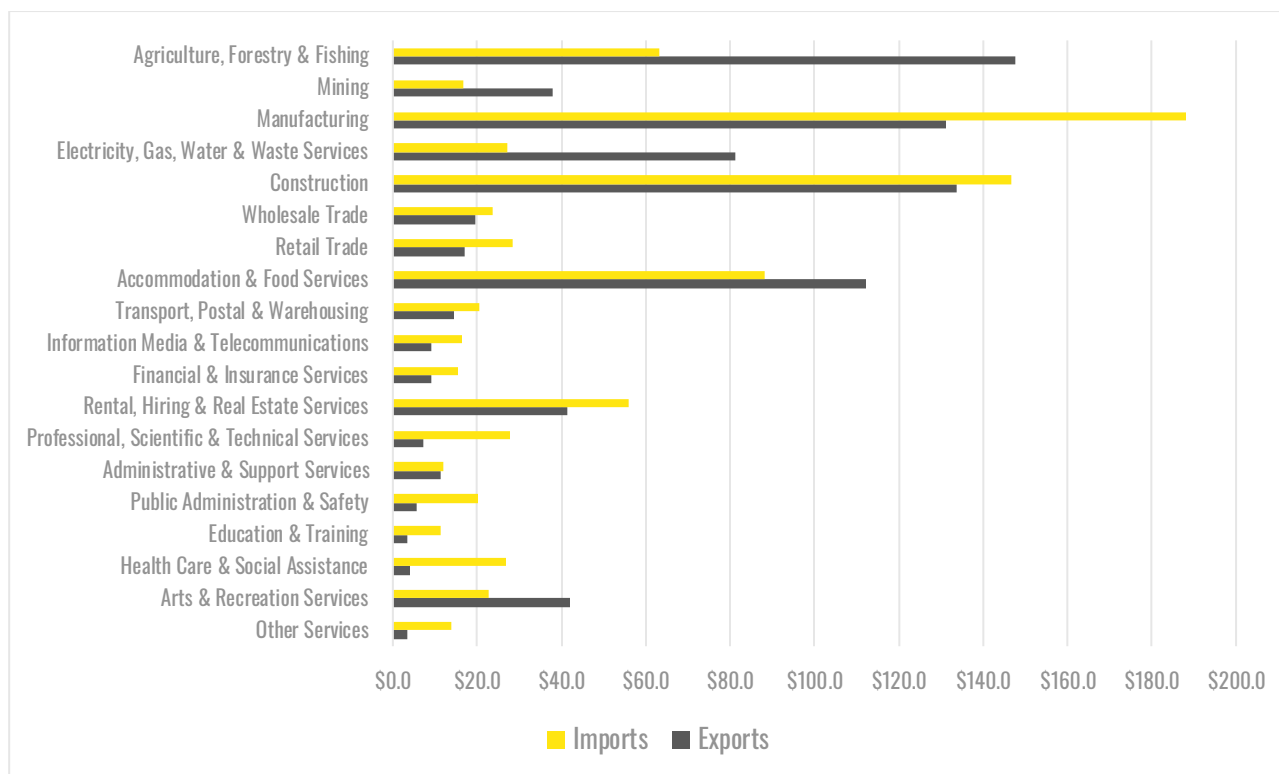
As at 2020, goods and services valued at \$831.9 million were exported from the Bass Coast (REMPLAN, 2020). Key exporting industries included Agriculture, Forestry and Fishing, Construction, Manufacturing and Accommodation and Food Services which collectively accounted for 63% of total exports.

The total value of goods and services imported into the Shire in 2020 is estimated at \$824.5 million (REMPLAN, 2020). The main industries driving demand for imported goods and services included Manufacturing, Construction, Accommodation and Food Services and Agriculture, Forestry and Fishing which together accounted for 58% of imports.

Industrial sectors collectively accounted for approximately 52% and 41% of regional exports and imports respectively. Much of this was driven by the Agriculture, Forestry and Fishing, particularly the sheep, grains, beef and dairy cattle sectors. When excluding Agriculture, Forestry and Fishing, industrial sectors accounted for 34% and 33% of regional exports and imports.

Figure 3.6 illustrates the estimated value of regional imports and exports by industry within the Bass Coast as at 2020.

Figure 3.6: Regional Imports and Exports (2020), Bass Coast Shire



Source: REMPLAN (2020)

3.3.4 Propulsive Sectors

The importance of different sectors to a local economy can be measured in multiple ways (e.g. Employment, GRP, Value Added, Imports and Exports, etc). Some industries can be a major contributor to local GRP but employ a relatively small number of workers (e.g. mining). Industries which across all these measurements are considered to be the key drivers of a local economy and can be termed 'propulsive sectors'.

REMPPLAN have developed a scoring matrix to identify the key propulsive sectors of the Bass Coast economy. The assessment is based on key indicators such as backward linkages, level of exports, employment and value added. The two key propulsive sectors identified from this assessment include Construction and Agriculture, Forestry and Fishing.

A summary of the assessment of propulsive sectors in the Bass Coast Shire as at 2020 is provided in **Table 3.5**.

Table 3.5: Propulsive Sectors (2020), Bass Coast Shire

Industry	Backward Linkages	Exports	Employment	Value Added	Total	Propulsive Sector?
Construction	Yes	Yes	Yes	Yes	4	Yes
Agriculture, Forestry & Fishing	Yes	Yes	No	Yes	3	Yes
Retail Trade	No	No	Yes	Yes	2	No
Accommodation & Food Services	No	Yes	Yes	No	2	No
Health Care & Social Assistance	No	No	Yes	Yes	2	No
Manufacturing	No	Yes	No	No	1	No
Electricity, Gas, Water & Waste Services	No	Yes	No	No	1	No
Transport, Postal & Warehousing	Yes	No	No	No	1	No
Rental, Hiring & Real Estate Services	No	No	No	Yes	1	No
Professional, Scientific & Technical Services	Yes	No	No	No	1	No
Education & Training	No	No	Yes	No	1	No
Arts & Recreation Services	Yes	No	No	No	1	No

Note: Industries which did not score are excluded

Source: REMPLAN (2020)

With the exception of Agriculture, Forestry and Fishing, Industrial industries (as per the BIC definition) were found to not be a driver of economic activity in Bass Coast. Two industrial sectors (Manufacturing and Electricity, Gas, Water and Waste Services) were identified in the propulsive sectors assessment, owing to their contribution to regional exports.

3.4 Implications for Study Area

The foregoing review of Bass Coast's socio-economic profile provides insight into the nature of the Bass Coast economy. The key findings of the analysis with direct implications for the Study Area include:

Demographic Profile

- The population of Bass Coast grew by some 20% over the 2014-2020 period, expanding a faster rate than both Gippsland and Greater Melbourne. This has direct implications for population-serving industries such as construction and retail who respond directly to population growth. Many forms of urban services also fall within this category.
- Bass Coast is characterised by a sizeable 'blue collar' workforce, providing local industrial businesses access to a large local labour pool. That said, new residents are increasingly employed in 'white collar' professions.
- Around 83% of local residents also work in the Shire, reflecting the importance of local industry.

Employment Profile

- The largest employing sectors in Bass Coast include construction, healthcare and social assistance, retail trade and accommodation and food services and account for over 52% of local employment.
- Recent employment growth over the 2016-2021 period was largely driven by the construction sector.
- Unsurprisingly, employment growth has failed to match the pace of population growth observed in recent years.
- Traditional industrial sectors account for just under 14% of local employment (or 30% if including construction).
- Industrial sectors have recorded declines in employment growth for much of the past decade.

Economic Profile

- The Bass Coast economy has been growing in recent years with GRP up by some 11% over 2017-2020.
- The local economy is fundamentally underpinned by the construction, agriculture and tourism sectors given their large contributions to both local employment, GRP and regional exports.
- Traditional industrial sectors are not major drivers of economic activity in Bass Coast, though Manufacturing and Electricity, Gas, Water and Waste Services play an important role through regional exports.

The findings of this analysis shows that the Bass Coast economy is highly self-sufficient and has traditionally been driven by the tourism and agriculture sectors. In response to strong population growth, construction has emerged over the past 5-years as a major employer and source of economic activity. Traditional industrial sectors (e.g. manufacturing, wholesale trade, etc) are not major drivers of economic activity, though are still key sources of employment for local residents.

It is important to recognise that industrial precincts play an accommodative role beyond traditional industrial sectors. For instance, construction businesses (defined as a 'population-serving' industry) are major occupiers across the Study Area. Large format retailers, recreational businesses (e.g. gyms) and urban services (e.g. repairs, cleaners) who service local residents are also key sources of demand for industrial land and property.

As the population of Bass Coast further expands over the coming decades, these types of industries will grow commensurate and elicit further demand for industrial property. Demand for industrial land in Bass Coast is therefore broad.

The next Chapter examines the economic and industrial trends set to influence demand for industrial land and property in the coming decades.

4. Economic and Industrial Trends

This Chapter explores the trends and factors influencing demand for industrial land in Australia today and how this is anticipated to change in the future. The Chapter secondly considers the regional and local economic drivers expected to influence activity in the Bass Coast industrial market. The Chapter concludes by assessing the likelihood and impact these trends will have in the Shire.

4.1 Business and Industry Trends

Bass Coast's industrial lands are zoned a mix of IN1Z and IN3Z. Whilst a broad mix of land uses is permitted under the definition of 'Industry' and 'Warehouse', industrial uses traditionally fall into two sub-sectors: manufacturing and logistics.

- **Manufacturing** is the process of producing goods and products from raw materials. This could include from 'start to finish' along the production chain, or a sole, specific component.
- **Logistics** is the distribution of goods and products.

Both manufacturing and logistics have evolved in recent decades as a result of global industrial trends. This evolution has been reflected in changing needs for industrial land, both internationally and in Australia.

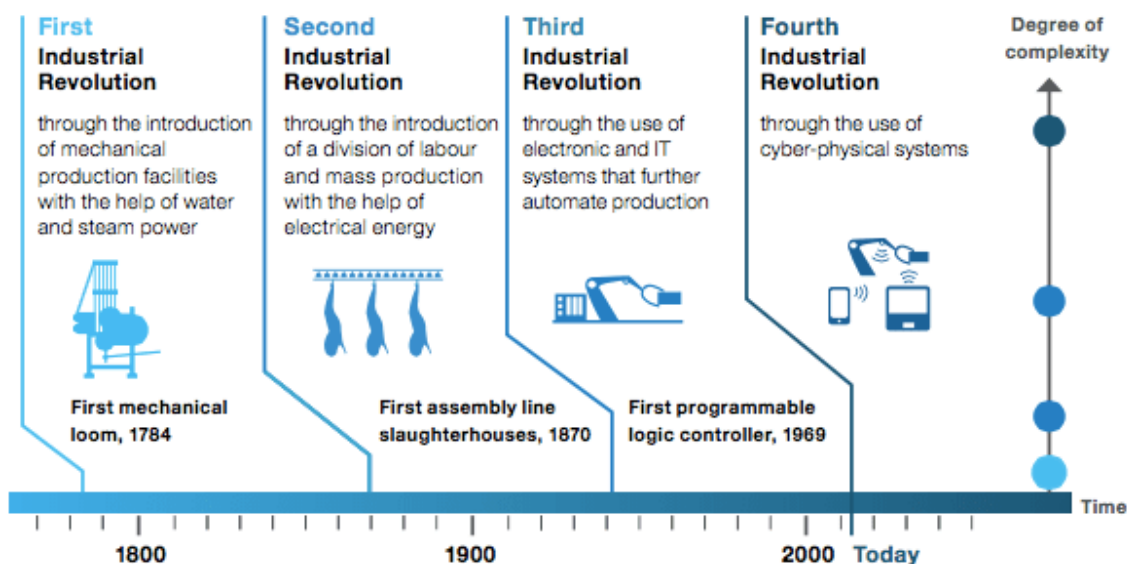
Industrial areas also accommodate occupiers who predominantly service the needs of local residents (e.g. automotive repairs, tradespersons, etc). These uses are often referred to as '**urban services**'.

The Fourth Industrial Revolution

Global industry has been evolving since the 1800s with the commencement of the Industrial Revolution. It is now recognised that there have been three industrial revolutions, each prompted by rapid advancements in technology which have facilitated improvements in business practices and industry structures.

It is widely agreed that global industry is entering a fourth industrial revolution brought about the significant growth, application and complexity of cyber-physical systems. As the fourth industrial revolution progresses, contemporary manufacturing and logistic practices are expected to further evolve.

Figure 4.1: The Four Industrial Revolutions



Source: Siemens (2013)

The onset of the COVID-19 pandemic in March 2020 amplified the fourth industrial revolution as global supply chains were challenged by historic levels of demand for goods purchased online. The use of cyber systems adopted during the course of 2020-21 are expected to remain permanent features of global industry, with significant scope for further uptake as technology improves and costs decline.

4.1.1 The Impact of Off-shoring

The utilisation of industrial land across Australia has been largely shaped by the drivers of the third industrial revolution, with one of these key drivers being the proliferation of 'off-shoring'.

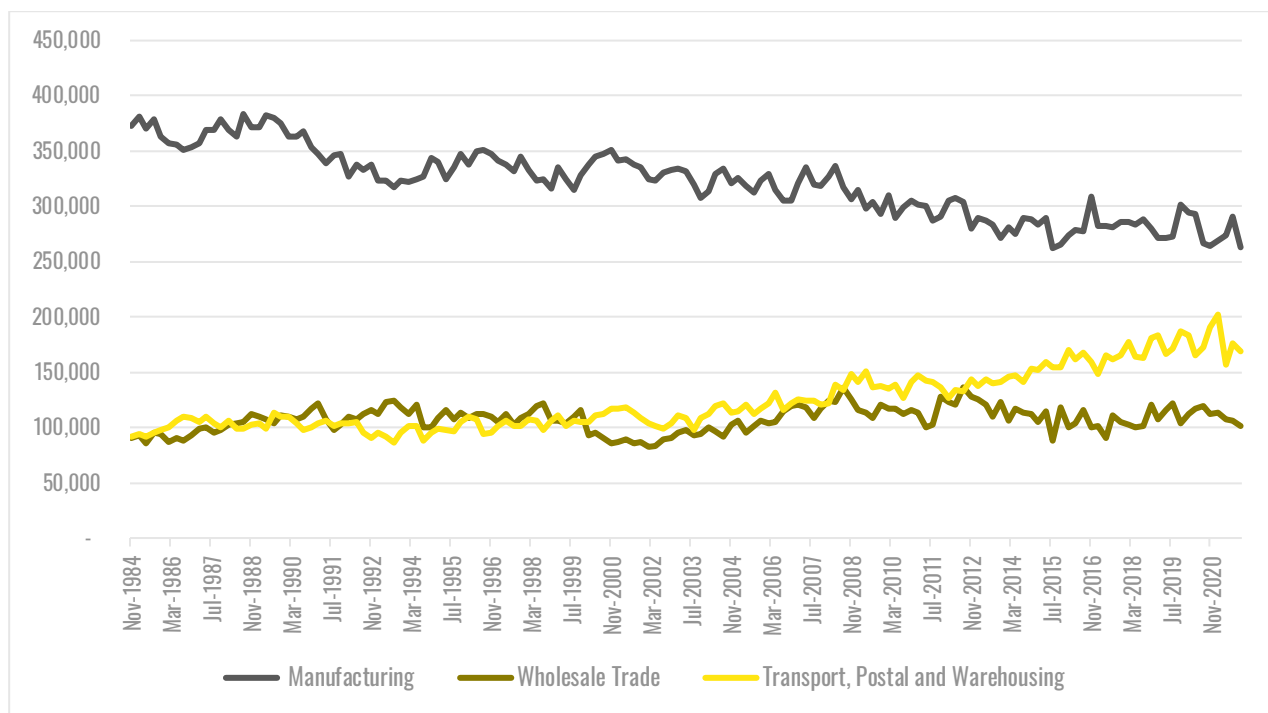
Off-shoring occurred in response to the global expansion. Advancements in transportation such as air travel and shipping containerisation brought down the cost of transportation, providing an opportunity for manufacturing processes to be relocated to emerging economies where labour costs are comparatively lower. Fully or partially manufactured goods could then be imported for distribution at a lower cost compared to if done domestically.

The third industrial revolution saw many Australian manufacturing jobs off-shored to Asia. In Victoria, several major car manufacturing plants closed over the past 15-years.

Globalisation and off-shoring resulted in a change of function for industrial land, from manufacturing-focused to largely service and logistics-focused. Rather than being used to physically build goods and products from raw materials, more and more industrial land is used to sort, package and distribute goods and services made elsewhere.

Figure 4.2 illustrates the gradual shift in industrial employment across Victoria over the past ~30 years. Manufacturing jobs have been progressively declining, whereas logistics-orientated employment has grown.

Figure 4.2: Traditional Industrial Employment (1984-2020), Victoria



Source: ABS (2021b)

4.1.2 Cyber Systems

The fourth industrial revolution and particularly the uptake of online retailing has reset customer expectations. For instance, same-day delivery is a widely offered service in parts of the United States and Europe. Whilst still early stages of take-up, robotics and autonomous vehicles have significant implications for industrial labour requirements. The implications of different advancements in cyber systems and technology on manufacturing and logistics, and in turn industrial land, cannot be understated.

There is a broad range of technological developments that fall under the umbrella of cyber systems and it remains unclear whether all will be successful. Emerging technologies with the greatest potential to disrupt the industrial sector include:

- The **Internet of Things (IoT)** allows a variety of mechanical and digital devices to be connected through the internet. Any number of processes, such as manufacturing or logistic warehousing, can be automated and monitored in real time. IoT infrastructure is utilised in large scale warehouse and distribution centres.

- The rollout of **3D Printing** remains limited given its high capital costs, though its application to the industrial sector is significant. Its use is complex and timely manufacturing processes is expected in the coming decades.
- Analysis of **big data** to understand consumer demand in real time, or predict demand, has had significant implications for supply chains with an even greater focus on speed and efficiency.
- Whilst **robotics and robotic systems** have been used on production lines for decades, smarter, more complex robots are now carrying out many tasks previously undertaken by human labour in several industrial sectors. The most recent example of this is the use of electronic pickers in modern freight and logistic warehouses.
- The use of **autonomous vehicles** remains in its infancy in the Australian economy. Autonomous vehicles represent a major step change in the freight and logistics sector, increasing speed and efficiency.
- **E-commerce** is arguably the largest and most advanced component of fourth industrial revolution. Retailing and the provision of services through the internet has been evolving over the past two decades, with Australia still with low market penetration compared to other advanced economies.

The technologies and practices identified are all expected to have a significant impact on industrial land use. Some of these possible impacts are outlined in **Table 4.1**.

Table 4.1: Possible Implications of Cyber Technologies on Industrial Real Estate

Technology	Possible Impact for Industrial Real Estate
Internet of Things (IoT)	• Development of 'smart' factories with embedded technology • Requirement for occupiers to commit to longer-term leases to offset increased capital investment • Need for high-quality, fast and wireless internet (5G) • Heightened data storage requirements requiring additional data storage capacity (i.e. data centres)
3D Printing	• Reduced need to maintain large workshop areas for certain industries (e.g., medical manufacturing)
Big Data	• Increased demand for rapid logistics capacity with less focus on product storage facilities • Need for industrial warehouses to provide secure, seamless wireless internet • Heightened data storage requirements requiring additional data storage capacity (i.e. data centres)
Robotics	• More manufacturing process could be brought back to advanced economies (e.g. 're-shoring') • Businesses may no longer require access to a large labour market during the site selection process • More efficient use of warehouses
Autonomous Vehicles	• Redesigned warehouses to allow automated vehicle use • Businesses may no longer require access to a large labour market during the site selection process • Greater focus on urban logistics
E-commerce	• Demand for mega fulfilment centres where merchandise is stored and picked at an item level • More parcel sortation centres and return processing centres • Warehouse dedicated solely to the delivery of online orders e.g. Woolworths' dark stores • More local delivery centres for faster delivery • Heightened data storage requirements requiring additional data storage capacity (i.e. data centres)

Source: Atlas/JLL (2016)

The large warehouses of the future will be highly integrated with emerging technologies.

Large occupiers are observed to already be investing heavily in cyber technologies, notably IoT and robotics. This higher level of investment will drive a need for longer-term commitments to existing and potential new locations as higher investment means a longer operational life is needed to justify their investment.

Conversely, occupiers will need security that industrial sites will remain in their current land use zoning in order to invest with confidence in the long-term sustainability of locations.

4.1.3 Online Retailing and Urban Logistics

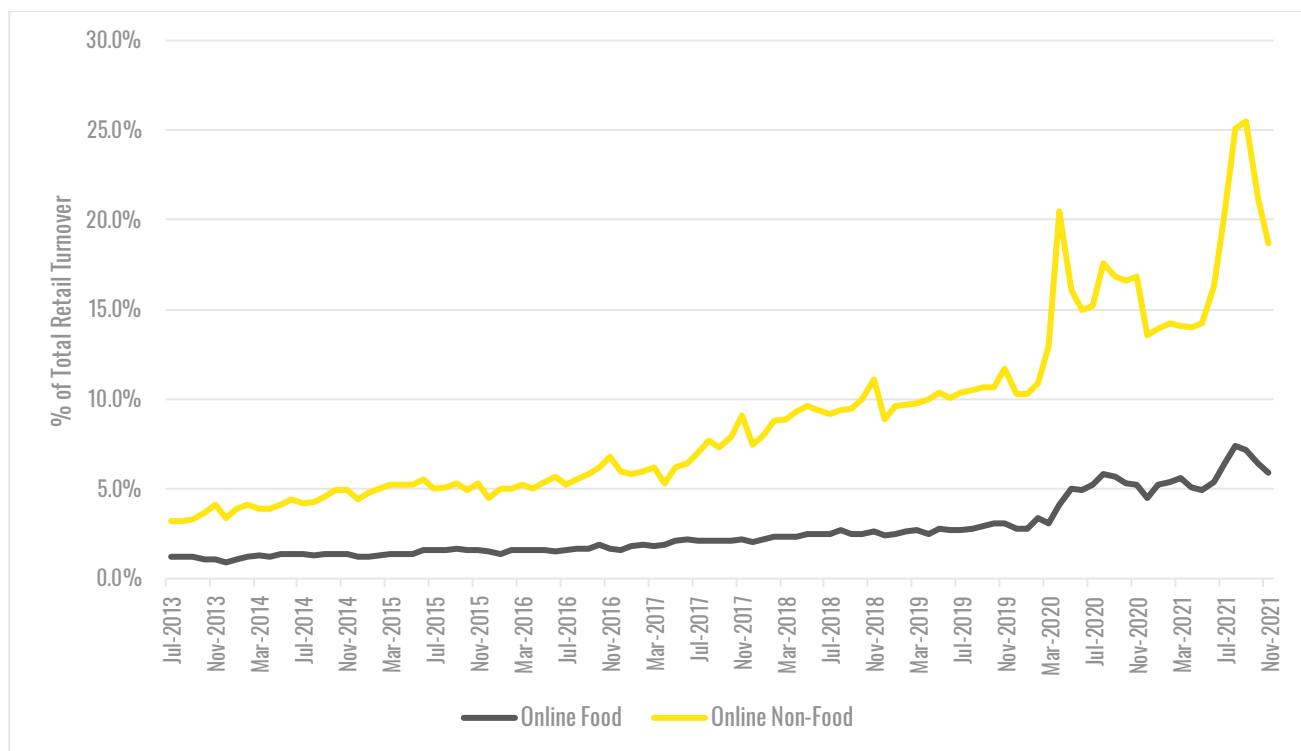
The growth of online retailing and urban logistics is set to define the future of industrial uses in advanced economies. The expansion of e-commerce requires to have a well-defined 'multi-channel' strategy, allowing customers to trade across several platforms – online (e.g. pure play), in store and on mobile devices.

The growth in online retail is itself being driven by a broad range of factors. Demographic trends, technology awareness, growth of online payment methods, availability of reliable internet connectivity and improvements in delivery timeframes have cumulatively driven demand for online retail usage. This growing demand has seen a far greater emphasis on the 'Last Mile' logistics task in which the end product is delivered to the consumer. In order to meet the demands of consumers in terms of choice, availability and delivery, many extra nodes in the supply chain are required in addition to storage space close to large population centres.

Online Retail Penetration

The onset of COVID-19-induced lockdowns over the course of 2020 resulted in an unprecedented surge in online shopping, with more Australians shopping online in the 12-months to December 2020 than ever before. Online retail spending grew by some 57% over this period, accounting for 16.3% of total retail spend (Australia Post, 2021). This is well-above the pre-pandemic trend of 11%-13%.

Figure 4.3: Online Retail Sales (% of Total Retail Turnover), Australia



Source: ABS (2022)

Whilst this growth has brought Australia into line with other major eCommerce leaders such as the United Kingdom, Denmark and the United States (where online retail has historically accounted for 15-18% of retail spend), Australia is still well-below Asian countries such as China and South Korea where online penetration rates are ~30%.

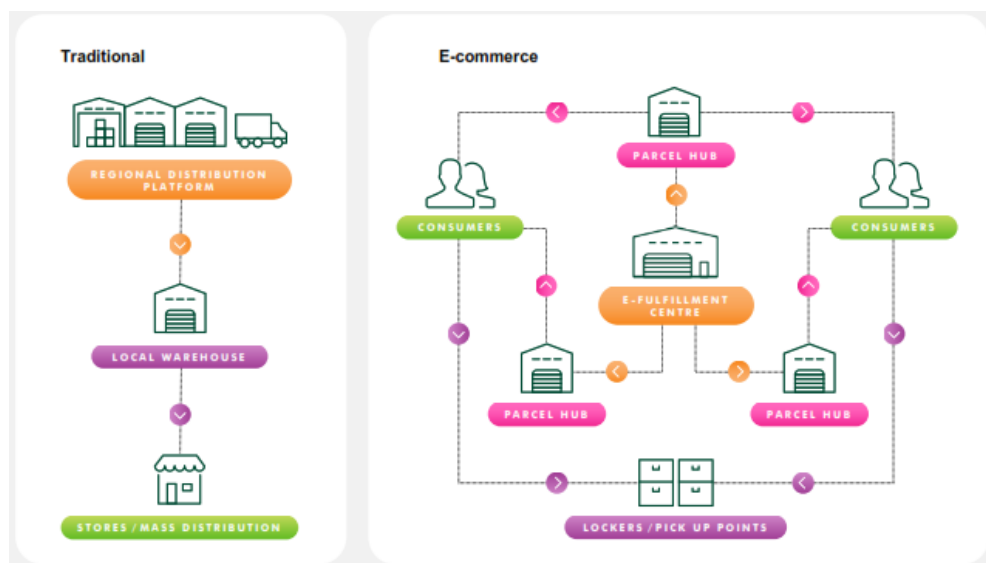
Looking forward, it is anticipated that further growth in online retail penetration rates across Australia will be observed over the coming decade, with expectations that Australia could reach penetration rates of ~25% as early as 2025 (CBRE, 2021a).

Changing Logistics Models and Implications for Warehouse Space

The growth in online retail has transformed traditional logistics and distribution models. Linear supply chains have been replaced by regional distribution centres, fulfillment centres and smaller parcel hubs. The growing need to accommodate product returns is driving further changes in distribution models, with research suggesting a need for up to 20% more space and labour capacity is required in reverse logistics supply chains (CBRE, 2021).

Figure 4.4 provides a simple illustration of the shift in logistics models as a result of e-commerce-based trade.

Figure 4.4: Changing Model of Logistics and Distribution



Source: CBRE (2021b)

The growth in online retail penetration rates across Australia is anticipated to be a major driver for warehouse and logistics demand. CBRE (2021a) anticipate that an additional 2.4 million sqm of logistics floorspace will be required across Australia over the 2020-2025 period to meet projected growth in online retail penetration rates. This equates to around 480,000sqm of additional floorspace per annum. For context, some of the new 'mega' fulfillment centres being delivered across Melbourne and Sydney total ~50,000sqm each.

Logistics is set to become the fundamental driver of demand for industrial land and property across Australia as the uptake of e-commerce and online retailing gathers further pace.

It is important to recognise that this significant demand for logistics space does not solely apply to large distribution centres. Smaller regional delivery centres (5,000sqm-15,000sqm), 'Last Mile' hubs (2,000sqm-3,000sqm) and parcel pick-up hubs are equally important and represent the spectrum of the e-commerce logistics chain.

'Dark' Supermarkets and Kitchens

The supermarket and hospitality industries have adapted their business models in light of the growth of e-commerce and online retailing. New facilities, known as 'dark stores' or 'dark kitchens', have emerged to solely cater to online deliveries. These do not need to be physically accessible to consumers, allowing them to be located in lower cost locations, including industrial precincts.

In the supermarket sector, Woolworths launched its first 'dark store' in Mascot (Sydney) in 2014 with the sole purpose of fulfilling online orders. Coles opened its first dark store in Melbourne's inner-city suburb of Richmond in 2016. There are now multiple dark stores across Melbourne.

The rise of food delivery services (e.g. Uber, Deliveroo, Menulog, Marley Spoon, etc) has also had significant implications for urban logistics. 'Dark kitchens', which solely cater to online food platforms, are well observed across Greater Melbourne. Deliveroo operates two dark kitchens in the inner-city suburbs of Collingwood and Windsor, whilst Marley Spoon operate their major fulfilment centre from a warehouse facility in Altona North.

The demand for and application of urban logistics and land is therefore broad with growing adoption of online shopping platforms expected to exacerbate this trend over the coming decades.

4.1.4 Re-Shoring and Advanced Manufacturing

The third industrial revolution encouraged off-shoring and the transfer of manufacturing capacity from Australia to emerging counties. Some manufacturing processes have started to be 're-shored' and relocated back to the domestic market. The need for domestic manufacturing capability has been clearly illustrated by the COVID-19 pandemic, where disruptions to global supply chains have caused temporary supply shortfalls across many sectors.

Examples of re-shoring are currently limited, prevailing trends may encourage more of this activity in the future:

- Increasing labour costs in emerging economies and the falling cost of advanced manufacturing technologies.
- Removal of geopolitical risk resulting from natural disasters and/or trade disputes.
- Increasing consumer demand for fast delivery times, which lends itself to domestic manufacturing.

The anticipated rise of re-shoring is consistent with Commonwealth and Victorian Government policies on attracting, developing and retaining advanced manufacturing in Australia. The Commonwealth's *Our Modern Manufacturing Strategy* and Victorian Government's *Advancing Victorian Manufacturing*, provide a wide variety of policy settings and incentives to encourage advanced manufacturing.

Re-shoring has yet to have a major impact on the Australian manufacturing sector. That said, a recent survey by the Australian Manufacturing Technology Institute Limited (AMTIL) found that some 55% of Australian manufacturers intend to re-shore part of their manufacturing processes to Australia given by 2023 following market volatility caused by the COVID-19 pandemic and international relations with neighbouring countries (AMTIL, 2021). It is more likely that re-shoring will occur in advanced manufacturing sub-sectors that are reliant on specialist or R&D focused skills.

Real estate outcomes could include a greater focus on campus-style, quasi-industrial/commercial developments which allow co-location of R&D facilities and manufacturing. Re-shored manufacturing activities will likely be smaller, specialist products as opposed to larger-scale production facilities.

4.1.5 Artisanal Food and Beverage Manufacturing

The artisanal food and drink sector is quickly growing across many of Australia's capital cities. Small-scale food and beverage manufacturing operators, notably microbreweries, liquor distilleries and coffee roasters are growing in response to a growing societal trend for premium 'craft' (i.e. small batch, high-quality and often locally made) food and beverage products.

For instance, Australia's craft beer industry has grown over the past five years and increased their total market share despite the broader beer manufacturing sector declining over the period (IBISWorld, 2021). The craft beer sector is poised to grow at an annualised rate of 7.0% over the coming years to 2025-26. This contrasts the projected revenue growth of just 4.4% in the broader beer manufacturing sector (IBISWorld, 2021). Similar trends are observed in the spirit manufacturing industry, where the 'premiumisation' of demand for craft spirits is leading to an uptick in small, local distilleries.

Artisanal food and beverage operators tend to operate on a single site and co-locate their manufacturing premises with wholesaling and direct-to-customer retailing. The ability for premises to carry out multi-functions is important, though often the distinction between 'light industrial' and 'retail' uses can be blurred.

The nature of artisanal food and beverage manufacturing requires a mix of uses on a single site, proximity to resident populations and good access. These requirements have lent themselves to older-style industrial precincts, particularly those which buffer residential areas. The capacity of these users to afford high commercial rents is also limited, making industrial areas the most viable option (particularly for small and emerging businesses).

With strong growth in the sector forecasted over the coming decade, it will be important that these operators can locate within appropriate industrial areas without impacting on the viability of industrial operators.

4.1.6 Sustainability Practices

Sustainability is a key component of building design with multiple sustainability rating systems (Green Star, NABERS, WELL) used across property sectors. Whilst industrial trends explored earlier in terms of re-shoring, urban logistics and technical innovation align with sustainability principles, sustainability is not in and of itself a key driver of change in the sector.

Historically, industrial building design has not adopted sustainable design elements to the same extent as commercial or retail sectors. This has been influenced by a variety of factors, principally substantial additional costs and the unique design requirements of industrial buildings. This slow adoption of green building design has increasingly begun to shift over the past five years. Large-scale industrial developers are recognising the long-term improvements in functionality, reduced operating costs and importantly, the ability to attract environmentally-minded tenants.

The adoption of sustainable design practices in industrial building design still has some way to go, with take-up to date generally limited to large scale developers and investors with the financial capacity to afford high upfront capital costs. As the cost of technology continues to fall, the adoption of more environmentally friendly design practices by smaller builder-developers and investors will become financially viable.

4.1.7 Internet Connectivity

Internet connectivity is now the fourth utility for occupiers, as important as water, electricity and gas. Whilst this is more apparent for retail and commercial users, the ever-growing incorporation of technology into industrial workplaces necessitates good internet connectivity.

Whilst much of Bass Coast is already connected to the National Broadband Network (NBN) with 4G internet speeds available, the rollout of the 5G network has been limited to Inverloch, parts of Wonthaggi and Phillip Island. Provision of 5G services will be important in attracting some businesses with high-speed internet requirements.

The rollout of 5G internet speeds will dramatically increase the technological capabilities of industrial users, specifically their capability to implement IoT and automation technologies.

Businesses with the capacity to implement such services will naturally gravitate to areas with 5G coverage.

4.2 Regional Economic Trends

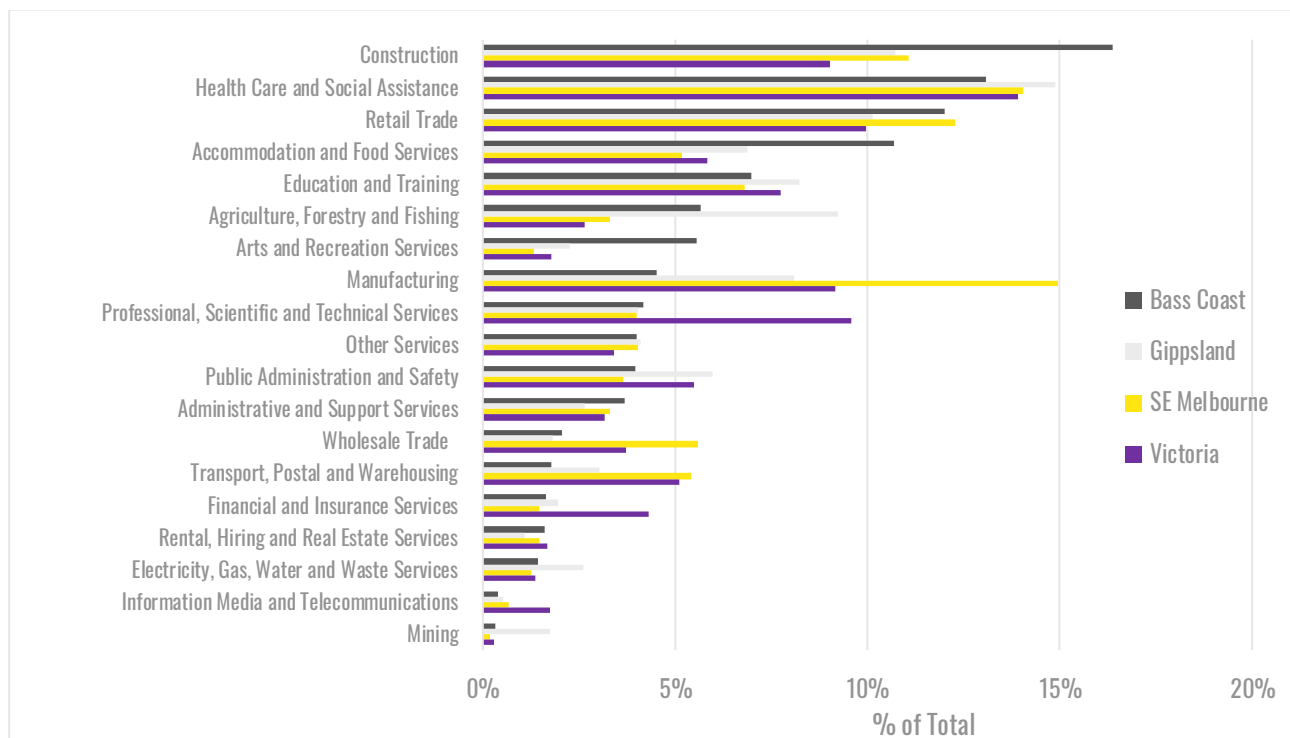
4.2.1 Regional Employment Growth

The Gippsland region is large and very diverse. The regional economy is driven by the individual industry drivers of each of the local government areas. Relative the region, Bass Coast has strengths in construction, healthcare, retail trade and accommodation and food services.

This economic structure shows the strength of the area as a population servicing economy, along with the region's relative strength in tourism. The Gippsland region by contrast has strengths in agriculture and manufacturing. Within the region these strengths are also varied, with Latrobe having a large manufacturing and industrial base centred around energy production, while other parts of the region rely more heavily on agriculture.

Figure 4.5 illustrates the existing employment profile of Bass Coast in comparison the Gippsland Region.

Figure 4.5. Employment by Industry (2021), Bass Coast, Gippsland and South East Melbourne

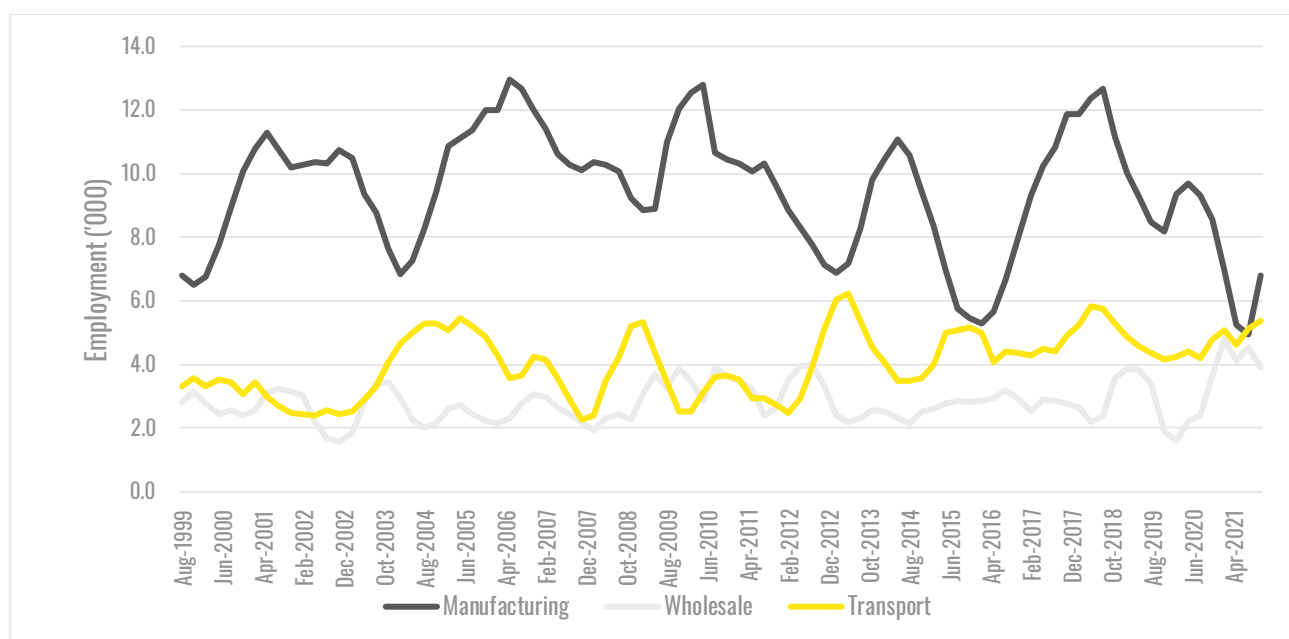


Source: NIEIR (2021)

Employment trends observed in Bass Coast in some traditional industrial sectors such as manufacturing, wholesale trade and transport, postal and warehousing have mimicked those observed in the Gippsland region and South East Melbourne, albeit more pronounced. Over the past decade, these three sectors continued to decline in the Bass Coast, whereas these sectors recorded positive growth over the 2016-2021 period in the Gippsland region and South East Melbourne.

A more detailed evaluation of regional trends shows tremendous volatility across the industrial sector, with manufacturing suffering periods of strong growth followed by steep declines. Manufacturing has generally declined over the last two years across the Gippsland region. At the same time, the wholesale trade and transport and storage sectors have demonstrated solid growth. Similar to other parts of the country, the transport sector has generally grown over the last two decades.

Figure 4.6. Employment by Industry, Gippsland Region



Source: ABS (2021b)

4.2.2 Changing Migration Patterns

Capital cities across Australia have been the beneficiary of population growth. Following the outbreak of COVID-19 across Australia in March 2020, a marked shift in population growth patterns resulted. Firstly, the cessation of international migration resulted in the capital cities of Melbourne and Sydney recording nominal, and in some instances negative, quarterly population growth.

The second notable shift has been an uptick in population growth to regional areas as residents from capital cities (particularly Greater Melbourne and Greater Sydney) have relocated to the regions as the importance of living close to places of employment has reduced for many office-based workers.

In the 12-months to March 2021, Regional Victoria recorded net internal migration of ~8,100 residents (ABS, 2021a). Conversely, Greater Melbourne record net loss of -18,900 residents over the same period. A breakdown of internal migration by LGA is not currently available and is anticipated for release in March 2022.

As a large component of Regional Victoria, the Gippsland Region is expected to have recorded above average population growth over the course of 2020-2021 as a result of intrastate migration from more urban areas in Greater Melbourne.

Table 4.2 provides a breakdown on net internal migration to Regional Victoria over the 12-months to March 2021.

Table 4.2: Net Internal Migration (March 2020-March 2021), Regional Victoria

Locality	March 2020	December 2020	March 2021	Total
Greater Melbourne	9,122	10,798	11,855	31,775
Other Capital Cities	2,227	2,092	2,381	6,700
Other Regional Areas	2,874	3,004	3,283	9,161
Total Arrivals	14,223	15,894	17,519	47,636
Total Departures	11,470	13,939	14,110	39,519
Net Internal Migration	2,753	1,995	3,409	8,157

Source: ABS (2021c)

4.3 Local Economic Drivers

In addition to the broader industry and regional trends which will influence the demand and supply of industrial land over the coming decades, the Bass Coast economy is subject to its own unique set of drivers and influencing factors which have influenced historical industrial activity or have the potential to do so in the future.

Beyond the traditional industrial sectors such as manufacturing and logistics, industrial precincts play an important role in accommodating occupiers who service the needs of local residents (e.g. automotive repairs). These uses are commonly referred to as 'urban services'. Urban services are influenced to a greater degree by local economic drivers such as population growth and demographic trends.

Table 4.3 summarises some of the key economic drivers expected to influence industrial activity in Bass Coast.

Table 4.3: Local Economic Drivers

Trend	Description
Population Growth and Changing Demographics	Bass Coast recorded an additional ~5,500 residents over the 2014-2020 period, reflecting growth of some 18%. This strong rate of growth has driven demand for a broad range of urban services (e.g. repair services, recreational and fitness) and retail, many of which are provided through the Shire's industrial precincts. Strong growth in younger and middle-aged residents has brought a shift in demand for services. For instance, several new gymnasiums have established across the Shire in recent years and have been an important source of employment growth. Several of these have located within the Study Area (e.g. Inverloch, Wonthaggi, Cowes). Given the significant population growth anticipated over the coming decades (coinciding with the Wonthaggi North East Growth Area) and a shift from capital cities to regional areas continues, these drivers will continue to gather momentum.
Construction Activity	Coinciding with strong population growth, Bass Coast experienced a significant uptick in residential construction activity since 2014. This had direct impact on demand for local building and construction services, along with flow-on impacts for other industrial sectors. Construction activity, and its subsequent flow-on economic impacts, will gather momentum as the Wonthaggi North East Growth Area is progressively developed.
Growth in Online Shopping Behaviour	COVID-19-induced lockdowns over the course of 2020-2021 across Victoria saw an unprecedented uptick in online shopping across the State. Bass Coast was at the forefront of this shift, with the suburb of Cowes identified as one of Australia's top 10 online shopping locations by percentage of new shoppers (Australia Post, 2021). As online shopping behaviours become engrained in a post-COVID economy and the unique benefits offered in regional areas, the uptake of online retailing across the Shire is expected to further grow.
Victorian Desalination Plant	The construction of the Victorian Desalination Plant (VDP) in 2012 has generated flow-on economic activity for a variety of small local operators in the manufacturing and electricity, gas, water and waste industries. For instance, local mechanical services operator Rotaret (located in Wonthaggi) established in direct response to the market opportunity catalysed by the VDP, who is their largest customer.
Agricultural Sector	A mix of local manufacturers, repair services and trades supply a mix of services to the agricultural sector in Bass Coast and the broader Gippsland Region. A variety of retailers who operate in the Study Area have a direct relationship with the region's agricultural sector (e.g. Bass Coast Stock Feeds, Bass Strait Seafoods, AG Warehouse). The Shire's agricultural sector has been influenced by the same economic headwinds influencing global and domestic agricultural markets. Looking forward, an emphasis on food security and a shift to higher-order food and beverage manufacturing has the potential to drive growth across the industry, providing flow-on benefits for local industry across Gippsland.
Renewable Energy	The shift towards renewable energy from all levels of government and the private sector is expected to present opportunities for local industry. Bass Coast and the neighbouring South Gippsland Shire have been identified as key locations for future investment into renewable energy in the Victorian Government's <i>Renewable Energy Roadmap</i>.
Visitor Economy	Tourism is arguably the largest driver of economic activity in the Bass Coast. Whilst the COVID-19 pandemic has significantly impacted the sector over the 2020-2021 period, a strong uptick in activity is anticipated as international and domestic travel begins to reset in the coming years. Local industry plays an important supporting role to the Shire's visitor economy in industries such as construction, wholesale trade and transport and warehousing.

Source: Atlas

4.4 Implications for Study Area

This Chapter explored the major sectoral changes impacting on the industrial sector and its consequent demand for land. The chapter also examined the more specific regional and local economic trends which will likely impact the Bass Coast industrial market over the coming decades. A summary of these trends is provided below.

Business and Industry Trends

- The past three decades have been characterised by the rise of globalisation and off-shoring, with Australian manufacturers largely relocating to cheaper locations overseas to remain globally competitive.
- Transport and logistics emerged as important drivers of the Australian industrial market as the transition from a production-based to consumption-based economy grew.
- Fuelled by the rapid growth of online retailing, transport and logistics is set to define the future of industrial uses across Australia with an additional 2.4 million square metres of logistics floorspace estimated to be needed nationally by 2025 to meet the demands of the e-commerce sector (CBRE, 2021a).
- The rise of cyber-systems will drive changes in industrial land use and building design with occupiers expected to invest more capital into facilities and correspondingly commit to locations for longer.
- The trend of re-shoring in the context of policy initiatives could see some previously off-shored manufacturing processes relocate back to Australia, particularly for advanced or niche processes.
- Societal demands for local and/or premium food and beverage products will continue to drive growth in artisanal food and beverage manufacturing, necessitating flexible planning responses within existing industrial areas.
- As the cost of technology continues to fall, the adoption of more environmentally friendly design practices by smaller builder-developers and investors will become financially viable.

Regional Economic Trends

- Employment trends in traditional industrial sectors in Bass Coast has broadly mirrored those of the Gippsland Region, though Bass Coast has a clearly more service-focused economy compared to neighbouring LGAs.
- Changing migration patterns resulting from the COVID-19 pandemic will likely see above-average population growth in regional localities such as Bass Coast, driving further demand for population-serving industries.

Local Economic Drivers

- Population growth, ongoing residential construction activity and the visitor economy will continue to be key drivers for local industrial occupiers across Bass Coast.
- Other local trends will have a more ancillary impact and will be largely influenced by further government investment or attraction initiatives.

Logistics driven growth in demand for industrial land and property is expected to be focused in Greater Melbourne's key industrial precincts where there is good proximity to major highways and large population hubs. Bass Coast's industrial market will likely play a more localised logistics role, focused on 'Last Mile' delivery as opposed to regional distribution. It will be important for planning to consider emerging components of e-commerce distribution models (e.g. parcel pick-up hubs) across the Shire.

The capacity of Bass Coast to attract advanced manufacturers will largely depend on any future investment attraction initiatives by State or local government. The corresponding implications for local industrial land is therefore difficult to quantify.

The key drivers for demand of industrial land in the Shire will be directly related to population growth and demographics. Artisanal food and beverage manufacturing, construction, recreational and urban service industries are closely linked to population growth. It is these sectors that are anticipated to drive majority of demand for industrial land across the Shire in the coming decades.

The next Chapter explores the historical and current market dynamics of Bass Coast's industrial market.

5. Property Market Review

This Chapter investigates market dynamics in the Bass Coast industrial market and other surrounding areas. This includes an overview of the Melbourne industrial market, local market activity, a competitive assessment of neighbouring precincts and an outlook for the Shire's local industrial market.

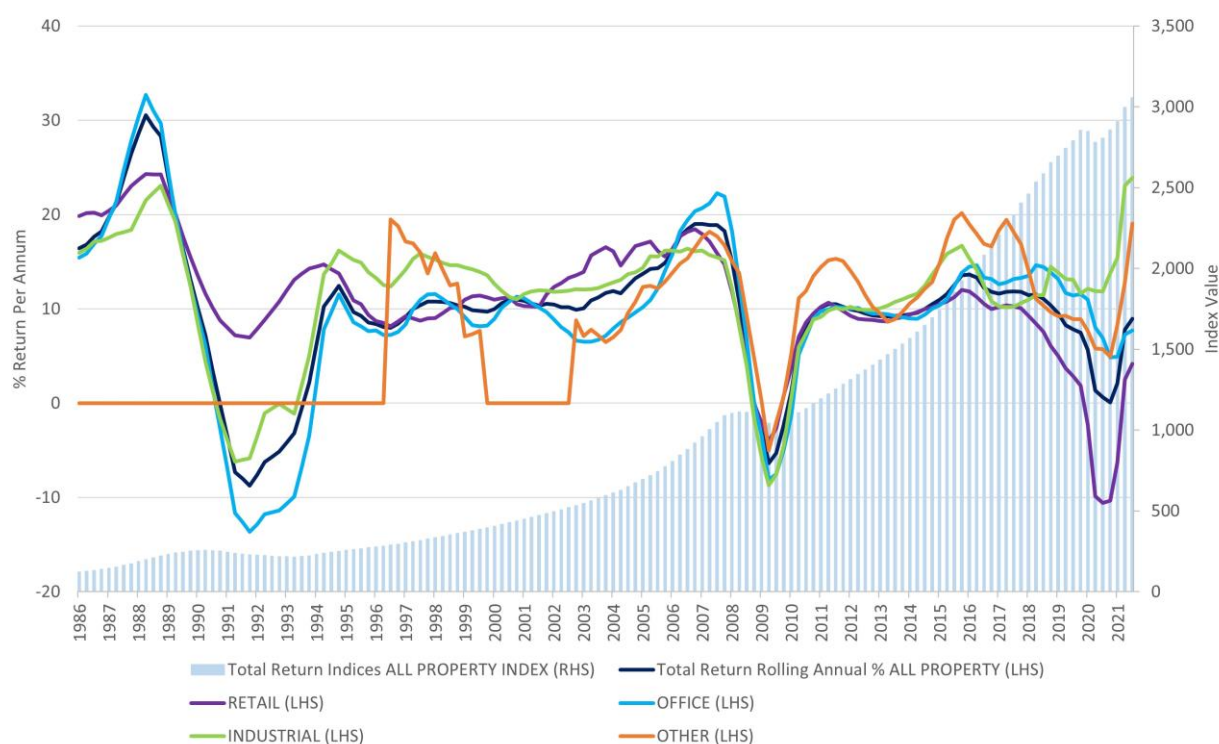
5.1 General Market Overview

The Australian industrial market is experiencing historically strong market conditions, buoyed by the significant rise in e-commerce driven demand for logistics space, large scale infrastructure projects, residential construction activity and strong population growth driving demand for urban services.

These sectoral tailwinds have seen an upward shift in investor and developer appetite for industrial property over the past 3-5 years, culminating in strong capital growth and falling yields. Industrial property is now the strongest performing asset class across Australia, with significant capital inflows from domestic private, institutional groups and foreign investors.

The onset of COVID-19 in Q1 2020 further amplified market sentiment for industrial property. The uptick in online retailing drove further growth in the freight and logistics sector, spurring interest in well-located warehouse and logistic facilities. As illustrated in **Figure 5.1**, the comprehensive investment returns of Australian industrial property rose sharply in 2020, though industrial property had been outperforming other sectors (office, retail, other) for some three years.

Figure 5.1: Investment Performance Index (1986-2021), Australia



Source: PCA (2021)

5.2 Greater Melbourne Industrial Market

The Melbourne industrial market has been at the forefront of Australia's industrial market boom. Strong population growth, residential construction activity and a major infrastructure investment programme have been a boon for the industrial sector. As subject to Australia's longest COVID-19-induced lockdowns, record rates of online shopping over the course of 2020-2021 saw commensurate growth in freight and logistics, heightening occupier and investor demand for industrial assets.

These drivers have almost universally resulted in rising capital values and rents, reductions in incentives and vacancy levels and compression of investment yields.

The Melbourne industrial market is commonly distinguished into five sub-markets – City Fringe, North, West, East and South-East. A clear hierarchy of values can be identified across these sub-markets; the City Fringe recording the highest rents and values, followed by the East, South-East, North and West. This is illustrated in **Table 5.1**.

Table 5.1: Key Market Indicators (Q3 2021), Greater Melbourne Industrial Market

Sub-Market	Net Rents (\$/sqm)		Capital Values (\$/sqm)		Land Values: <5,000sqm (\$/sqm)		Land Values: 1ha-5ha (\$/sqm)	
	Low	High	Low	High	Low	High	Low	High
City Fringe	\$110	\$160	\$2,300	\$4,000	\$1,600	\$1,900	\$1,100	\$1,450
North	\$75	\$85	\$1,500	\$2,100	\$400	\$600	\$400	\$500
West	\$77.5	\$90	\$1,600	\$2,300	\$450	\$525	\$350	\$425
East	\$90	\$100	\$1,900	\$2,500	\$850	\$950	\$600	\$700
South-East	\$87.5	\$97.5	\$1,800	\$2,400	\$550	\$650	\$375	\$450

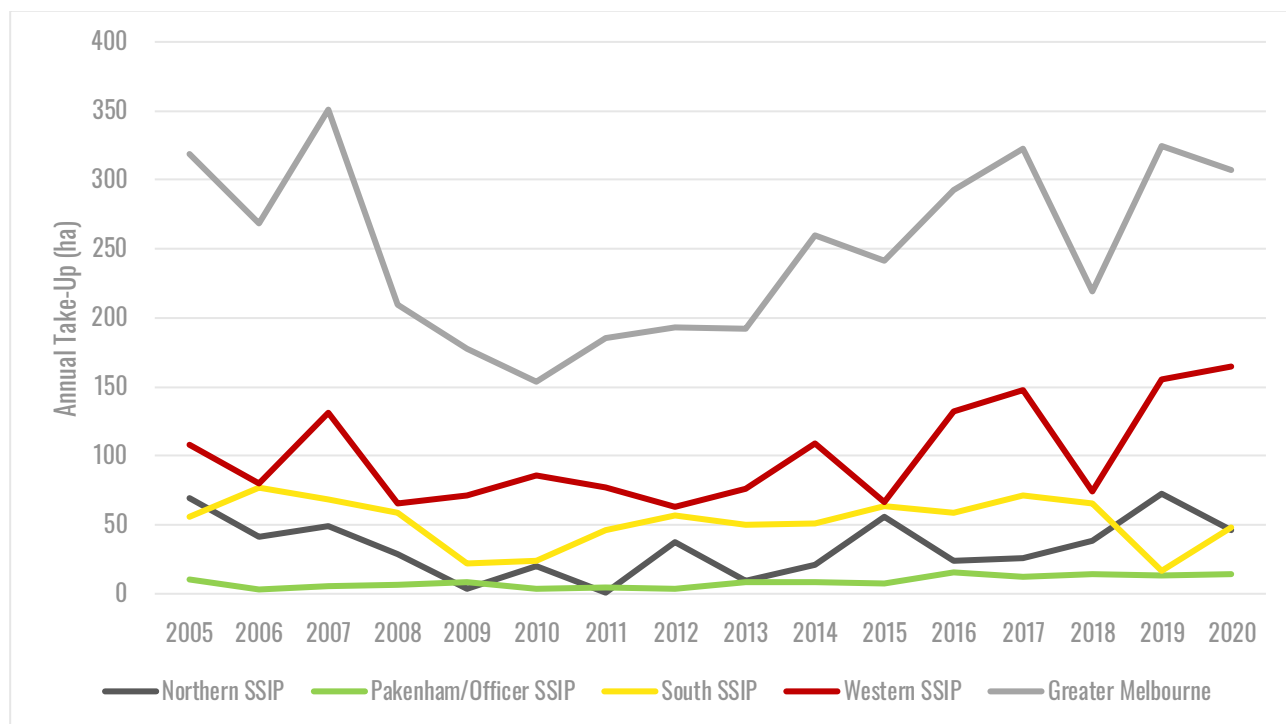
Note: net rents and capital values are prime grade
Source: Savills Research (2021)

The East, South-East and North sub-markets have historically played a key role in accommodating demand for logistics-orientated operators. In more recent years, take-up of industrial land in the West sub-market has accelerated as many firms have preferred the market's proximity to the Port of Melbourne, strong highway connectivity and future plans for Bay West as Melbourne's second container terminal.

The Officer/Pakenham industrial areas in the South-East sub-market have also seen an uptick in land consumption as the traditional industrial precincts in areas such as Dandenong (South SSIP) have reducing levels of remaining supply.

Figure 5.2 illustrates the historical consumption of industrial land across Greater Melbourne and the major SSIPs.

Figure 5.2: Historical Consumption of Industrial Land (2005-2020), Major SSIPs



Source: DELWP (2020)

The South-East sub-market (which includes the areas of Dandenong, Cranbourne, Hallam, Officer and Pakenham) represent the closest metropolitan industrial market to the Bass Coast Shire. The South-East sub-market is the largest industrial area within Greater Melbourne by land area, with some 7,270ha of zoned and occupied land (DELWP, 2020). The sub-market also has a significant amount of remaining supply, with around 2,337ha of zoned and vacant land (though not all of this is serviced). There is also around 938ha of future industrial land earmarked in the Officer-Pakenham SSIP which will be released over the coming decades.

5.3 Local Market Activity

This section provides an overview of recent market activity across Bass Coast's industrial market, including market conditions, sales and leasing activity and the nature of surrounding competitor markets.

5.3.1 Market Conditions

The Bass Coast industrial market has experienced strong market conditions over the past 24-months, with demand outstripping supply over this period. All existing industrial precincts across the Shire are tightly held, with landowners and occupants aware of the limited supply of industrial land/premises across the Shire. Together with a lack of new supply, these market dynamics have resulted in upward pressure on property values and rents.

Strong population growth, low interest rates and high levels of construction activity have been the key drivers of demand for the local market. Whilst demand has been relatively diverse, strong interest has been observed from construction, 'lifestyle uses' (e.g., small food wholesalers/manufacturers, gyms, etc) and urban service businesses. There is also strong demand for self-storage facilities which are utilised by residents, businesses and 'holidayers'. This reflects the supporting role of the Study Area to the Shire's visitor economy.

The dearth in available supply is resulting in businesses opting for locations which may not necessarily be optimal for their business requirements. For instance, local real estate agents note that businesses unable to find accommodation in Wonthaggi have instead located in Cowes, despite primarily servicing the 'mainland' areas of the Shire. Businesses who have been unable to secure additional space have been 'making do' with smaller spaces, resulting in the stalling of business growth. Relocations have been rare, owing to the need for most businesses to remain local. There have been some examples relocations to Melbourne's South-East, such as Archicentre (modular building company) who relocated to Hallam and TwoTwo Design (modular building company) who relocated to Pakenham.

Market commentators frequently note the stalling of development at 35 Carneys Road as a major missed opportunity and poor outcome for the local industrial market and economy. Following permit approval in 2014, 16 of the 25 industrial lots had been sold 'off-the-plan' to a mix of local and 'out of area' businesses. Following lengthy negotiations with Council, DELWP and VicRoads, the developer is understood to have subsequently readvertised the site for sale and rescinded the pre-sale agreements, citing the high cost of infrastructure costs and lengthy approval process with VicRoads.

The lack of supply has resulted in many businesses locating in non-industrial zones. Examples of this are observed San Remo (Genista Street, MUZ1), North Wonthaggi (White Road, MUZ1) and various areas across the Shire zoned FZ.

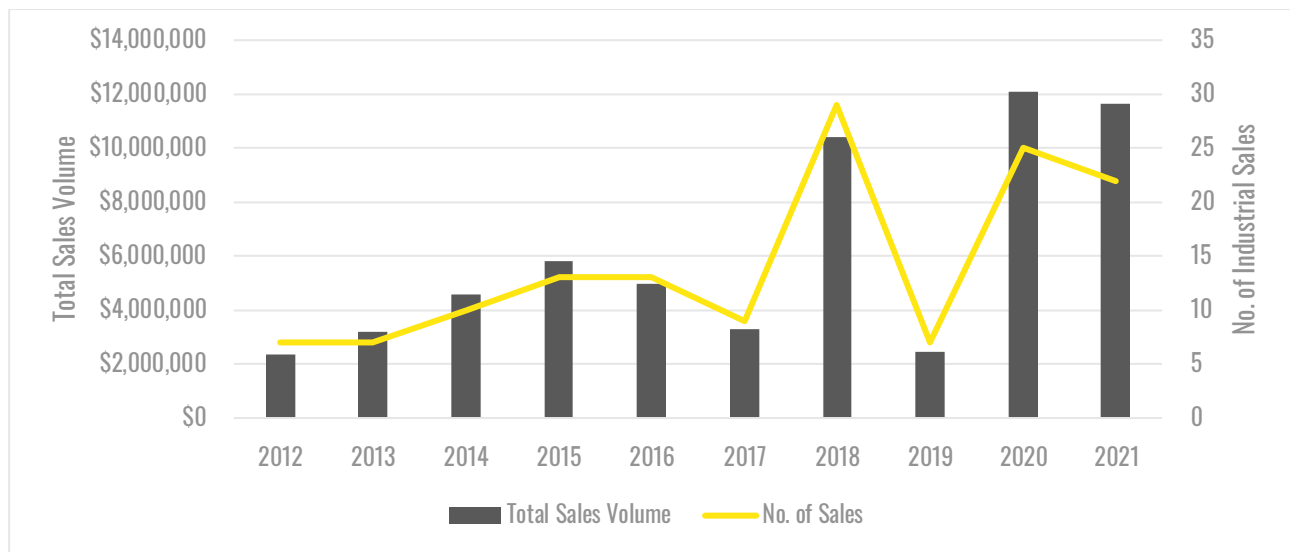
5.3.2 Sales Activity

Strong market conditions, low interest rates and a preference for many businesses to owner occupy has resulted in a flurry of sales activity over the 2020-2021 period across the Shire. Sales peaked in 2020 (in terms of both value and number of sales), with only a nominal decline observed in 2021. That said, sales activity has been mixed by precinct:

- **Cowes** has recorded the highest level of sales activity over the past 2-years with a mix of established warehouses, storage units/industrial suites and vacant blocks transacting. The largest of these was the sale of 1/11 The Concourse for \$840,000 in October 2021 (\$1,077/sqm of site area) which is currently leased to PKB Tiles.
- A flurry of activity has also been seen in **Newhaven**, with around 7 sales of recently completed industrial suites. These are understood to have been primarily purchased for personal and business storage purposes.
- The **Korumburra Road** precinct at Wonthaggi also recorded around 7 sales over 2020-2021, predominantly a series of small industrial suites at 5 Cyclone Street (circa 250sqm in floor area). The selling agent noted there was significant interest in these suites over the marketing campaign with around 10 parties unable to secure premises.
- **Inverloch** has recorded around half a dozen sales over 2020-2021 with a mix of vacant blocks, newly completed industrial suites and an established warehouse transacting. This included one of the largest sales since 2014, with a primarily vacant block at 11 Bear Street transacting at auction for \$1.1 million in June 2021 (\$978/sqm of site area).
- Limited sales activity was observed in the **Eastern Area Industrial Estate**, with just four sales between 2020-2021 and is a reflection of the popularity and tightly held nature of the precinct.
- One sale was observed in **Grantville** with no sales observed in the **White Road/McKenzie Street** precinct.

Figure 5.3 illustrates historical sales activity across the Shire's industrial market over the 2012-2021 period.

Figure 5.3: Industrial Sales (2012-2021), Bass Coast Shire



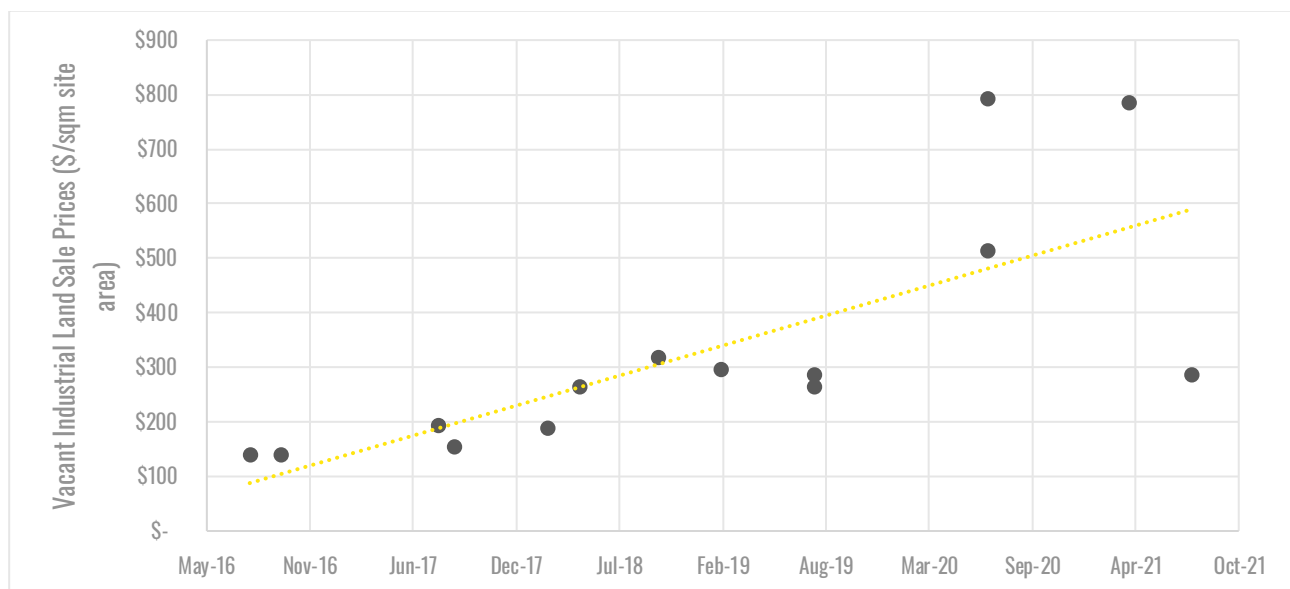
Source: Pricefinder

In addition to an uptick in sales activity, strong market conditions have resulted in growth in both industrial property and land values. Industrial property values have risen significantly in the past 5-7 years, placing pressure on business costs. For instance, 13 Bear Street, Inverloch last sold in mid-2014 for \$422,000 (equating to \$392/sqm of site area). The adjoining site at 11 Bear Street, being highly comparable in terms of site area and improvements, sold in July 2021 for \$930,000 (equivalent to \$878/sqm of site area). This reflects price growth of >120% on a dollar per square metre of site area basis.

Land values have also been progressively rising. A review of vacant industrial land sales over 2016-2021 reflects this upward trend, with several recent sales in the order of \$500/sqm to \$800/sqm of site area.

Figure 5.4 illustrates historical industrial land sales across Bass Coast Shire over the 2016-2021 period.

Figure 5.4: Vacant Industrial Land Values (Sub-3,000sqm), Bass Coast Shire



Source: Atlas Economics/CoreLogic

It is noted that a pre-sales campaign for vacant lots ranging from ~1,250sqm to ~2,500sqm as part of the proposed industrial subdivision at 35 Carneys Road was carried out over the course of 2015-2017. Anecdotal evidence from local marketing agents indicate that 16 pre-sales were secured with prices analysing to circa \$500/sqm of site area. This is markedly higher than existing vacant land values at the time, reflecting the premium afforded to this location.

5.3.3 Leasing Activity

A dearth of recent leasing activity has been observed across the Bass Coast industrial market over the past 12-24 months given historically low vacancy levels.

An audit of the individual precincts across the Study Area in November 2021 identified a total of 16 industrial properties likely to be vacant, equating to a vacancy rate of 6%. Vacancy levels differed across the Study Area, with the highest levels observed in Newhaven, White Road/McKenzie Street and Korumburra Road precincts. Minimal vacancies were observed in Inverloch or Cowes, with no vacancies identified in the Eastern Area Industrial Estate of Wonthaggi.

Historically, the highest industrial rents across Bass Coast have been in Wonthaggi (particularly the Eastern Area Industrial Estate), followed by Cowes, Inverloch and lastly Newhaven. Increasingly, a lack of available stock is resulting in the historical hierarchy of rents begin to blur, as occupiers compete for a limited number of premises across the Shire.

Table 5.2 depicts the rental profile of individual industrial precincts across the Study Area.

Table 5.2: Rental Profile, Study Area

Precinct	Vacancy ¹ (Q4 2021)	Gross Rents ² (\$/sqm floor area)
Eastern Area Industrial Estate	0%	\$130-\$160
White Road/McKenzie Street	13%	\$130-\$160
Korumburra Road	9%	\$130-\$160
Inverloch	6%	\$100-\$110
Cowes	3%	\$105-\$115
Newhaven	33%	\$90-\$100
Grantville	0%	N/A

Notes:

1 – Vacancy measured as proportion of vacant floorspace of total floorspace within precinct

2 – Gross rents based on small to medium-sized industrial suites

Source: Atlas Economics

5.3.4 Competitive Context

The nature of the Bass Coast economy and desire of most industrial occupiers to be located proximate their customer base has meant that limited competitive impact from industrial lands outside the Shire. Industrial precincts on the 'mainland' (Wonthaggi, Inverloch, Grantville) and Phillip Island (Cowes, Newhaven) have historically competed amongst themselves for investment and occupiers. As supply issues have continued to be exacerbated over the past 2-years, almost all industrial precincts across the Shire now compete with each other at some level.

That said, the Bass Coast industrial market does not operate in a vacuum. Demand and supply dynamics across the Shire are invariably influenced by market activity in the surrounding areas of Baw Baw and South Gippsland, along with the nearby South-East Melbourne industrial market. Local businesses which are export-based or do not rely upon proximity to local markets have relocated to markets outside the Shire in recent years.

Competitor Precincts

Market investigations suggest the following external industrial precincts compete with Bass Coast in some capacity:

- Officer-Pakenham State Significant Industrial Precinct (Cardinia Shire)
- Narre Warren and Hallam (forms part of the Southern State Significant Industrial Precinct within the City of Casey)
- Warragul (Shire of Baw Baw)
- Leongatha (South Gippsland Shire)

The **Officer-Pakenham SSIP** is considered to be the major competitor to industrial precincts in Bass Coast given it forms the easternmost edge of the Greater Melbourne metropolitan area. It is of significant scale, comprising a total of ~641ha of industrial land with only around 50% of this occupied to date (predominantly around Pakenham on either side of the Princes Freeway. An additional ~938ha of industrial land is earmarked for future rezoning and release.

Whilst take-up in Pakenham has historically been relatively slow compared to other industrial areas in the South East such as Dandenong, the market profile of the area is growing and attracting strong interest from large logistics operators, retail distribution centres and manufacturers. New subdivisions of smaller style industrial typologies are also attracting a broad mix of urban services, construction and trades and small-scale manufacturers.

The **Warragul** and **Leongatha** industrial markets are considered to be the secondary external competitors of the Study Area and are the primary industrial service centres of their respective LGAs. Warragul comprises circa ~80ha of industrial (IN1Z) land and primarily plays a local-serviced orientated role for Shire of Baw Baw (similar to that of the Eastern Area Industrial Estate). Leongatha comprises some ~98ha of industrial (IN1Z) land and is orientated towards the agricultural, construction and urban services sectors, anchored by the Saputo (formerly Murray Goulburn) dairy processing facility. There is very little remaining undeveloped land at either precinct – estimated to be circa 6.5ha at Warragul and ~26ha at Leongatha.

Future Impact on Market Activity

Overall, the localised role of Bass Coast's industrial precincts (and the broader economy) forms a competitive counterweight to other neighbouring industrial areas. Industrial occupiers in Bass Coast, for the most part, require a 'Bass Coast address' to effectively service their customers. This is true for businesses with either local or retail (public) customers.

Competitor precincts outside Bass Coast will however affect the capacity of the Shire to retain and attract new business and industry. Firstly, more affordable precincts with significant land supply have the capacity to attract Shire businesses which play a more export-orientated role (in terms of either products or services). Operators which do not require a 'Bass Coast address' are able to consider alternate locations where accommodation is more affordable, or a greater range of accommodation options is available. A key example of this was the relocation of modular building company TwoTwo Design who relocated from the Shire to Pakenham to expand their business.

Secondly, the significant volume of remaining industrial land (either zoned or in planning) in the Officer-Pakenham SSIP will limit the attractiveness of Bass Coast to businesses looking to relocate from Greater Melbourne. Good access to the metropolitan freeway network and ample supply of industrial land in Officer-Pakenham will limit the ability of Bass Coast to play a demand 'overflow' role without a more direct business attraction strategy.

5.4 Implications and Future Outlook

This Chapter examined market activity in Bass Coast to understand the market factors affecting the Shire's desirability as an industrial market. Several important implications flow from the findings of this Chapter:

- The Shire's industrial precincts have historically played a locally orientated role serving the Bass Coast LGA and parts of the broader Gippsland region. This dynamic remains largely unchanged.
- Industrial precincts in the Shire accommodate a broad mix of occupiers, many of whom could operate in other employment zones.
- Aligning with the broader Melbourne industrial market, strong market conditions have been observed in Bass Coast's industrial precincts over the past 12-24 months. Demand is being primarily driven by industries that respond to population growth, including construction and trades, urban services and 'lifestyle' uses.
- Demand is being primarily for small to medium-sized premises, ranging from 200sqm to 1,000sqm.
- Supply constraints are significantly impacting on the ability of local businesses to expand in response to a rapidly growing population. This lack of supply is also limiting the ability of Bass Coast to attract new businesses to the area.
- Tightly held industrial precincts, a lack of new land supply and strong demand conditions have resulted in rises in property values and rents. Small businesses are particularly sensitive to accommodation costs.

Overall, the outlook for Bass Coast's industrial precincts is positive. Ongoing population growth, a strengthening visitor economy and regional growth in emerging industries collectively present opportunities for business.

The next Chapter considers the challenges and opportunities for growth in Bass Coast's industrial market in more detail.

6. Challenges and Opportunities for Growth

This Chapter considers the challenges and opportunities facing Bass Coast's industrial precincts. The Chapter firstly summarises the feedback received from stakeholder engagement, including a summary of identified strengths, opportunities, weaknesses and threats. The Chapter then considers the likelihood and level of impact that previously identified economic and market trends could have on the Bass Coast industrial market. Lastly, the Chapter considers the need for future planning in the Study Area to align with broader economic development initiatives.

6.1 Stakeholder Feedback

To understand the issues facing local industry and businesses in Bass Coast's industrial precincts, engagement with local businesses, real estate agents and business associations was carried out.

Issues focused on during the engagement included the reasons for location selection, strengths and opportunities of individual industrial precincts and the broader Bass Coast region along with inherent weaknesses and future threats.

A summary of the identified strengths and opportunities and weaknesses and threats is provided in turn.

6.1.1 Strengths and Opportunities

Feedback consistently identified factors that underpin the desirability of Bass Coast's industrial precincts include:

- Proximity to primary customer base (both business and retail customers).
- Proximity to labour, with most respondents noting that their workers typically reside within a 10-minute to 20-minute drive from their workplace.
- Historically affordable cost of accommodation (either cost of purchase or rental cost), though this has begun to shift in the past 12-18 months.
- Strong growth in the residential construction sector spurring demand for a mix of services during the construction phase and subsequently population-driven services.
- Limited restrictions on the hours of operation.

In the Inverloch Road (Wonthaggi) precinct, several businesses noted the benefits of buffers between the industrial precinct and other neighbouring uses, along with its direct frontage to Bass Highway. The buffers provide functional land use separation from sensitive uses such as residential.

Good exposure and access to Bass Highway was highlighted as a key strength of the White Road (Wonthaggi), Grantville and Inverloch precincts.

Respondents identified a broad mix of future opportunities for the Shire from which local industrial occupiers could capitalise on. These included:

- Significant volumes of available land for further industrial releases, particularly along Bass Highway.
- Strong growth in the recycling and renewable energy sector which if supported and drawn to the Shire, would have significant flow-on economic impacts for industrial occupiers.
- Potential opportunity for Council to pursue the development of a waste treatment facility with an industrial furnace which could process the waste needs of the broader Gippsland region.
- Significant population growth over the coming decade and the resulting flow-on impacts to support the residential construction sector.
- Leveraging further synergies with the Victorian Desalination Plant.
- The lifestyle offering of the Bass Coast to attract businesses into the Shire.

6.1.2 Weaknesses and Threats

Negative factors commented upon by respondents were a mix of Shire-wide and precinct-specific issues. Shire-wide weaknesses identified by respondents included:

- Lack of remaining development opportunities in existing industrial precincts, limiting the potential for existing businesses to expand and the ability to attract new businesses.
- A dearth of existing established industrial property available for either sale or lease.
- A lack of any industrial precinct of significant scale, limiting the ability of the Shire to attract major industrial users.
- Long and costly planning approval processes.

In some precincts, including Inverloch Road in Wonthaggi (north of Bass Highway), Korumburra Road and Cowes, proximity to surrounding residential uses was frequently cited as causing (or likely to cause in the future) land use conflicts. 'Residential creep' was cited as a long-term issue for the viability of these precinct by most respondents.

Other precinct-specific weaknesses identified include:

- Carneys Road (Wonthaggi) was identified as being too narrow for heavy vehicles and the cause of several accidents.
- The intersection of Carneys Road and Bass Highway needs improvement from an accessibility and safety perspective.
- Carparking in Cowes is becoming increasingly problematic, with street parking artificially narrowing local streets.
- Coghlan Road (Cowes) is primarily accessed via Settlement Road which includes multiple roundabouts not conducive to heavy vehicles. Coghlan Road itself is too narrow and has no shoulder.
- Local roads in the Korumburra Road precinct (Wonthaggi) cannot accommodate vehicles carrying over 10-tonnes and the street network is particularly narrow. On-street parking further narrows the streets, causing issues for businesses with frequent deliveries or freight needs.
- Local school bus stop on Wonthaggi Road (Inverloch) results in school students often standing in the driveways of industrial properties on the opposite side of the road and is cited as a potential safety hazard.

A series of threats were also identified which have the potential to severely impact the viability of the local industrial market. Almost all of these were attributed to a lack of available supply, with supply issues likely persist in short to medium-term based on development approval and construction timeframes. The key risks identified included:

- 'Missed opportunity' to build upon the regional population shift and attract larger industries/operators to the Shire.
- Inability for existing businesses to expand, increasing the risk that some may choose to relocate outside the Shire.
- Further growth in land and property values and rents, worsening affordability issues for small businesses.
- Pressure on other land use zones to allow more forms of industrial uses, particularly in the FZ and MUZ.
- Further encroachment of 'non-industrial' uses, undermining the sustainability of the industrial precincts.
- Continued pressure on smaller industrial precincts with a residential interface and narrow local road network as the surrounding population continues to grow.

6.2 Trends Matrix

Understanding the likelihood and magnitude of impact that different economic and market trends may have on Bass Coast is a critical consideration before anticipating the quantum and type of supply needed to satisfy future demand.

Chapter 4 and 5 examined the industry, economic and property market trends influencing the supply and demand of industrial property at a national, regional and local level. Given the unique economic structure of the Bass Coast economy, it is unlikely that all these influences will play out in the Shire. Equally, their level of impact in Bass Coast may differ compared to other areas.

A detailed assessment of the relevant trends likely to influence the Bass Coast economy and its local industrial market is carried out in **Table 6.1**.

Table 6.1: Trends Assessment Matrix, Bass Coast

Trend	Assessment			Implications for Industrial Land in Bass Coast
	Likelihood	Impact	Total Score	
Demographic				
Above-forecast population growth	5	4	9	The shift in regional migration patterns from Australia's eastern capital cities towards neighbouring regional areas is expected to drive above-forecast population growth in Bass Coast. This has direct demand implications for population-serving industries which locate in industrial precincts.
Future rises in education levels	5	3	8	The upward trajectory in local education levels across the Shire is anticipated to continue, providing a larger pool of skilled labour to source from. This will be important as local industry evolves and becomes more reliant on new technologies and work practices.
Continued shift towards health consciousness	5	4	9	The societal shift towards health consciousness is resulting in growing demand for sports and recreational facilities, allied health services and health food products. This trend is expected to continue, driving demand for recreational gym/fitness facilities which often locate in industrial areas.
Economic/Industry				
Rebound in international/domestic tourism	5	3	8	The Bass Coast visitor economy is anticipated to rebound strongly upon the large-scale return on international visitors and domestic tourism recovers. Industrial areas in Bass Coast play an important supporting role for local tourism and hospitality businesses, with this role expected to grow commensurate with the local visitor economy.
Rising global demand for agricultural products	4	3	7	Significant population growth in overseas markets is set to drive demand for agricultural land and products over the coming decades. Whilst the agriculture sector is an important component of the Bass Coast economy and will benefit from these drivers, other areas in the Gippsland Region will play a greater role in accommodating this demand.
Major shift to renewable energy generation	3	3	6	The global and national shift from fossil fuel energy production towards renewable, green energy sources will accelerate dramatically over the coming decades. Multiple renewable energy projects are proposed across Bass Coast. If completed, the sector could drive demand for services and products from local industrial businesses.
Re-shoring of manufacturing processes	1	5	6	Whilst re-shoring has yet to have a major impact on the Australian manufacturing sector, a significant increase in re-shoring is anticipated in the medium term. The capacity of Bass Coast to attract these domestic manufacturers is currently limited given distance from Greater Melbourne and lack of available industrial land.
Further growth in online retail	5	3	8	Online retail penetration rates are anticipated to grow markedly over the coming decade. Bass Coast is unlikely to draw demand from major logistics operators for large distribution centres, with these typically located in metropolitan locations proximate multiple arterial highways. However, strong demand is expected from smaller distribution hubs and parcel collection points as these become increasingly important in e-commerce supply chains.
Growth in food and beverage manufacturing	5	4	9	Demand for locally produced and/or niche food and beverage products is anticipated to grow in line with rises in education and income levels. Artisanal operators in this sector are also important components of local visitor economies. Strong growth is anticipated in this sector across Bass Coast which will drive demand for industrial land and/or premises.
Further use of food delivery services	2	2	4	Food delivery services and 'dark kitchens' are commonly observed in highly populated urban areas given the high throughput needed for economic viability. Demand for these uses will likely be steady across Bass Coast and rise commensurate with population growth, though 'dark kitchens are unlikely to be observed in the Shire until a critical mass of residents is reached.

Trend	Assessment		Implications for Industrial Land in Bass Coast	
	Likelihood	Impact		Total Score
Industry/Market				
Adoption of cyber systems in industrial buildings	2	4	6	Integration of cyber systems in industrial buildings has grown in recent years, though the cost of these technologies has limited take-up to large institutional owners or major companies. It is unlikely that these trends will be observed to a great extent in the Shire as most industrial occupiers are local SMEs.
Importance of accessibility	3	4	7	The need for industrial precincts to be highly accessible will be critical as urban logistics continues to grow. Precincts with poor street networks and/or connectivity with arterial roads will struggle to remain viable over the coming decades. This could impact several smaller precincts across the Shire.
Adoption of sustainability design standards	3	1	4	The adoption of sustainable design practices in industrial building design remains relatively immature compared to other property sectors. This is largely attributed to high upfront costs, with industrial values and rents insufficient to mitigate these additional project costs. As the cost of technology continues to fall, the adoption of more environmentally friendly design practices by smaller builder-developers and investors will become financially viable. It will be important that any requirement for sustainability measures to implemented in new industrial buildings across the Shire is cognisant on their likely cost and impact to development feasibility.
Further shift in capital investment towards industrial assets	4	5	9	The marked shift in investment and development capital to industrial assets over the past 3-5 years is unlikely to slow in the short to medium-term. In supply-constrained markets such as Bass Coast, significant investment interest is anticipated to be observed and will form a key component of future demand for industrial land.
Capital value and rental growth	4	5	9	A lack of new supply (both established property and land) is anticipated to persist across Bass Coast in the short-term. Given existing levels of demand, this will drive further growth in property values and rents. There is potential that further growth could 'price out' smaller local businesses, impacting demand in the medium-term.
Demand for high-amenity industrial buildings	1	2	3	A growing trend for high-amenity industrial buildings is well-observed across parts of Greater Melbourne and Sydney. These developments are typically to attract national 'blue chip' operators and often incorporate a large component of office floorspace. This trend is unlikely to be observed in Bass Coast given the differing demand profile and lower capacity for rents to offset the higher construction costs associated with these developments.
Densification of industrial typologies and vertical warehousing	1	4	5	More intense formats of industrial building typologies, including vertical warehouses, are emerging across parts of Greater Melbourne and Sydney where there is a shortage of stock and capital values/rents are at a level sufficient to offset increased construction costs. Whilst Bass Coast does face a supply issue, the potential values/rents achievable in the Bass Coast market would be insufficient to make these formats a commercially viable proposition.

Source: Atlas Economics

As shown in **Table 6.1**, the expected impacts of different demographic, economic and industry/market trends on the Bass Coast industrial market vary. Population growth and other demographic trends are anticipated to have the greatest level of impact on future demand for industrial land across the Shire, driving demand for service industries who commonly locate in industrial precincts.

This trend-by-trend analysis will inform the development of different growth scenarios and the likely quantum of industrial land needed to support future demand across the Shire (Part B).

Alignment with Economic Development Framework

An Economic Development Framework (the Framework) is currently being prepared by Council to guide future economic development initiatives. The Framework will build upon the existing EDS to facilitate sustainable economic development.

It is understood that many of key sectors identified in the EDS (e.g. tourism, agriculture, waste and recycling, etc) will remain a focus of the Framework. Food and beverage manufacturing is anticipated to be a key focus for the Shire moving forward

The role of investment attraction as part of the Framework is yet to be fully explored. As the Framework is further developed, certain industries and sectors may be 'targeted' for the purposes of attracting their relocation to the Shire. It will be important that the BILUS is cognisant of any investment attraction strategies outlined in the Framework to ensure that future industrial land release is sufficient to meet the needs of these industries.

Site and location requirements differ by industry, sub-industry and business. Understanding land area, access, labour and infrastructure requirements of targeted industries/businesses would be critical to the success of any investment attraction strategy.

6.3 Implications for Study Area

This Chapter considered the mix of challenges and opportunities for growth of the Bass Coast industrial market, along with the trends likely to influence future demand over the coming decades. Key findings included:

- Almost all existing industrial precincts are functioning well and ideally located for most businesses given proximity to their customer and employee bases.
- The major weaknesses and threats identified are driven by a lack of supply, with many existing businesses unable to expand and new businesses unable to relocate to the Shire.
- Whilst population growth and demographic trends are anticipated to have the greatest influence on future industrial demand, it is also a double-edged sword as further introduction of population-serving, 'non-industrial uses' has the potential to undermine the sustainability of some precincts. This is more so the case for precincts which already have certain weaknesses that impinge on the desirability as industrial areas (e.g. residential interface, narrow streets).

The findings from Part A provide a detailed overview of the economic and market profile of the Bass Coast industrial market. Trends likely to influence future demand for industrial land over the coming decades have been identified and considered in detail.

The next Part of this Study (Part B) considers historical consumption and supply of industrial land across the Shire and projects the likely quantum and type of industrial land needed to support population and economic growth over the coming decades.



PART B: SUPPLY AND DEMAND ANALYSIS

7. Consumption and Supply Analysis

This Chapter considers historical consumption of industrial land across Bass Coast and the broader region. The existing quantum of zoned industrial land, including undeveloped land, is also examined. Lastly, areas earmarked for future industrial supply across the Shire are examined.

7.1 Regional Consumption

Historical consumption rates of industrial land across the Greater Melbourne metropolitan area are tracked by DELWP and published annually in the *Industrial Urban Development Program* (UDP).

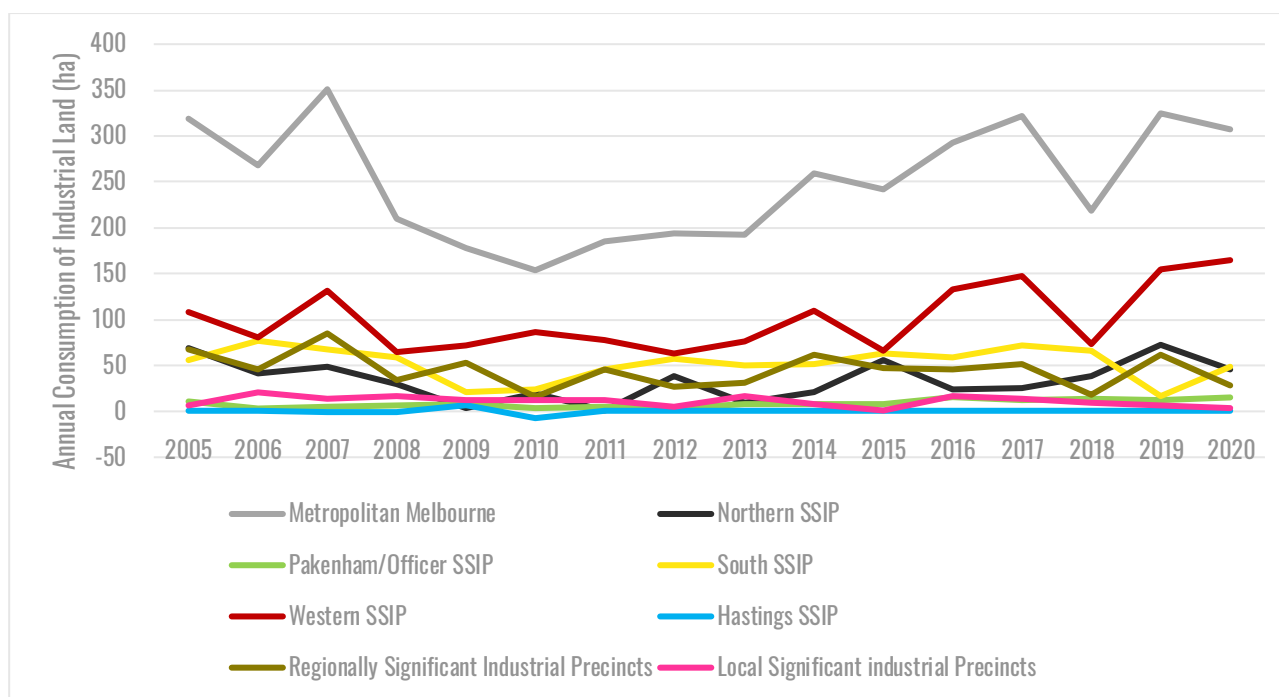
Over the 2015-2020 period, average annual take-up of industrial land across Greater Melbourne has been circa 293ha. Most recently, take-up of approximately 307ha of industrial land was recorded in 2020 across Greater Melbourne. This is some 5% higher than the 2015-2020 average and reflective of the strong market conditions in the industrial sector.

Consumption of industrial land across Greater Melbourne is primarily driven by activity in the SSIPs. Historically, the Western SSIP has accounted for the majority of take-up over the 2006-2020 period, contributing to 41% of total consumption over this period. The popularity of the Western SSIP has reinforced this trend over the 2016-2020 period, with significant take-up resulting in almost half of all consumption across Greater Melbourne occurring in the Western SSIP.

The Pakenham-Officer SSIP in Melbourne's South-East has historically played a smaller role in the Greater Melbourne industrial market, accounting for just 3% (69ha) of total consumption over the 2016-2020 period. However, as supply levels in the more popular Southern SSIP become exhausted, Pakenham-Officer is anticipated to play a much greater role in the coming decades.

Figure 7.1 illustrates historical consumption of industrial land across Greater Melbourne over 2005-2020.

Figure 7.1: Historical Consumption of Industrial Land (2005-2020), Greater Melbourne

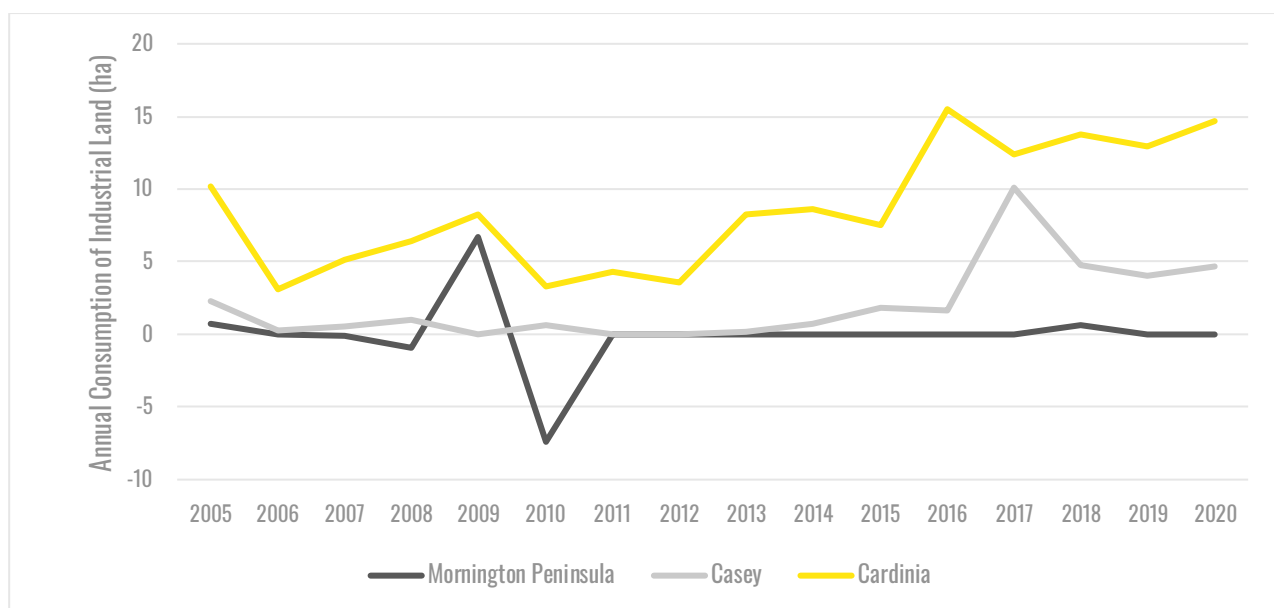


Source: DELWP (2020)

When viewed at a local government level, the uptick in consumption in the Pakenham industrial precinct can be more easily observed. Take-up has been progressively growing in the Cardinia Shire LGA since 2016, with average annual consumption of ~14ha. Other municipalities in the South-East (e.g. Casey) have also seen an uptick in consumption over this period, though take-up in the Mornington Shire has been nominal for several years.

Figure 7.2 illustrates historical consumption of industrial land in the Casey, Cardinia and Mornington Peninsula LGAs.

Figure 7.2: Historical Consumption of Industrial Land (2005-2020), Casey, Cardinia and Mornington Peninsula



Source: DELWP (2020)

7.2 Local Consumption

This section considers historical and recent take-up of industrial land across the Bass Coast Shire.

7.2.1 Historical Land Consumption

The most recent audit of industrial land consumption was carried out in 2012 as part of the Victorian Government's UDP.

It was found that Bass Coast recorded an average annual consumption rate of 0.4ha of industrial land over the 2006-2012 period. Consumption patterns were found to slightly differ across the Shire's two main regions:

- Average annual consumption of 0.3ha in Phillip Island (e.g. Cowes, Newhaven)
- Average annual consumption of 0.1ha in Wonthaggi/Inverloch (e.g. Wonthaggi, Inverloch, Grantville)

Take-up was primarily limited to lots of 0.5ha or smaller, reflecting demand for 'local servicing needs' (Spatial Economics on behalf of DTPL, 2012).

To identify more recent consumption patterns (2012-2021), a detailed analysis of existing and historical aerial imagery, planning and subdivision permits and first-hand observations from site visits has been carried out.

Key findings from the analysis of historical consumption include:

- Over the 2012-2021 period, approximately 20.2ha has been developed (average 2ha per annum).
- Take-up has been much faster in the recent five years to 2021, with average annual consumption of 3.8ha. This contrasts with consumption over 2012-2016 (0.3ha per annum).
- A spike in consumption was recorded in 2020 following the completion of the Wonthaggi Secondary College in the Eastern Area Industrial Estate (some 16ha). If this was excluded from the consumption analysis:
 - The long-term annual consumption rate over 2012-2021 would decline to 0.4ha per annum.
 - Recent average annual consumption over 2016-2021 would be 0.5ha per annum.
- Most lots developed over 2012-2021 have been sub-3,000sqm, aligning with trends observed over 2006-2012.
- Cowes accounted for the majority of take-up over the 2016-2021 period, totalling around 1.8ha.

Table 7.1 shows the annual take-up of industrial land over 2012-2021 across the Bass Coast industrial precincts.

Table 7.1: Historical Consumption of Industrial Land (2012-2021), Bass Coast Shire

Precinct	Annual Consumption (ha)											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total	Avg. Annual
Cowes	-	0.28	-	-	0.28	-	0.69	0.49	0.23	0.11	2.08	0.21
Newhaven	-	-	-	-	-	0.11	-	-	0.22	-	0.33	0.03
Grantville	-	-	-	-	-	-	-	-	-	-	-	-
White Rd/McKenzie St	-	0.55	-	-	-	-	-	-	-	-	0.55	0.05
Korumburra Rd	-	-	0.09	-	-	-	-	0.10	-	-	0.19	0.02
Eastern Area Industrial Estate	-	-	-	-	-	0.23	-	-	16.43*	-	16.66	1.67
Inverloch	-	-	-	0.15	-	-	0.22	-	-	-	0.37	0.04
Total	-	0.83	0.99	0.15	0.28	0.34	0.91	0.59	16.88	0.11	20.18	2.02

*Development of the Wonthaggi Secondary College which falls within the IN1Z

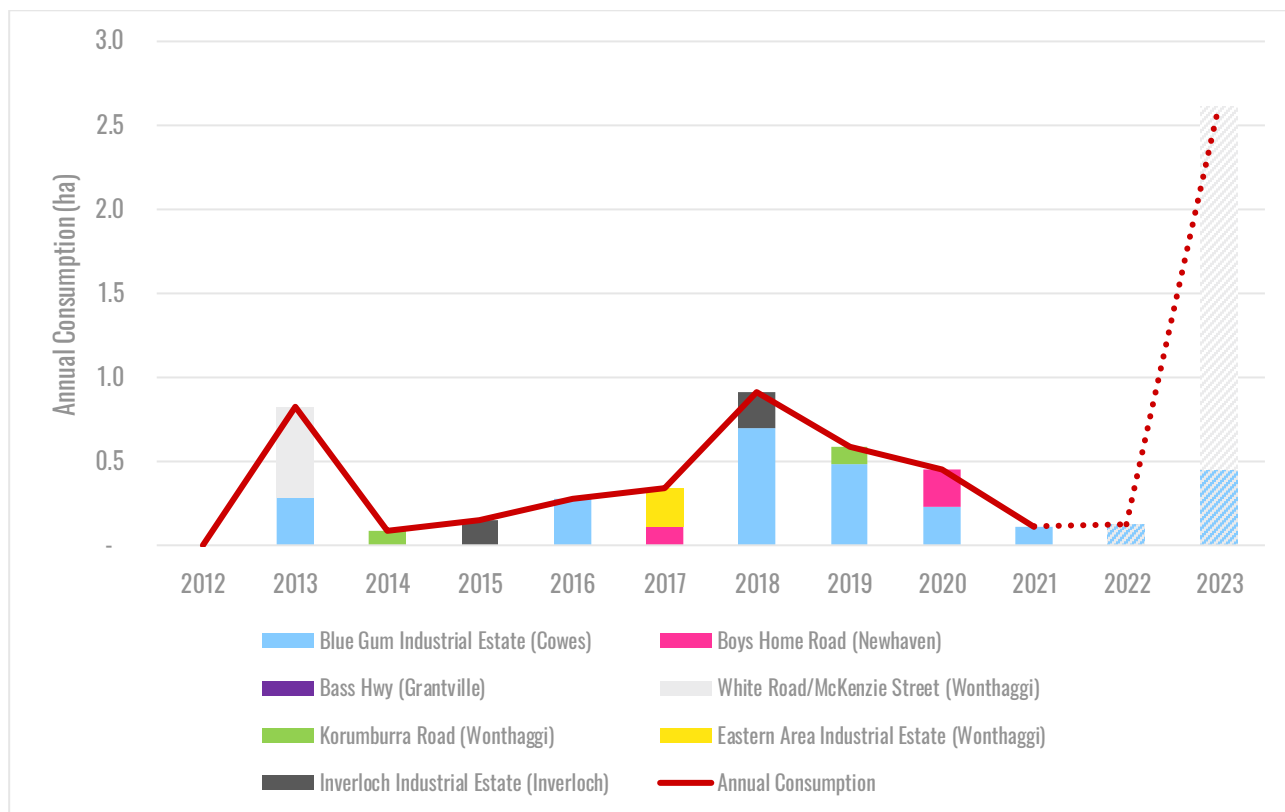
Source: Atlas Economics

Based on existing planning permits and construction activity, it is estimated that an additional ~3ha of industrial land will be developed in Cowes and the White Road/McKenzie Street precincts over the 2022-2023 period. The majority of this will comprise the proposed Bunnings Warehouse hardware store at White Road/McKenzie Street (~2.2ha).

No other planning or subdivision permits for industrial development are currently being proposed elsewhere in the Study Area. Consumption of ~3ha over the 2022-2023 period would be *greater* than total consumption recorded over 2016-2021.

Figure 7.3 depicts the historical and forecast consumption of industrial land across Bass Coast.

Figure 7.3: Historical Consumption of Industrial Land (Ex. Wonthaggi Secondary College), Bass Coast Shire



Source: Atlas Economics

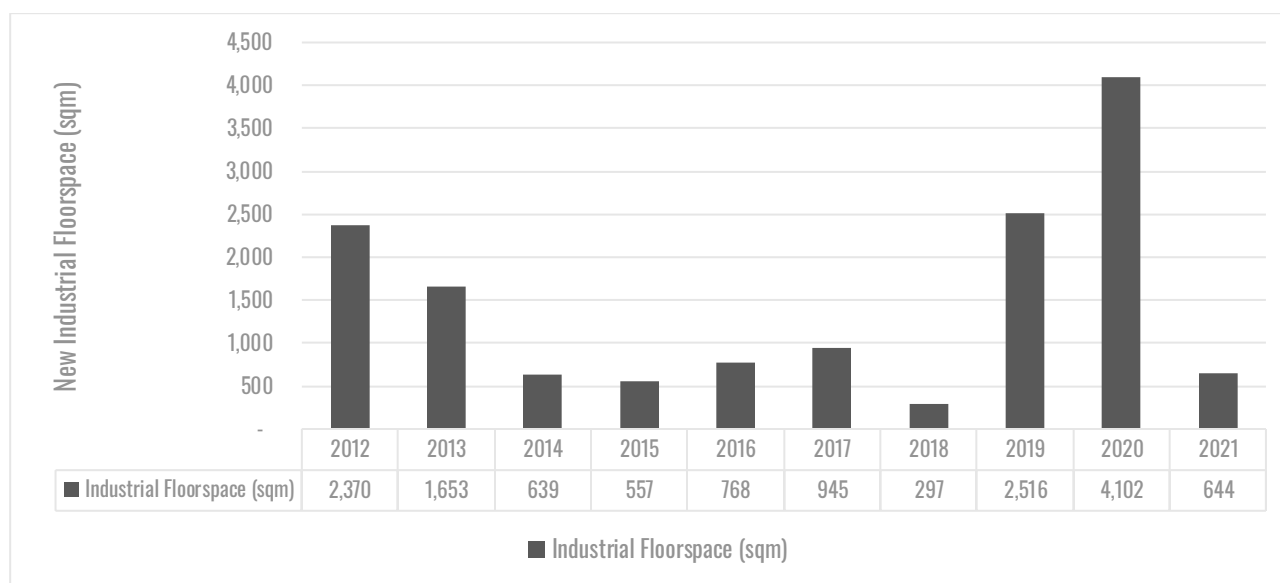
7.2.2 Historical Building Activity

A review of industrial building permit data has been carried out to quantify the amount industrial floorspace delivered over the 2012-2021 period.

Over the 2012-2021 period, building approvals for circa 14,500sqm of industrial floorspace were recorded at an average annual rate of ~1,450sqm (VBA, 2021). Industrial construction activity peaked over the 2019-2020 period, with approvals for some ~6,600sqm of industrial floorspace. This coincides with the completion of several developments during this period, notably in Cowes, Newhaven and the Korumburra Road precinct.

Figure 7.4 illustrates new industrial floorspace supply added over the 2012-2021 period.

Figure 7.4: New Industrial Floorspace (2012-2021), Bass Coast Shire



Source: VBA (2021)

7.3 Existing and Remaining Supply

7.3.1 Existing Supply

There is approximately 90ha of zoned industrial land across Bass Coast, comprising 72ha of land zoned IN1Z and 18ha of land zoned IN3Z. Of this 90ha of zoned industrial land, some 65ha is currently occupied. There is an estimated 108,530sqm of industrial floorspace in the Shire and some 337 industrial lots.

Table 7.2 details the existing supply of industrial land across the Bass Coast Shire as at Q4 2021.

Table 7.2: Existing Supply of Industrial Land, Bass Coast Shire

Precinct	Zone	Zoned Land Area (ha)	No. Lots	Occupied Land Area (ha)	Vacant Land Area (ha)	Floor Area (sqm)	Avg. Plot Ratio*
Eastern Area Industrial Estate	IN1Z	45.9	78	34.6	11.3	27,387	0.08
White Rd/McKenzie St	IN1Z	11.6	22	7.6	4.0	15,035	0.20
Korumburra Rd	IN1Z	3.7	29	3.7	-	12,667	0.34
Inverloch	IN3Z	7.2	50	6.8	0.4	16,292	0.24
Cowes	IN3Z	11.2	120	9.0	2.2	29,778	0.33
Newhaven	IN1Z	2.9	22	2.9	-	5,103	0.18
Grantville	IN1Z	7.9	12	0.3	7.6	2,268	0.76
Total		90.4	337	64.8	25.5	108,530	0.17

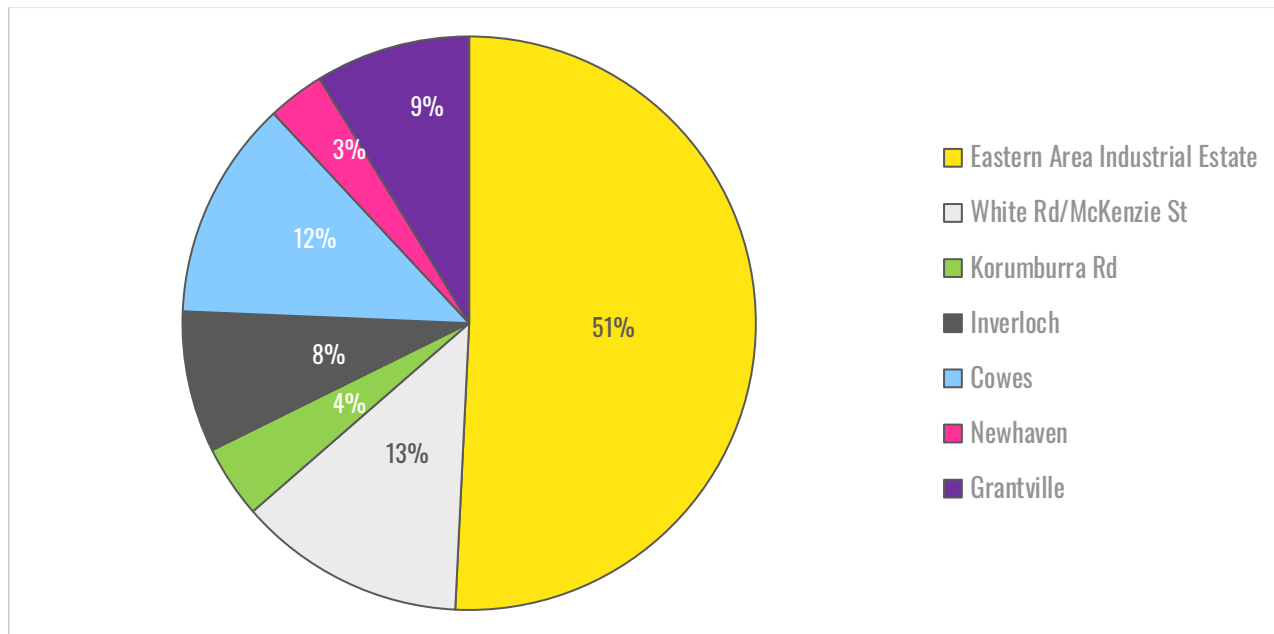
Source: Atlas Economics/Bass Coast Shire Council

Existing Supply by Precinct

The majority of zoned industrial land is located in the Eastern Area Industrial Estate, measuring some 46ha and accounting around 51% of total land area. The White Road/McKenzie Street, Cowes and Inverloch precincts are the only other sizeable precincts across the Shire (ranging from 7ha to 12ha) and collectively account for 33% of total land area.

Figure 7.5 reflects the supply of zoned industrial land across Bass Coast by precinct.

Figure 7.5: Zoned Industrial Area by Precinct, Bass Coast Shire

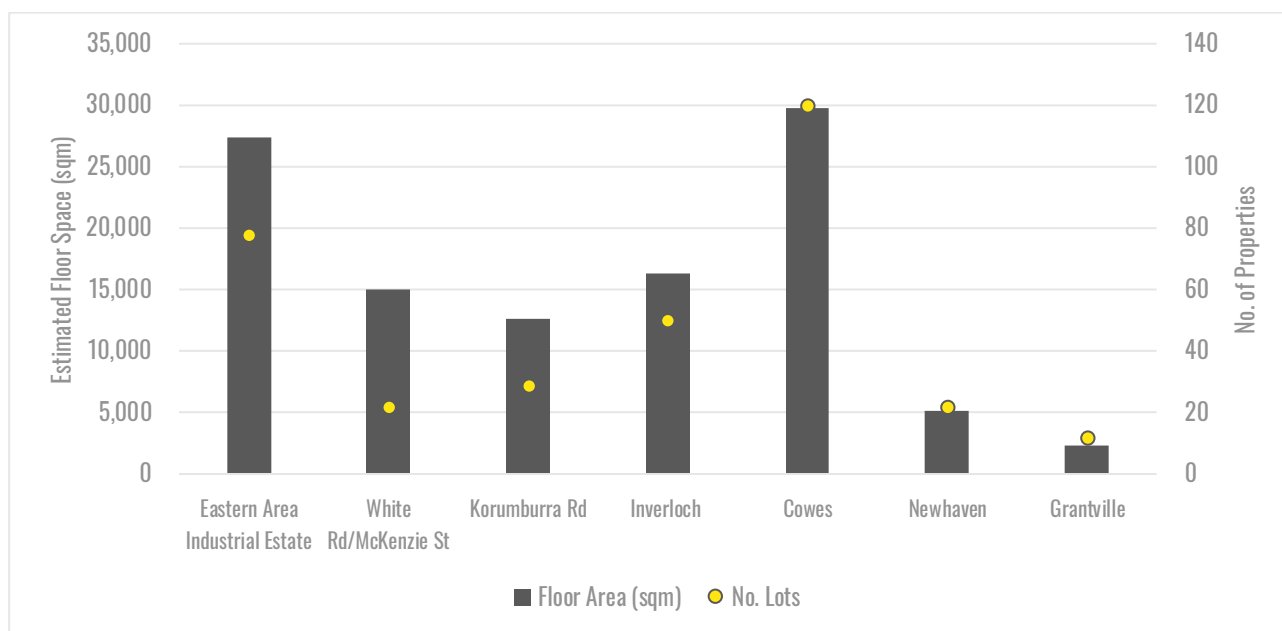


Source: Atlas Economics/Bass Coast Shire Council

Whilst Wonthaggi's Eastern Area Industrial Estate accounts for the majority of industrial *land* across Bass Coast, Cowes comprises a larger amount of industrial floorspace and greater number of individual properties. Totalling almost 30,000sqm of industrial floorspace across 120 individual properties, Cowes accounts for 36% of the Shire's total industrial floorspace. This is higher than both the Eastern Area Industrial Estate (23%) and Inverloch (15%). **This distinction between land and floor area is important given industrial demand across the Shire is largely driven by smaller service-based businesses.**

Figure 7.6 illustrates the quantum of industrial floorspace and properties by precinct.

Figure 7.6: Industrial Floorspace and Properties by Precinct, Bass Coast Shire



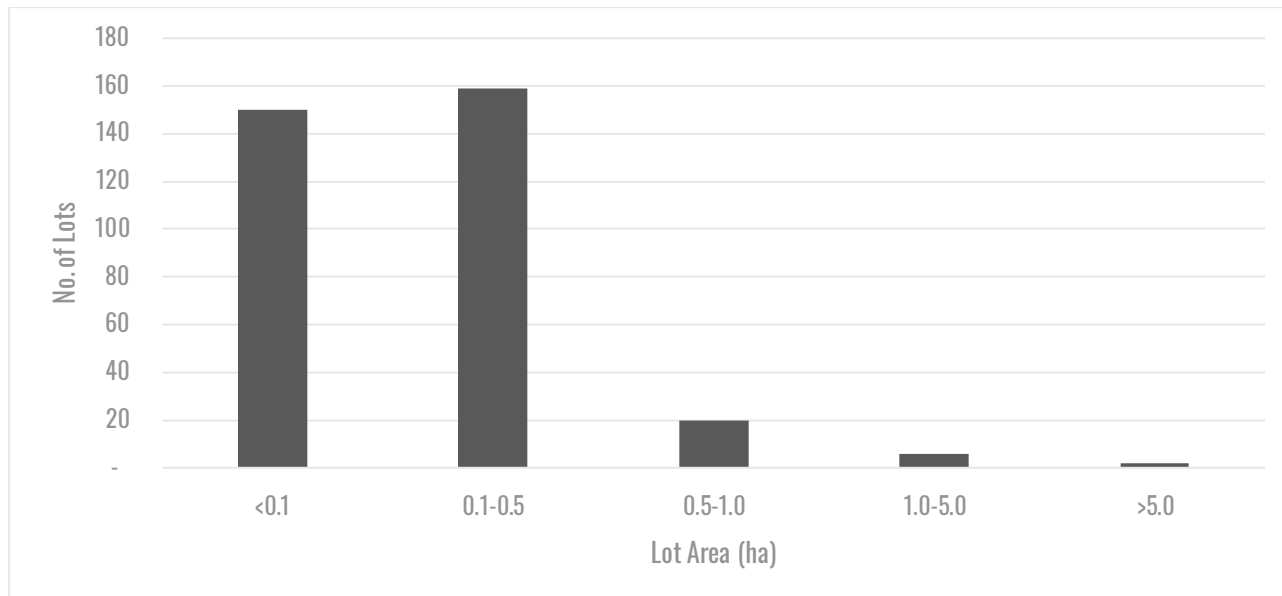
Source: Atlas Economics/Bass Coast Shire Council

Lot Sizes

The overwhelming majority of zoned industrial lots are less than 0.5ha in site area. Approximately 47% of lots fall between 0.1ha and 0.5ha, with a further 45% of lots being smaller than 0.1ha. There is a total of 28 lots which comprise over 0.5ha in site area, with only 8 of these lots over 1ha in size.

Figure 7.7 depicts the mix of industrial lot sizes (by ha).

Figure 7.7: Industrial Lots by Size (ha), Bass Coast Shire



Source: Atlas Economics/Bass Coast Shire Council

7.3.2 Remaining Supply

There are approximately 43 undeveloped zoned industrial lots in the industrial precincts, totalling ~26ha of industrial land. Most of these lots are in the Eastern Area Industrial Estate and Cowes, accounting for around 75% of the Shire's vacant land stocks. The majority of these lots are between 0.1ha and 0.5ha.

Whilst currently vacant, many undeveloped industrial lots are currently subject to planning permits for development (thereby not 'true' vacant blocks). When excluding these sites from the count of vacant stock, there is approximately 8.4ha of remaining undeveloped industrial land.

Table 7.3 analyses the remaining supply of zoned industrial land by precinct.

Table 7.3: Remaining Supply of Zoned Industrial Land, Bass Coast Shire

Precinct	Zone	No. Vacant Lots	Total Vacant Land (ha)	Vacant Land with No Permit (ha)	Total Vacant Undeveloped Lot Sizes (ha)				
					<0.1	0.1-0.5	0.5-1.0	1.0-5.0	>5.0
Eastern Area Industrial Estate	IN1Z	15	11.3	3.9	3	8	2	-	1
White Rd/McKenzie St	IN1Z	3	4.0	-	-	1	-	2	-
Korumburra Rd	IN1Z	-	-	-	Not applicable				
Inverloch	IN3Z	4	0.4	0.3	-	4	-	-	-
Cowes	IN3Z	15	2.2	0.6	2	13	-	-	-
Newhaven	IN1Z	-	-	-	Not applicable				
Grantville	IN1Z	3	7.6	3.6	-	-	1	2	-
Total		43	25.5	8.4					

Source: Atlas Economics/Bass Coast Shire Council

Deliverability of Remaining Supply

A common misconception is that if land is zoned for urban uses it will be developed. In practice, this can be far from reality as the development potential of land is collectively influenced by environmental, market or economic constraints that can together impede development. There are a myriad of factors affecting the commercial viability of development and rarely is a single factor the only cause of poor development take-up outcomes.

A selection of some of the common factors influencing the deliverability of remaining industrial land supply is discussed.

- **Existing Land Value and Site Consolidation**

Development is primarily influenced by the principle of 'highest and best use'. To economically acquire land, a proposed use must translate into a higher value than the land's existing use.

In the Shire, it is no surprise that recent industrial development activity has been limited to instances where developers have been able to secure vacant sites. This has allowed developers to economically deliver new industrial buildings, avoiding higher acquisition costs associated with already improved sites.

Furthermore, it is an unfortunate reality that site consolidation is a high-risk and costly exercise. Consolidation of sites in multiple ownership can be cost-prohibitive unless there is notable financial upside.

- **Land Ownership**

Even if a 'higher and better use' can be secured through development of a site, landowner objectives are not always financial in nature and do not always align to enable development. Landowners may prefer to continue occupying their premises despite any financial upside that may result from divestment and/or development.

In greenfield areas where strategic planning is proposed/underway, heightened landowner expectations can also result in an unwillingness to consider divestment or result in unrealistic price expectations.

- **Construction and Infrastructure Costs**

Industrial pricing is typically lower than other employment uses (i.e. commercial, retail). Accordingly, even nominal increase in construction and lead-in infrastructure costs can impact the commercial viability of industrial development. This is observed in Wonthaggi, where the cost of infrastructure servicing has been cited by landowners as a key impediment to deliverability.

Consideration of whether the remaining vacant industrial land is likely to be developed is important as it will influence decisions whether more land release should be undertaken. **Table 7.4** considers some of the issues influencing the deliverability of remaining industrial land supply in Bass Coast.

Table 7.4: Issues Influencing Deliverability of Remaining Undeveloped Industrial Land

Precinct	Vacant Land - No Permit (ha)	Issues Influencing Deliverability
Eastern Area Industrial Estate	3.9	14 individual sites. Majority are located to the east of Carneys Road in the Wonthaggi North-East PSP Area, though were formally rezoned as INZ1 in 2011 (Amendment C116). Submissions from landowners on the Wonthaggi North-East PSP noted that the development costs for road, water and sewerage infrastructure have proven a major impediment to development. In consultation with South Gippsland Water (SGW), the VPA have concluded that these costs are to be borne by developers/landowners. Given the number of smaller, 'non-developer' landowners in the precinct, the cost burden of these works will remain a major impediment to development in the short-term.
Inverloch	0.3	Three sites ~1,100sqm each. All connected to existing services. One recently purchased with development expected in short-term. Remaining two sites appear to be used for storage purposes. No major constraints to development identified. It is anticipated development will occur in short to medium-term.
Cowes	0.6	Three sites ranging from ~1,000sqm to ~3,300sqm. All connected to services and not transacted for over 6 years. All sites are owned by local investors and developers. No major constraints to development have been identified. It is anticipated that development of these sites will occur in the short to medium-term.
Grantville	3.6	Two sites – 4 Grantville Drive which fronts Bass Highway and 32 Grantville Drive at rear of precinct zoned a mix of IN1Z and LRDZ. 4 Grantville Drive is connected to services and sold in late-2020. Development is anticipated in the short-term. Sale history and infrastructure servicing to 32 Grantville Drive is unknown.

Source: Atlas Economics

Overall, the prospects of remaining undeveloped land on being delivered is mixed. Take-up in Inverloch, Grantville, Cowes is expected in the short to medium-term, whereas the cost of infrastructure delivery in the Eastern Area Industrial Estate will likely result in delays in new supply being brought to market.

7.4 Future Supply

Two precincts have been identified by Council for future industrial supply – Wonthaggi and Grantville. In total, these two precincts measure a gross area of ~102ha of land.

The status of planning for both precincts is different. Planning for future industrial land in Wonthaggi is well-advanced and forms part of the Wonthaggi North East PSP. Limited planning for future industrial land in Grantville has occurred.

Wonthaggi

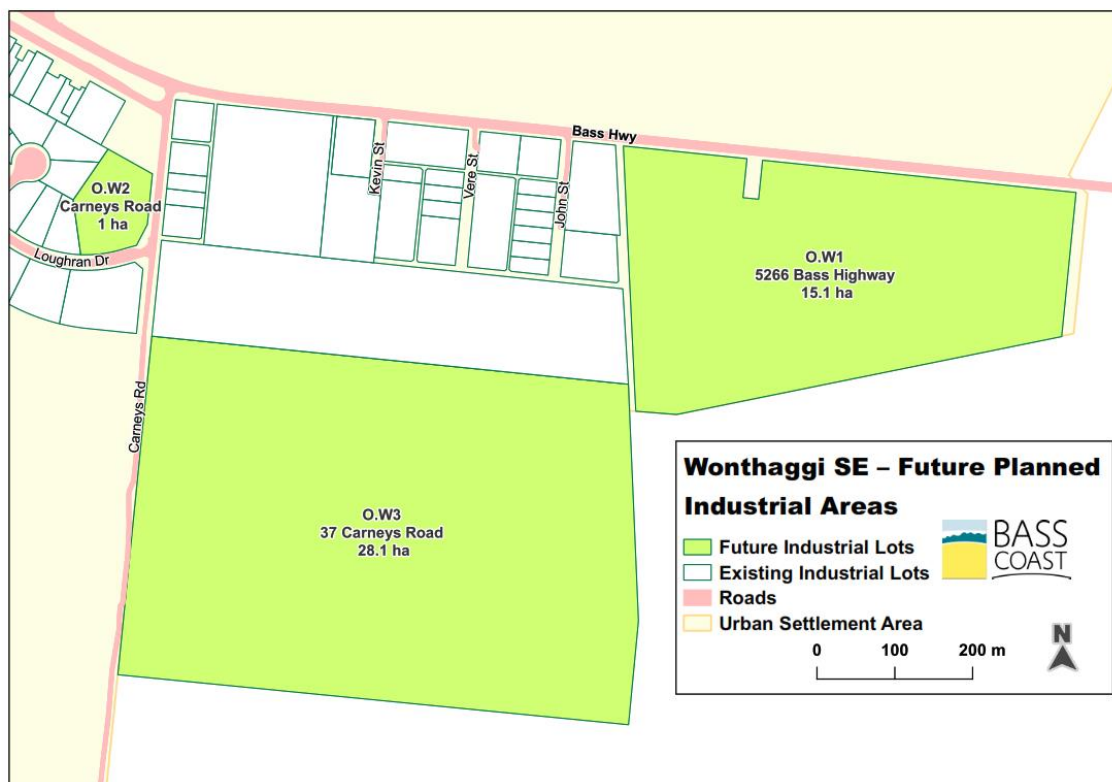
Future industrial land in Wonthaggi forms part of the Wonthaggi North East PSP. The future precinct includes two large landholdings (15ha and 28ha) currently zoned FZ located just south of Bass Highway and immediately adjacent the existing Eastern Area Industrial Estate. Both sites are proposed to be zoned IN3Z, are controlled by single landowners and are currently used for rural-residential purposes.

Submissions from both landowners were received on the Wonthaggi North-East PSP in 2021. The owner of 37 Carneys Road raised issues regarding the cost of infrastructure servicing connections (water and sewerage). These costs are to be borne by developers/ landowners and are not included in the Wonthaggi North East Development Contribution Plan in accordance with advice from SGW. The owner also noted they have no immediate redevelopment plans for their site.

The owner of 5266 Bass Highway is an established local investor and developer. Redevelopment prospects for this site are potentially better than that of 37 Carneys Road given its direct frontage to the Bass Highway.

Figure 7.8 depicts the location of Wonthaggi's Future Industrial Release Area.

Figure 7.8: Future Industrial Release Area, Wonthaggi



Source: Bass Coast Shire Council

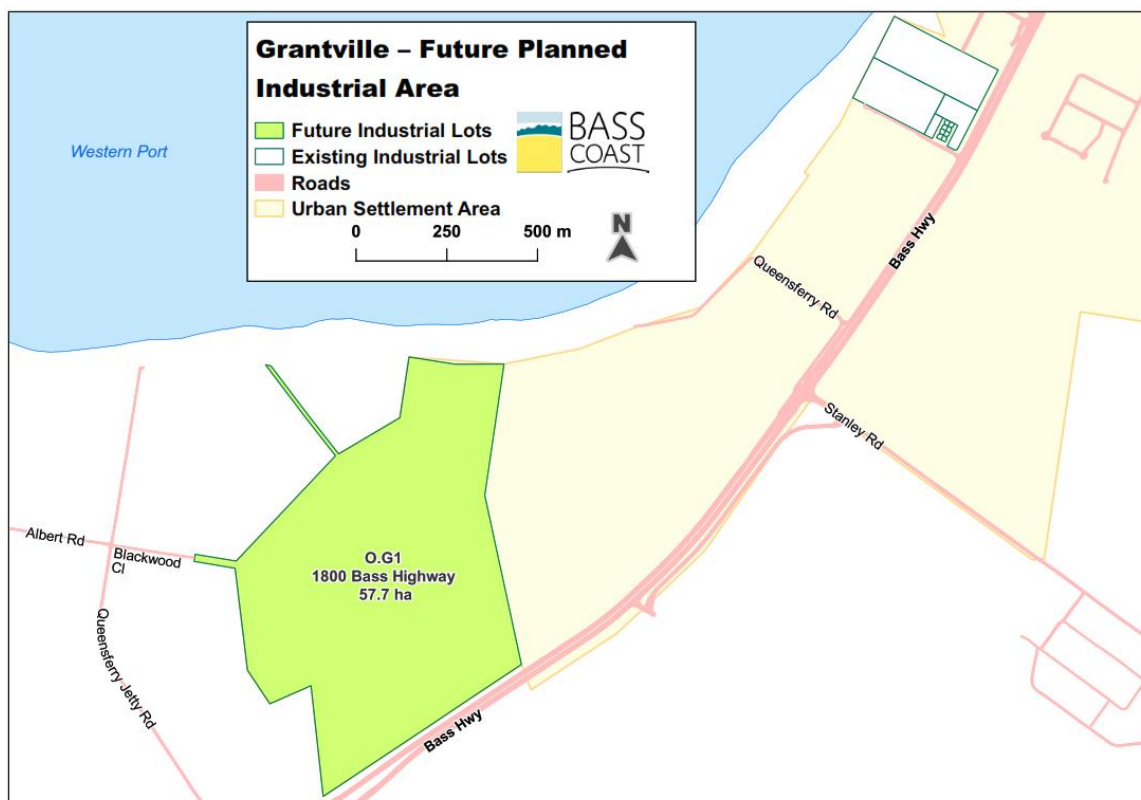
Grantville

The future Grantville industrial release area is located along Bass Highway just south of the existing Grantville industrial precinct. It comprises a large single landholding (circa 58ha) currently zoned FZ and used for rural purposes.

Whilst no detailed precinct planning for the site has been carried out, it is understood to have significant environmental constraints (proximity to wetlands, high biodiversity values) which could limit its ability for urban development.

Figure 7.9 depicts the location of the proposed industrial release area in Grantville.

Figure 7.9: Future Industrial Release Area, Grantville



Source: Bass Coast Shire Council

7.5 Key Findings and Implications

This Chapter examined historical consumption of industrial land at a regional and local level and identified the quantum of existing and planned industrial land across Bass Coast. Key findings and implications from this Chapter include:

- Some 20ha of industrial land has been developed across the Shire since 2012, averaging 2ha per annum.
- A spike in consumption was recorded in 2020 following the completion of the Wonthaggi Secondary College. If this was excluded, the long-term annual consumption rate over 2012-2021 would decline to 0.4ha per annum.
- Building approvals for circa 14,500sqm of industrial floorspace were recorded over the 2012-2021 period, reflecting an average annual rate of ~1,450sqm per annum.
- There is approximately 90ha of zoned industrial land and ~65ha is currently occupied.
- Approx. 26ha of industrial land is currently vacant however when excluding lots with existing planning permits for development, there will be only 8ha of remaining undeveloped industrial land. Owing to a myriad of issues, not all of this remaining stock is likely to be delivered in the short to medium term.
- Around 102ha of gross land area has been identified for future industrial uses. Around 43ha of this is expected to be rezoned in the short-term as part of the Wonthaggi North East PSP.

Whilst the level of existing and future industrial land supply would appear sufficient to meet the needs of the Bass Coast economy based on historical consumption rates, in reality not all of this supply will be delivered due to landowner objectives and circumstances. Furthermore, the future growth trajectory of the Bass Coast economy is likely to be different to that observed over the 2012-2021.

The next Chapter investigates the likely demand for industrial land in Bass Coast over the coming decades.

8. Growth Scenarios and Demand Projections

This Chapter examines the future growth of the Bass Coast population and economy over the coming decades and corresponding implications for the Bass Coast industrial market. Population and employment projections are firstly considered before a series of growth projections are developed which identify the quantum of industrial land that could be required across the Shire to meet anticipated demand.

8.1 Population Projections

The COVID-19-pandemic has resulted in a shift in internal migration patterns across much of Australia's east coast as residents from capital cities have relocated to regional areas. Older families and retiree couples who were intending on relocating to regional areas in many cases brought these plans forward, further generating an uptick in regional population growth.

These migration trends are yet to be reflected in the Victorian Government's population projection series, *Victoria in Future*. It is understood that DELWP are looking to revise these projections.

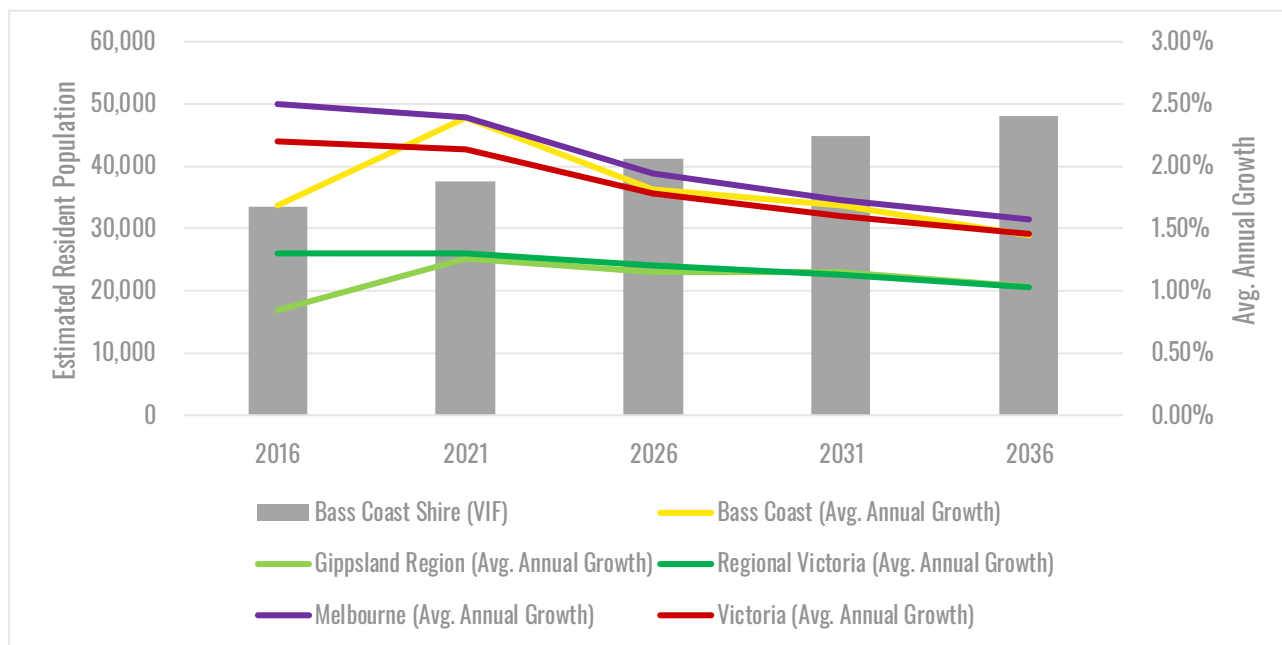
For the purpose of this report, the current *Victoria in Future* population projections are utilised.

Official population projections in Victoria are carried out by DELWP and are known as *Victoria in Future* (VIF). The VIF series projects population growth on a variety of assumptions, including birth and fertility rates, mortality rates, migration levels, household formation patterns, occupancy rates and anticipated residential development. The most recent series projections were released in 2019 (VIF2019). Projections for individual LGAs are based on a 2016-2036 projection period.

By 2036, the Bass Coast Shire is projected to reach a population of ~48,100 residents (DELWP, 2019). This would reflect growth of almost ~15,000 residents over the 2016-2036 period at an average annual growth rate of 1.8%. This rate of growth is only slightly lower than that expected in Greater Melbourne though well above that anticipated in the broader Gippsland Region or Regional Victoria.

Figure 8.1 depicts the anticipated population growth across Bass Coast over the 2016-2036 period.

Figure 8.1: Population Projections (2016-2036), Bass Coast Shire



Source: DELWP (2019)

By 2021 Bass Coast was projected to reach a population of just over 37,600 residents. The ABS has recently estimated that the Shire's population was ~37,400 residents in 2020. This suggests that actual population growth in Bass Coast over the 2016-2021 period has been much faster than that anticipated in the VIF2019 projections.

8.2 Employment Projections

Employment projections for Victoria are produced by the Commonwealth Government's National Skills Commission (NSC). Each year, the NSC produces employment projections by industry, occupation, skill level and region for the following five-year period. Projections are based at a State and Statistical Area 4 (SA4) geography level. The Gippsland Region is a defined SA4 geography and incorporates the Bass Coast Shire.

The most recent employment projections were released in 2020 however were limited to capital city and regional geographies. For contextual purposes, both the 2020 and earlier 2019 projections (Gippsland SA4) have been analysed.

Over the 2019-2024 period, the Gippsland SA4 was anticipated to record employment growth of over 7,500 jobs, largely driven by the health and education and population-serving sectors. Traditional industrial sectors were anticipated to grow by some ~450 jobs, with large declines in Agriculture, Forestry and Fishing. Construction was anticipated to rise strongly by almost 1,000 jobs, along with Electricity, Gas, Water and Waste Services (~600 jobs).

Industry trends from the more current 2020-2025 employment projections for Regional Victoria (Rest of Victoria) generally align with the 2019 projections for the Gippsland SA4. Further declines in Agriculture, Forestry and Fishing are anticipated, whilst population-serving sectors (particularly construction) and health and education will remain the primary drivers of employment growth in Regional Victoria.

Table 8.1 shows the NSC's two sets employment projections for the 2019-2024 and 2020-2025 periods.

Table 8.1: Employment Projections, Gippsland SA4 (2019-20204) and Rest of Victoria (2020-2025)

Industry/BIC	Gippsland SA4 Employment Growth (2019-2024)		Rest of Victoria Employment Growth (2020-2025)	
	No.	%	No.	%
ANZSIC				
Agriculture, Forestry & Fishing	-629	-4.7%	-2,656	-4.1%
Mining	31	2.0%	54	1.1%
Manufacturing	517	4.9%	2,447	3.8%
Electricity, Gas, Water & Waste Services	602	17.9%	215	2.1%
Construction	995	7.4%	6,053	8.1%
Wholesale Trade	62	2.1%	249	1.4%
Retail Trade	342	2.6%	2,448	3.2%
Accommodation & Food Services	839	9.3%	6,379	15.3%
Transport, Postal & Warehousing	-136	-3.2%	2,009	6.9%
Information Media & Telecommunications	38	2.6%	-759	-13.5%
Financial and Insurance Services	-63	-3.3%	-	0.0%
Rental, Hiring and Real Estate Services	25	2.0%	745	9.1%
Professional, Scientific & Technical	282	6.0%	4,652	13.1%
Administrative & Support Services	-254	-7.5%	2,360	11.5%
Public Administration & Safety	387	5.4%	2,195	5.0%
Education & Training	1,010	10.8%	4,945	7.9%
Health Care & Social Assistance	3,021	16.5%	14,596	12.7%
Arts & Recreation Services	166	7.8%	779	6.5%
Other Services	312	6.9%	-27	-0.1%
Total	7,546	6.0%	46,685	6.4%
BIC				
Industrial	446	19%	2,318	11.2%
Population Serving	2,653	34%	15,632	33.0%
Knowledge Intensive	415	5%	9,193	25.1%
Health and Education	4,031	27%	19,542	20.5%
Total	7,546	6.0%	46,685	6.4%

Source: NSC (2019, 2020)

8.3 Future Demand for Industrial Land

This section considers the likely demand for industrial demand across Bass Coast over the coming decades in a series of scenarios.

8.3.1 Approach and Methodology

Future demand for industrial demand in Bass Coast is expected to be driven by a mix of different industries and sectors. Some of these sectors will directly respond to population growth (e.g., urban services) whereas others will be influenced by broader economic and industry factors at global or national scale. Many industries service a mix of local residents and businesses, so are influenced by changes in the local population and broader economic growth. Accordingly, consideration of both projected population and employment growth is required to forecast the likely future demand for industrial land.

Models to predict future consumption of industrial land can be population or employment-based, where future residents/jobs are converted into an industrial land requirement based on a series of assumptions. Demand models can also focus on historical consumption patterns to derive future demand.

Projection Scenarios

The demographic and economic impacts of COVID-19 are still being understood which mean the medium to long-term economic outlook is difficult to discern. Projecting economic and employment activity long-term with any high degree of accuracy at a local level (i.e., LGA) is problematic given these impacts are still playing out.

Notwithstanding the difficulty of forecasting employment at a small area level in the current economic climate, three high-level modelling approaches have been developed to quantify the potential amount of industrial land needed across the Shire over the coming decades. A different modelling approach is adopted for each Scenario which is considered an appropriate response given the current level of economic uncertainty. The three Demand Scenarios considered are as follows.

- **Scenario 1: Employment-Driven Consumption**

High-level employment projections are developed for the 2021-2036 period based on historical and projected growth patterns. Industries likely to require industrial land are then identified. An industrial land requirement is then derived from the additional employment expected in these industries.

- **Scenario 2: Market-Based Consumption**

Historical industrial land consumption patterns in Bass Coast and other comparable areas are reviewed and high-level average annual consumption rates are developed for future estimates.

- **Scenario 3: Population-Driven Consumption**

The historical ratio of occupied industrial land compared to local population is analysed. This ratio is then applied to projected population growth over the 2016-2036 period to quantify the required amount of industrial land.

There are limitations with each of these approaches and the findings of each approach should not be viewed in isolation. The assumptions, findings and limitations of each scenario are detailed in turn.

8.3.2 Scenario 1: Employment-Driven Consumption

Scenario 1 considers the future industrial land requirements of industry in the Shire by projecting employment growth over the coming years to 2036.

Employment growth is projected by applying average annual growth rates to existing (2021) employment counts. Adopted growth rates differ by industry and are based on a mix of NSC's Gippsland and Regional Victoria employment projections.

Using this methodology, it is estimated that the Bass Coast economy will reach a total worker population of ~14,700 jobs by 2036, reflecting growth of almost ~2,900 workers since 2016.

Table 8.2 summarises the high-level employment projections for Bass Coast to 2036.

Table 8.2: Employment Projections (2016-2036), Bass Coast Shire

Industry	Historical		Projected			Change (2016-2036)
	2016	2021	2026	2031	2036	
ANZSIC						
Agriculture, Forestry & Fishing	934	683	651	620	591	-343
Mining	46	39	40	41	41	-5
Manufacturing	513	544	570	598	628	114
Electricity, Gas, Water & Waste Services	201	172	176	180	183	-18
Construction	1,153	1,971	2,130	2,303	2,489	1,336
Wholesale Trade	361	291	297	303	310	-51
Retail Trade	1,565	1,399	1,444	1,490	1,538	-28
Accommodation & Food Services	1,368	1,286	1,406	1,537	1,680	312
Transport, Postal & Warehousing	275	214	228	244	261	-14
Information Media & Telecommunications	86	48	49	50	52	-34
Financial and Insurance Services	148	199	193	186	180	33
Rental, Hiring and Real Estate Services	219	194	198	202	206	-13
Professional, Scientific & Technical	462	503	534	566	599	137
Administrative & Support Services	505	445	411	380	352	-153
Public Administration & Safety	520	477	503	530	558	38
Education & Training	851	838	929	1,029	1,141	290
Health Care & Social Assistance	1,629	1,575	1,835	2,138	2,491	861
Arts & Recreation Services	555	670	722	779	839	284
Other Services	457	481	514	550	588	130
Total	11,850	12,030	12,830	13,726	14,727	2,877
Avg. Annual Growth	7.1%	0.3%	1.3%	1.4%	1.4%	1.1%
BIC						
Industrial	2,331	1,943	1,962	1,986	2,014	-317
Population Serving	5,099	5,807	6,217	6,658	7,134	2,035
Knowledge Intensive	1,940	1,866	1,887	1,914	1,947	8
Health and Education	2,480	2,414	2,764	3,167	3,631	1,151
Total	11,850	12,030	12,830	13,726	14,727	2,877

Source: Atlas Economics

Assumptions on which industries are likely to require industrial land over the coming decades are made using professional judgement and based on the mix of sub-industries within each broad ANZSIC sector. These assumptions are shown in **Table 8.3** and suggest around ~780 additional jobs could require industrial land over the 2016-2036 period.

Table 8.3: Employment with Industrial Requirements (2016-2036), Bass Coast Shire

Industry	Projected Employment Growth (2016-2036)	% of Industry Likely to Require Industrial Land	Projected Employment Likely to Require Industrial Land
Mining	-5	25%	-1
Manufacturing	114	100%	114
Electricity, Gas, Water & Waste Services	-18	25%	-4
Construction	1,336	50%	668
Wholesale Trade	-51	100%	-51
Transport, Postal & Warehousing	-14	100%	-14
Rental, Hiring and Real Estate Services	-13	10%	-1
Other Services	130	50%	65
Total	2,877		776

Source: Atlas Economics

Based on this analysis, employment projections can be converted into an industrial land requirement using a series of generic assumptions, including average workspace ratios (i.e. amount of floorspace per worker) and site coverage rates. Assumptions relied upon include:

- Average workspace ratio of 100sqm per industrial worker.
- Site coverage ratio of 33%.
- Net to gross developable land ratio of 70%.

Using these high-level assumptions, it is projected that some ~77,500sqm of industrial floorspace and approx. 34ha of industrial land would be required in the decades to 2036. This is summarised in **Table 8.4**.

Table 8.4: Projected Industrial Land Demand (Scenario 1), Bass Coast Shire

Description	unit	Scenario 1
Additional Jobs Requiring Industrial Land	jobs	776
Workspace Ratio	sqm/job	100
Industrial Floorspace Demand (2036)	sqm	77,571
Site Coverage Ratio		33%
Net Industrial Land Demand	ha	23.5
Net to Gross Land Area Ratio		70%
Gross Industrial Land Demand	ha	33.6

Source: Atlas Economics

8.3.3 Scenario 2: Market Based Consumption

Scenario 2 considers the likely market take-up rates of industrial land in Bass Coast over the 2022-2036 period based on historical consumption rates and market intelligence gathered.

The expected future growth of the Bass Coast economy and population makes reliance on historical consumption rates unsuitable. With this limitation in mind, two sets of scenarios have been considered – a Lower Growth (1.0ha per annum) and Higher Growth scenario (1.5ha per annum). These adopted take-up rates are based on the following considerations:

- The historical industrial consumption rate in Bass Coast over the 2012-2021 period was 0.5ha per annum.
- There is assumed to be an 'underlying' demand for at least ~4.3ha of industrial land in Bass Coast. This reflects the ~4.3ha of industrial land in the proposed industrial subdivision at 35 Carneys Road which had been pre-sold (and then rescinded due to delays in the statutory approval process) over the course 2015-2017.
- If this ~4.3ha of underlying demand had been taken-up, the historical consumption rate would be circa 1ha per annum.
- Historical consumption of industrial land in LGAs in Gippsland varies. Over the 2013-2018 period, the South Gippsland Shire consumed some 0.8ha per annum (South Gippsland Shire, 2018). In Latrobe, industrial consumption was circa 8ha per annum over 2012-2015 (Latrobe City Council, 2019).
- Annual take-up of industrial land in Melbourne's South East LGAs over the course of 2012-2021 ranges from 3ha per annum (Casey) to ~11ha per annum (Cardinia).

Under the Lower Growth Scenario, some 26.2ha of industrial land could be demanded across the Shire by 2036. Under the Higher Growth Scenario, around 36.2ha of demand for industrial land would result.

The results of the Scenario 2 demand estimates are summarised in **Table 8.5**.

Table 8.5: Projected Industrial Land Demand (Scenario 2), Bass Coast Shire

	Lower Growth (Scenario 2a)	Higher Growth (Scenario 2b)
Existing Industrial Demand	4.3ha	
Projection Period (2022-2036)	14 years	
Assumed Consumption Rate (ha/per annum)	1.0	1.5
Net Industrial Land Demand	18.3ha	25.3ha
Net to Gross Land Area Ratio	70%	
Gross Industrial Land Demand	26.2ha	36.2ha

Source: Atlas Economics

8.3.4 Scenario 3: Population-Drive Consumption

Scenario 3 uses population growth as a proxy for employment growth and demand for industrial land. The limitations of this method are acknowledged as population growth is not the only driver for economic activity which utilises industrial floorspace and land.

Accordingly, it is primarily used as a secondary check to the demand estimates developed in Scenario 1 and 2.

Using a series of assumptions, the quantum of industrial land needed by 2036 can be derived from anticipated population growth. This is based on the following approach and assumptions:

- In 2021, there was some ~65ha of occupied industrial land across the Bass Coast. If underlying demand of ~4.3ha was also assumed to be occupied, there could be some 69.1ha of occupied industrial land.
- Bass Coast's resident population in 2020 was approximately 37,400 residents.
- By comparing the number of existing residents against the quantum of occupied industrial land across the Shire, a ratio of ~18.5sqm of industrial land per resident is calculated.
- If this ratio was assumed to remain static (constant) over the coming years to 2036, there could be demand for some 89ha of industrial land based on Bass Coast reaching a projected population of ~48,100 residents.
- By subtracting the existing quantum of occupied land and underlying demand (~69ha) and by applying a net to gross developable land ratio of 70%, additional demand for some 28.4ha of industrial land is calculated.

A summary of the Scenario 3 demand projections is provided in **Table 8.6**.

Table 8.6: Projected Industrial Land Demand (Scenario 3), Bass Coast Shire

Description	unit	Scenario 3
Occupied Industrial Land and Underlying Demand (2021)	ha	69.1
Estimated Resident Population (2020)	residents	37,400
Occupied Land/ERP Ratio (sqm/ resident industrial land)	sqm/resident	18.48
Projected Population (2036)	residents	48,145
Projected Industrial Land Need (2036)	ha	89.0
Additional Occupied Land Requirement (2036)	ha	19.9
Net to Gross Land Area Ratio		70%
Gross Industrial Land Demand	ha	28.4

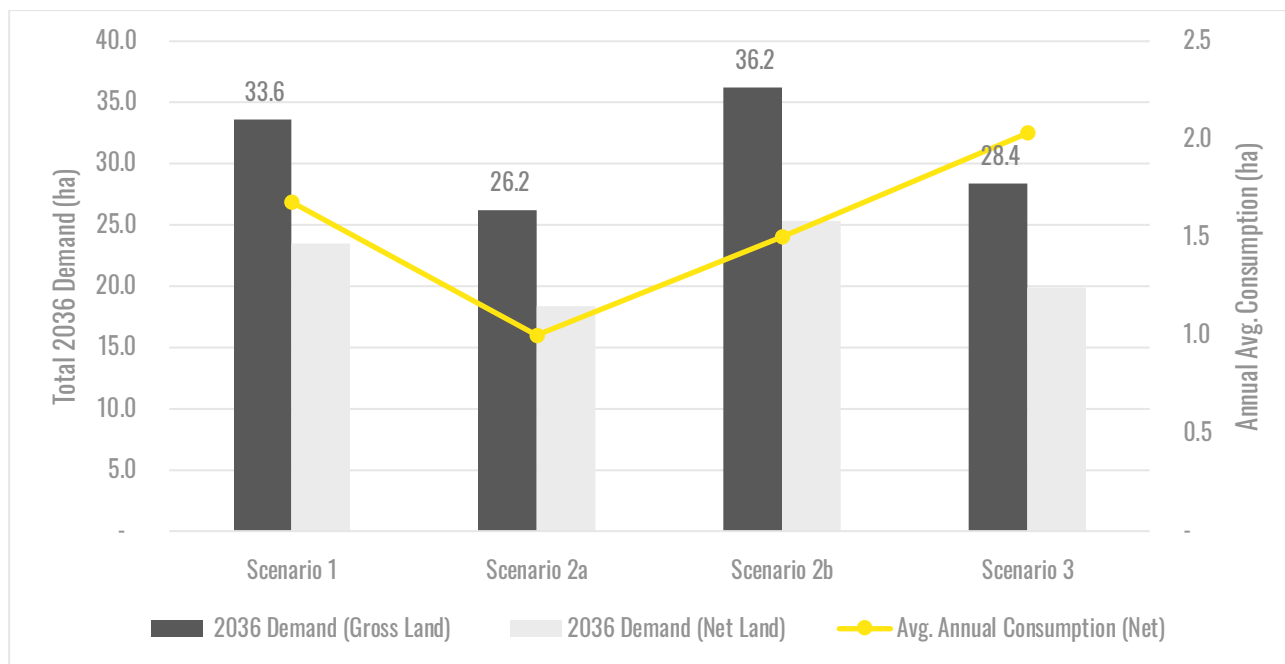
Source: Atlas Economics

8.4 Summary of Findings

This Chapter considered a mix of projection scenarios and using different methodologies to estimate the potential quantum of industrial land that could be required to 2036. This mix of scenarios and approaches to demand modelling is considered appropriate given the lack of certainty currently observed across the economy at both a global and domestic level.

Overall, the results of the projection scenarios suggest that demand for industrial land over the coming years to 2036 could range from 26ha to 36ha of gross industrial land. This reflects net demand of between ~1ha and ~2ha per annum. A summary of the demand projections under each scenario are illustrated in **Figure 8.2**.

Figure 8.2: Summary of Industrial Land Demand Projections, Bass Coast Shire



Source: Atlas Economics

Whilst an important consideration, historical consumption in Bass Coast will to an extent be a poor predictor of future demand for industrial land. Recent consumption is already observed to have outpaced historical trends.

Having regard to the trends identified in Part A and the findings of research and engagement, the Study considers it appropriate to rely on the upper band of estimated demand, that is 36ha in gross area required to 2036.

The next Chapter considers the capacity of the Shire's existing and future industrial precincts to meet projected demand and the capacity of precincts to sustainably accommodate demand.

9. Future Needs and Recommendations

This Chapter examines the ability of Bass Coast's remaining and future land supply to meet demand over the coming decades. It makes a series LGA-wide and precinct-specific recommendations to ensure the long-term economic viability of the Shire's industrial precincts.

9.1 Future Demand and Remaining Supply

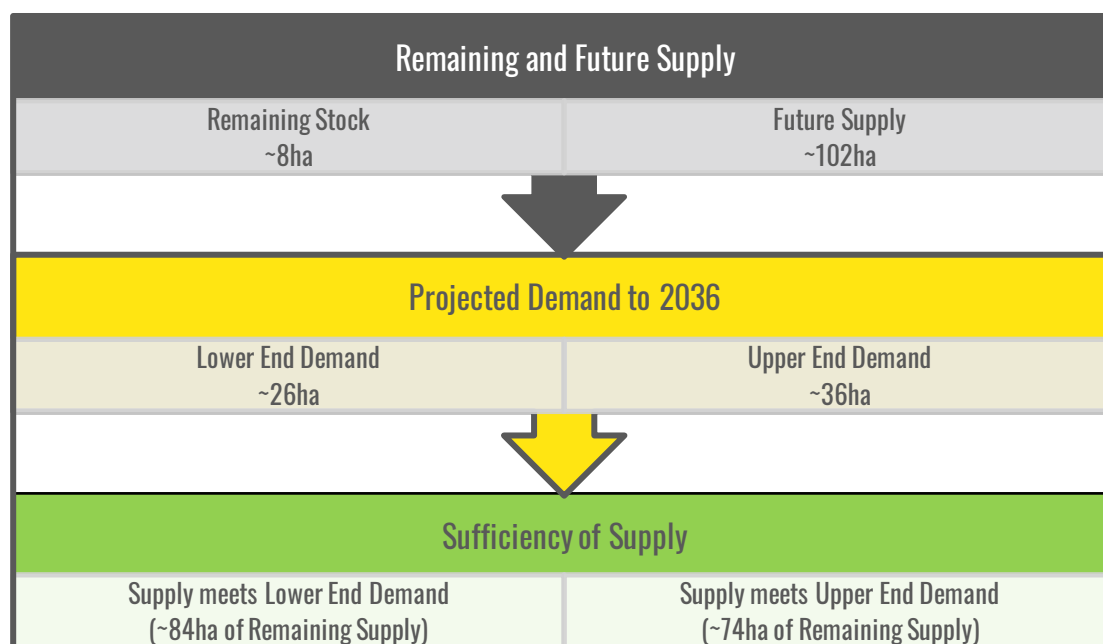
A review of remaining stock and future industrial land planned for release identified ~110ha of Remaining and Future Supply.

Various demand scenarios in Chapter 8 identified there could be a need for between ~26ha (Lower End) and 36ha (Upper End) of industrial land over the coming years to 2036. Chapter 8 recommended that due to recent observations of consumption and demand requirements the upper band demand, i.e. 36ha be adopted for the purposes of strategic planning.

There is likely to be sufficient supply of industrial land to meet future demand (to 2036), subject to Remaining and Future Supply being appropriately serviced and/or capable of being feasibly delivered. The factors influencing the deliverability of industrial land were discussed in section 7.3.

Figure 9.1 summarises the capacity of Remaining and Future Supply to meet projected demand to 2036.

Figure 9.1: Supply Capacity and Future Demand



Source: Atlas Economics

Whilst the supply and demand analysis suggest there is sufficient future supply, it is a truism that not all zoned land will be developed. This is for a range of reasons - landowner objectives and motivations do not always align with development. For example, even though there may be latent development potential on vacant land, a business may continue to use the vacant for farm equipment storage. Accordingly, providing for an appropriate 'buffer' of supply will be critical to ensure that demand can be met.

Furthermore, an 'overprovision' of industrial land would provide an opportunity for the Shire to attract larger operators to the region from key industries such as construction, waste and recycling, manufacturing or renewable energy.

9.2 Future Industrial Requirements

Future industrial land and building requirements in Bass Coast are likely to evolve as broader economic and business trends play out and as the local economy grows and mature.

- **Land Requirements**

Market investigations in Chapter 5 identified that demand for industrial property in Bass Coast was primarily driven by small to medium enterprises (SMEs). These operators would typically require sites no larger than 1ha.

Whilst this trend is anticipated to persist, it is understood that there have been previous enquiries from a mix of industries seeking larger industrial landholdings (1ha to 2ha). A supply audit identified limited opportunities for operators who require sites of this size.

As the local population grows and connectivity to Bass Coast improves through road infrastructure upgrades, it is likely that demand from certain industries (e.g. construction, waste and recycling) that require larger sites could grow commensurate. This is consistent with findings from earlier industrial studies.

- **Land Use and Building Requirements**

Chapter 6 examined the trends likely to influence the future use and needs of industrial buildings. Population growth and other demographic trends are expected to have the greatest level of impact on future activity in local industrial precincts, driving demand for service industries (e.g. gyms, food and beverage manufacturing) which directly respond to population growth.

The growing needs for quality access and internet connectivity will continue to persist in the coming decades. Demand for sustainable building design will be largely tied to further declines in the cost of sustainable technology and practices.

Any future planning controls which necessitate sustainable building features should be cognisant of their cost and potential implications for development feasibility.

As such, the BILUS should be cognisant of the following future industrial requirements:

- Future demand for industrial land will continue to focus on smaller type industrial lots (1ha and smaller) owing to the characteristics of the local economy.
- There should be provision for larger lots (1ha and greater) in the future industrial areas (e.g. Wonthaggi, Grantville) to accommodate the needs of larger operators in key industries.
- Population growth will continue to drive demand from uses such as recreational facilities such as gyms, retailers, personal storage, food and beverage manufacturing and other population-serving industries in the industrial precincts.
- Well buffered access and adequate separation from sensitive uses (such as residential) will remain critical to the long-term sustainability of local industrial precincts as the need for urban logistics gathers greater momentum.
- The need for high-quality internet connectivity (5G and greater) will be critical to attracting and retaining local business.
- The take-up of sustainability technology and design will grow commensurate with further advancement which result in declines in the cost of technology.

9.3 Recommendations

9.3.1 Guiding Principles

The individual precincts in the Study Area range in scale and importance. Wonthaggi's Eastern Area Industrial Estate measures some ~46ha and is the primary driver of industrial activity in the Shire. Conversely, the Boys Home Road precinct in Newhaven comprises just 3ha. Policy recommendations for each precinct recognise that each plays a different role and requires a different approach.

The viability and sustainability of lands for continued industrial use is underpinned by their ability to be easily accessible and operate in a conflict-free environment. Where these issues are not able to be resolved, industrial precincts will struggle to be competitive in the long term.

As the Bass Coast economy grows and evolves over the coming decades, a range of business uses for industrial lands needs to be considered, however, with the proviso that these alternate uses do not compromise existing occupiers and precipitate their relocation. Overall, it is recommended that Council consider the following guiding principles:

- **Prioritise the release of additional industrial land** in the Wonthaggi North East Growth Area as soon as practicable. This will help address underlying demand for industrial land from local businesses.
- **Retain all existing industrial precincts in the short to medium term.** Due to the evolving nature of industrial activities and the growing need for population-serving businesses, it is important that planning controls are flexible enough to encourage and enable this transition. Surplus capacity in the local industrial market will enable future employment growth to be accommodated.
- **Support businesses located in fragmented industrial precincts.** Maintain those isolated precincts which are performing a functional employment role for as long as they are required by businesses in-situ. **In the longer term, investigate alternative land uses,** as those fragmented precincts that abut residential areas will conceivably struggle to attract new occupiers, particularly when the current occupiers vacate.

Flexible planning controls are key to assisting industries and businesses as they continue to transition in a time of structural economic change. An inability to meet business need will invariably undermine the viability of industrial areas.

9.3.2 Shire-wide Recommendations

Whilst it is acknowledged that each precinct within the Study Area is unique (therefore requiring an individualised approach), the Study has identified potential actions and recommendations which could be applied at a Shire-wide level.

Table 9.1 outlines the six Shire-wide recommendations that could be considered for adoption in the BILUS.

Table 9.1: Shire-Wide Recommendations

Recommendations	Objectives and Actions
Recommendation 1: Implement the BILUS	• The BILUS should reflect the findings of this Study and be implemented as soon as practicable to provide certainty to the market and landowners around future supply of industrial land.
Recommendation 2: Prioritise the Release of Future Industrial Land Supply	• In recognition of the existing undersupply of industrial land and high levels of underlying demand, the VPA and Council should prioritise the release of the future Wonthaggi Industrial Release Area. • Given the cited feasibility challenges in the precinct, Council and the VPA should liaise with the landowners and SGW to explore options to deliver required water and sewerage infrastructure. ◦ To validate claims of feasibility issues, the VPA/Council could commission a feasibility study to examine the impact of infrastructure charges on the viability of development. • Council should investigate alternative industrial land release locations in the case that the Grantville Future Release Area is identified as inappropriate for urban development.
Recommendation 3: Balance Land Use Flexibility with Existing Industrial User Needs	• Given the anticipated growth in population-serving industries, Council should review permitted land uses in select industrial precincts to ensure a level of flexibility is provided whilst protecting the integrity of existing industrial uses. • Smaller industrial precincts which are unlikely to remain viable in the long-term should be identified and initial planning around their transition to other employment zones should be carried out.
Recommendation 4: Monitor Industrial Activity through the Land Use and Register Tracker (LURT)	• Council should periodically review the health, role, and function of industrial lands as an ongoing priority using the Land Use and Register Tracker (LURT) Database. This will become increasingly relevant with time and in response to population growth, infrastructure provision, and an evolving local economy. • Council should also monitor and track the development of industrial type uses outside of existing industrial areas to understand the drivers of this activity.
Recommendation 5: Continue to Advocate for Major and Local Road Upgrades	• Council should continue to advocate to the Victorian Government for funding of upgrades to the Bass Highway given its strategic importance for local industrial occupiers. • The existing local road upgrade programme should continue to be funded with a focus on improving accessibility into the Shire's existing industrial areas.
Recommendation 6: Align BILUS with the future ED Framework	• Ensure the recommendations and actions of the BILUS align with those of the future Economic Development Framework, including consideration of any investment attraction strategies.

Source: Atlas Economics

9.3.3 Precinct-specific Recommendations

The inherent characteristics of the individual precincts require a tailored set of recommendations to ensure their long-term economic sustainability.

Table 9.2 outlines the precinct-specific recommendations which could be considered in the BILUS.

Table 9.2: Precinct-Specific Recommendations

Precinct (Township)	Zoning	Recommendations
Eastern Area Industrial Estate (Wonthaggi)	IN1Z	- Retain existing IN1Z zone and policy objectives which promote industrial activity in Bass Coast to be located in Wonthaggi. - In the medium to longer term, consider the appropriateness of a IN3Z or commercial zone in the small industrial area along Webb Drive given its proximity to residential uses.
White Road/McKenzie Street (Wonthaggi)	IN1Z	- Retain existing IN1Z zone and policy objectives which promote industrial activity in Bass Coast to be located in Wonthaggi. - Review the impact of the future Bunnings store on access and traffic on existing industrial occupiers in the medium-term.
Korumburra Road (Wonthaggi)	IN1Z	- Retain existing IN1Z zone and policy objectives which promote industrial activity in Bass Coast to be located in Wonthaggi. - Consider alternative land uses in line with the Wonthaggi Activity Centre Plan in the longer term, subject to the addition of further industrial land releases elsewhere in the Shire.
Inverloch Industrial Estate (Inverloch)	IN3Z	- Retain existing IN3Z zone. - Ensure level of flexibility in permitted land uses (subject to impact on existing industrial occupiers) given role of the precinct in supporting the local visitor economy.
Blue Gum Industrial Park (Cowes)	IN3Z	- Retain existing IN3Z zone. - Investigate upgrades to Coghlan Road to improve safety and accessibility. - Consider the findings from the Cowes Access and Movement Study to address carparking issues. - Ensure level of flexibility in permitted land uses (subject to impact on existing industrial occupiers) given role of the precinct in supporting the local visitor economy.
Boys Home Road (Newhaven)	IN1Z	- Retain existing IN1Z zone. - Longer-term consideration should be given to the appropriateness of the existing IN1Z subject to the addition of further industrial land releases elsewhere in the Shire.
Bass Highway (Grantville)	IN1Z	- Retain existing IN1Z zone and policy objectives which support manufacturing and processing industries that use sand and ancillary products as raw materials to locate in Grantville. - Recognise strategic importance of Grantville given its proximity to the Greater Melbourne's metropolitan freeway network.
Wonthaggi Future Release (Wonthaggi)	FZ (IN3Z)	- Facilitate the rezoning of the Wonthaggi Future Release Area to IN3Z as a matter of priority given its role in meeting underlying industrial demand in the short-term. - Investigate the implications of water and sewerage infrastructure costs of development feasibility and work with existing landowners, VPA and SGW to overcome any identified issues which may prevent development from occurring.
Grantville Future Release (Grantville)	FZ	- Commence investigations to identify the environmental capacity of the Grantville Future Release area to accommodate industrial uses. - Liaise with the existing landowner to understand their short, medium and long-term objectives. - Progress land release and precinct planning to enable rezoning to future industrial.

Source: Atlas Economics

References

- AMTIL (2021). *Survey finds Australian manufacturers gearing up for reshoring*. Accessible from: <https://amtil.com.au/pros-australia-reshoring-manufacturers-amtil/>.
- Australian Bureau of Statistics (2022). *Retail Trade, Australia*. Accessible from: <https://www.abs.gov.au/statistics/industry/retail-and-wholesale-trade/retail-trade-australia/latest-release#data-download>.
- Australian Bureau of Statistics (2021a). *Estimated Resident Population*. Accessible from: <https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/latest-release>.
- Australian Bureau of Statistics (2021b). *Labour Force, Australia, Detailed*. Accessible from: <https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed/latest-release>.
- Australian Bureau of Statistics (2021c). *Regional internal migration estimates, provisional, Mar 2021*. Accessible from: <https://www.abs.gov.au/statistics/people/population/regional-internal-migration-estimates-provisional/mar-2021>.
- Australia Post (2021). *Inside Australian Online Shopping: eCommerce Industry Report 2020*. Accessible from: https://auspost.com.au/content/dam/auspost_corp/media/documents/ecommerce-industry-report-2021.pdf.
- Bass Coast Shire Council (2021). *Council Plan 2021-2025*. Bass Coast Shire Council, Wonthaggi.
- Bass Coast Shire Council (2016). *Bass Coast Economic Development Strategy 2016-2021*. Bass Coast Shire Council, Wonthaggi.
- CBRE (2021a). *Australia's E-Commerce Trend and Trajectory: June 2021*. Accessible from: <https://www.cbre.com.au/research-reports/Australia-Major-Report---Australias-E-Commerce-Trend-and-Trajectory>.
- CBRE (2021b). *Australia Real Estate Market Outlook 2021: Industrial and Logistics*. Accessible from: <https://www.cbre.com.au/research-reports/australia-real-estate-market-outlook-2021>.
- DELWP (2021). *Urban Development Program Industrial 2020*. Victorian Department of Environment, Land, Water and Planning.
- DELWP (2021). *Victorian in Future 2019*. Victorian Department of Environment, Land, Water and Planning.
- IBISWorld (2021). *Craft Beer Production in Australia 2021*. IBISWorld, Sydney.
- JLL (2016). *The new industrial revolution*. Accessible from: <https://www.slideshare.net/AlexandraTornow/jllthe-new-industrial-revolutionfinal>.
- NIEIR (2021). *Employment by Industry Statistics*, unpublished.
- Regional Development Victoria (2020). *Gippsland Regional Plan 2020-2025*. Accessible from: <https://www.rdv.vic.gov.au/regional-partnerships/gippsland/projects#gippsland-regional-plan>.
- Savills (2021). *National Industrial Q3 2021*. Accessible from: https://www.savills.com.au/research_articles/167771/203006-0.
- Siemens (2013). *Pictures of the Future*. Accessible from: <https://www.scribd.com/document/194650946/Siemens-Pictures-of-the-Future>.
- Victorian Building Authority (2021). *Building Permit Activity Summaries*. Accessible from: <https://www.vba.vic.gov.au/about/data>.
- Victorian Planning Authority (2021). *Wonthaggi North East Precinct Structure Plan*. Accessible from: <https://vpa.vic.gov.au/project/wonthaggi-north-east/>.

MELBOURNE

Level 7, 333 Collins Street
Melbourne, VIC 3000

SYDNEY

Level 12, 179 Elizabeth Street
Sydney, NSW 2000

E: info@atlasurbaneconomics.com
T: 1300 149 151

