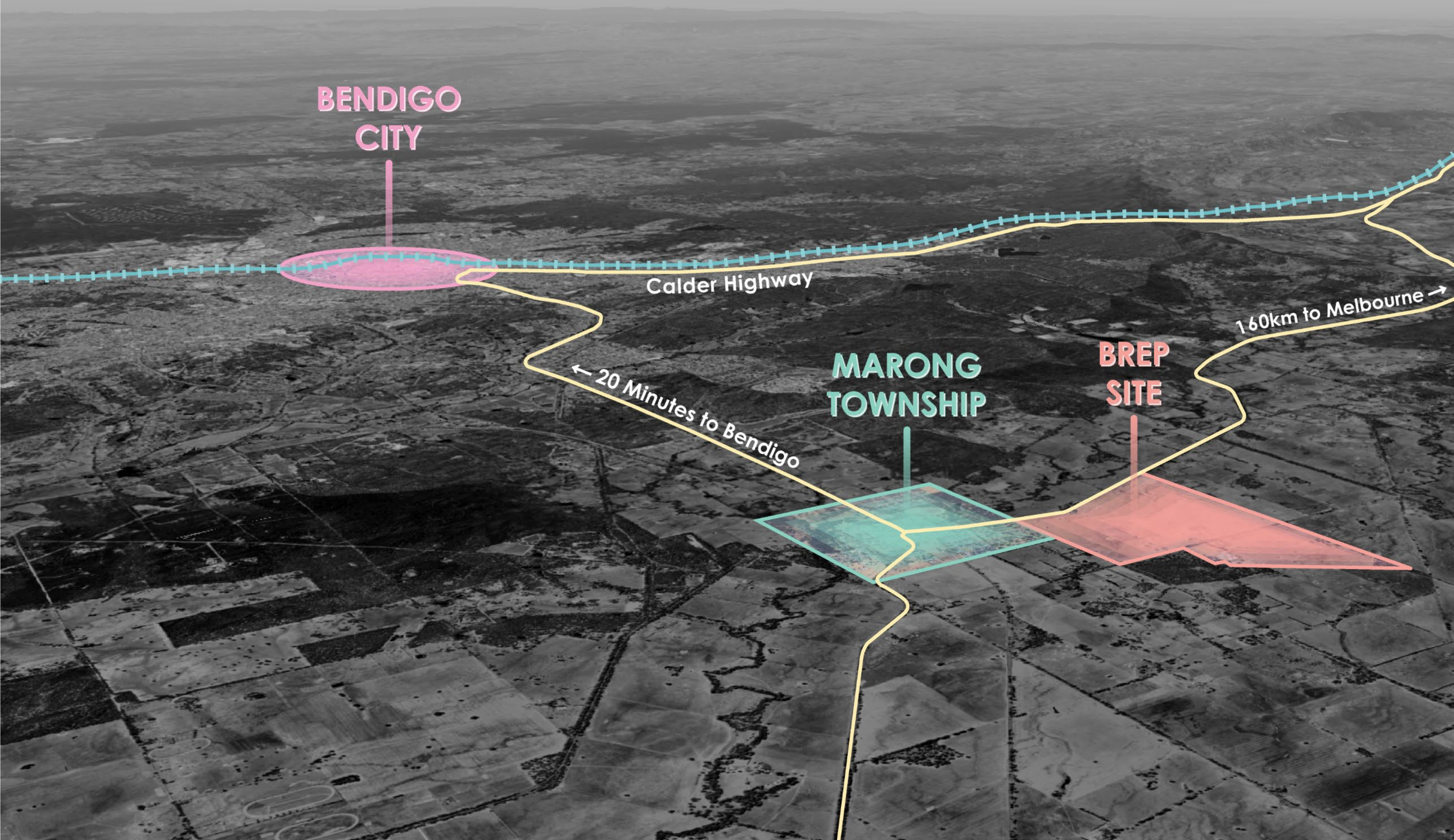
BENDIGO REGIONAL EMPLOYMENT PRECINCT

INDEPENDENT DEVELOPMENT ASSESSMENT



Bendigo Regional Employment Precinct

Independent Development Assessment

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Glossary

Term	Definition
ABS	Australian Bureau of Statistics
BREP	Bendigo Regional Employment Precinct
CoGB	City of Greater Bendigo
Core Industrial Sectors	Encompasses the following industries (INDP 1-Digit Level): • Construction • Electrical, Gas, Water and Waste Services • Manufacturing • Mining • Transport, Postal and Warehousing • Wholesale Trade
Ha	Hectares
LGA	Local Government Area
Sqm	Square metres
Land Classification	**Definition**
Occupied	Land that is currently subject to an active industrial use
Constrained	Land that does not support an active industrial use but is subject to environmental, regulatory, topographical or other constraints that limit its development potential.
Vacant	Land that does not support an active use of any form
Subject to Development Processes	Land that has had an approved or pending permit application since 2019

1.0 Findings

Investigation Scope

This report assesses the potential of the Bendigo Regional Employment Precinct (BREP) to attract industrial land demand. To do so, the report undertakes an economic land use assessment to assess whether the region incorporates the potential scale of land demand to support the successful delivery of the BREP. In so doing, the report also identifies the BREP's long term land and employment capacity. The report focuses on the merit of the BREP as it is proposed at 2025. The report, therefore, does not consider the merit of the BREP supporting alternate non-industrial uses.

Investigation 1A – The role, importance and maturity of the study area industrial sector

1A.1 The industrial sector is central to the region's productivity, economic output and employment.

1A.2 Each of the City of Greater Bendigo (Greater Bendigo) and the Shire of Mount Alexander support large and established industrial sectors that rely on industrial land settings to operate.

1A.3 Within both the Greater Bendigo and Mount Alexander Shire, the industrial sector leads local economic output and productivity and constitutes a third of local employment.

1A.4 Manufacturing and food product manufacturing are growing economic specialisations in the region. These forms of economic activity rely upon industrial land settings to operate.

Investigation 1B – Industrial sector outlook

1B.1 Based on ongoing land development trends, industrial floor space investment and a range of demographic and economic growth drivers, the region's industrial sector is positioned to continue to grow.

1B.2 Since 2019, the value of annual industrial building approvals within Greater Bendigo has consistently grown and is set to spike in 2024/2025.

1B.3 Average annual industrial land development since 2019 comprises 10.2 hectares per annum. This is an increase on 2019 annual industrial development as measured by the City of Greater Bendigo Council of approximately 9 hectares per annum. A high proportion (73%) of Greater Bendigo's vacant industrial land is subject to pending or approved development permits.

1B.4 Industrial sector employment is also growing. The industrial sector added 2,140 workers jobs between 2016 and 2021.

1B.5 Population-induced demand, agriculture, manufacturing, mining and logistics investment, construction industry expansion, defence investment, new energy and waste needs and the restructuring of the economy to support local supply chain capacity provide positive conditions to fuel future industrial expansion.

Investigation 1C – The status and outlook of industrial land supply

1C.1 Greater Bendigo lacks land to sustain medium to long term industrial expansion. Both REMPLAN and Charter anticipate near exhaustion of industrial land supply options in the early 2030s.

1C.2 In 2024, Greater Bendigo incorporated an estimated 123.6 hectares of vacant industrial land comprising 108 vacant land parcels.

1C.3 Under post 2019 land development trends Greater Bendigo incorporates approximately 11 years of industrial land supply. Charter's land supply projections are consistent with REMPLAN 2019 analysis which anticipates full theoretical industrial occupancy in the 2030s.

1C.4 There is a small and diminishing number of larger developable sites (greater than one-hectare) to sustain ongoing industrial development within Greater Bendigo. Over two thirds of recent industrial land development was derived from the development of larger (1 hectare +) vacant lots. In 2024, there were 19 large (1 hectare +) vacant industrial lots. Eleven of these lots are currently subject to a development process.

1C.5 As larger vacant industrial sites become increasingly scarce, industrial land development is anticipated to slow.

1C.6 Greater Bendigo's prime industrial area in East Bendigo is nearing full occupancy. The majority of developable lots in East Bendigo are currently subject to a permit process.

1C.7 The Shire of Mount Alexander incorporates 17.1 hectares of vacant industrial land. A lack of industrial land supply in the Shire has slowed industrial development within the Shire at a time when the Shire's population is growing. A lack of industrial land has resulted in industrial uses establishing in non-industrial areas.

1C.8 The analysis validates industry feedback obtained during project engagement. Stakeholders consistently identified a lack of industrial land as an ongoing issue for the industrial sector, particularly the shortage of larger lots, which was identified as a constraint on the growth of existing business and a barrier to inducing new business to Greater Bendigo.

Investigation 2A: Industrial Land Supply Options

2A.1 Greater Bendigo requires new land to sustain the expansion of its industrial sector.

2A.2 Greater Bendigo lacks options to expand the footprint of its existing industrial precincts – which would be a preferred expansion option. Due to environmental constraints and their proximity to sensitive uses, potentially vacant land parcels in proximity to Greater Bendigo's existing industrial areas are unable to support the logical expansion of Greater Bendigo's existing industrial precincts.

2A.3 The expansion of Greater Bendigo's industrial footprint requires the redevelopment of a previously non-industrial area into a new industrial precinct.

2A.4 A land search in 2019 was undertaken to identify industrial land supply options. The land search applied a range of assessment criteria to identify industrial land supply sites that merit further investigation by Greater Bendigo Council.

2A.5 The investigation filtered over 80,000 parcels according to a range of land criteria. This resulted in the detailed assessment of 485 parcels which resulted in the identification of 5 optimal investigation sites within 15 kilometres of central Bendigo that warranted further investigation. This included the site that would become the Bendigo Regional Employment Precinct (BREP).

2A.6 The BREP site was identified based on key advantages related to connectivity, potential size, land form, evidence of limited constraints and potential infrastructure connectivity. Multiple ownership, the site's relationship to a potentially expanded Marong town boundary and proximity to low density rural dwellings represented potential disadvantages for industrial development.

2A.7 Since 2019, a number of the site's disadvantages have diminished. This is as result of (a) the purchase of land within the BREP by the City of Greater Bendigo which is now the site's largest land holder and (b) the resolution of Marong's town boundary. Based on the BREP's relationship to the town boundary, the BREP will be able to provide land that meets recommended threshold distances for industrial uses as specified by the Environmental Protection Authority's 2024 Separation Distance Guideline.

2A.8 Since 2019 BREP's site has accumulated further policy and infrastructure planning advantages as a result of Victorian Government infrastructure investigation funding commitments and the recognition of the BREP in State planning policy.

2A.9 Within the region, Mount Alexander also lacks options to expand the footprint of its existing industrial precincts. Similarly, the Shire needs to investigate new greenfield land in locations not previously subject to industrial uses to provide industry opportunity to grow and operate. This will inevitably require significant environmental, infrastructure and transport analysis, infrastructure investment and community and landholder engagement. The Shire Council has committed to investigating the BREP as a potential regional industrial development option.

Investigation 2B: BREP Industrial Demand Outlook

2B.1 The BREP incorporates a number of industrial investment attractors. These include direct connectivity to major arterial road infrastructure for heavy vehicles, capacity to provide industry with relatively unconstrained operational conditions, and the sites proximity to established industrial networks. The land also incorporates potential investment constraints including infrastructure constraints and land form constraints which will require foundational investment to deliver the BREP.

2B.2 Victoria incorporates a number of precedents for the successful delivery of greenfield industrial development precincts including at the Geelong Ring Road Employment Precinct (GRREP), Logic Wodonga and the Ballarat West Employment Zone (BWEZ).

2B.3 The BREP shares similar locational and connectivity attributes to Logic and the GRREP including heavy vehicle connectivity to significant transport infrastructure, land form, market context and the provision of operational autonomy for industrial uses. The BREP is well positioned to experience similar market dynamics to Logic and the GRREP.

2B.4 Since their inception, Logic and GRREP have on average attracted 58.6% of expressed industrial demand within their local markets. Logic and GRREP provide a demonstrated market share benchmark for new autonomous greenfield arterial industrial locations in Victoria's regions.

2B.5 Assuming the BREP attracts a benchmark share of regional industrial demand, the BREP is projected to attract 6.5 hectares of annual average regional industrial land demand.

2B.6 Logic and GRREP attract the majority of their workforce from within a 25 kilometre catchment. Assuming the same workforce gravity at BREP, by 2032 the BREP will incorporate a core workforce catchment of approximately 69,000 workers.

2B.7 At full occupancy, the BREP will support a workforce of 2,800 workers. This is based on existing workforce densities in equivalent industrial locations.

Investigation 2C: BREP Industrial Land Capacity

2C.1 The aspirations of *The Greater Bendigo Industrial Land Development Strategy 2024* identify the need for 30 years of industrial land supply. According to Charter modelling the BREP incorporates between 24 and 30 years of industrial land supply.

2C.2 Charter's modelling assumes a net developable area of 206 hectares. The need for additional drainage and road space would see a decline in BREP's net developable area which would reduce potential years of supply. This is a realistic outcome given ongoing planning of the BREP.

2C.3 Years of supply would also be impacted if the BREP were to attract either a higher or lower share of regional industrial demand. If the precinct were to, for instance, attracted 75% of average annual regional demand, the precinct would be nearing capacity in the early 2050s. This is realistic given regional supply constraints and a lack of competitive markets and locations to induce demand. Alternatively, if the precinct were to attract 45% of demand the precinct might incorporate near on 40 years of supply.

2C.4 The BREP will enable the achievement of Clause 17.03-1S - Industrial Land Supply of the Victorian Planning Provisions by delivering long term industrial land supply including large and accessible lots, and lots that can accommodate contemporary industrial buffer distance requirements.

2.0 Bendigo Regional Employment Precinct: Independent Development Assessment

Background

The Bendigo Regional Employment Precinct (BREP) is a proposed 294-hectare new employment precinct located to the south of the Marong township in central Victoria. The precinct is situated approximately 14 kilometers west of Bendigo City Centre, along the Wimmera and Calder Alternative Highways.

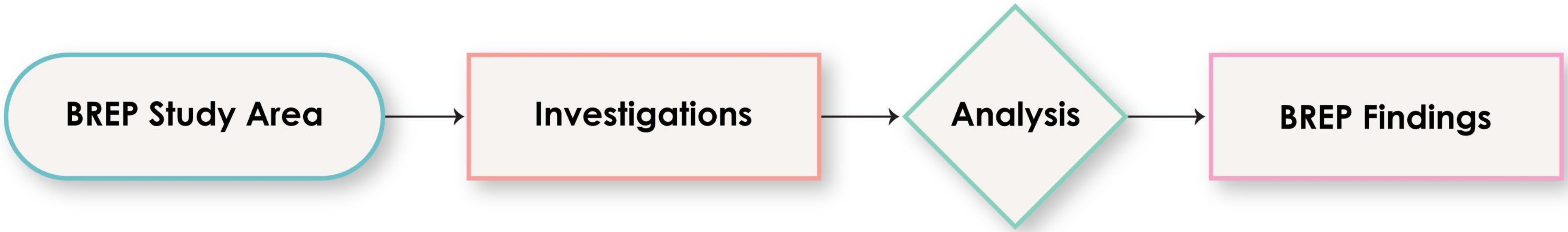
The Victoria Planning Authority (VPA) is currently preparing a draft planning scheme amendment (C296gben) to the Greater Bendigo Planning Scheme to guide future development and land use within the BREP which will include the rezoning of the BREP for industrial purposes.

Victorian Government policy, including the *Plan for Victoria* and the *Victorian Economic Growth Statement*, identify the BREP as a key driver of regional employment growth. *The Greater Bendigo Industrial Land Development Strategy 2024* likewise identifies the BREP as a priority area for future industrial expansion.

Independent Development Assessment

To support the development of the planning scheme amendment the VPA has engaged Charter Keck Cramer to provide independent advice on the merit of delivering the BREP as a regional employment area and to provide market-based recommendations to inform the planning framework that will guide the delivery of the BREP.

To assess the merit of the BREP the report undertakes an economic land use assessment to assess whether the region incorporates the potential scale of land demand to support the successful delivery of the BREP. In so doing, the report also identifies the BREP's long term land and employment capacity. The report focuses on the merit of the BREP as an exclusively industrial precinct. The report, therefore, does not consider the merit of the BREP supporting alternate non-industrial uses.



3.0 Bendigo Regional Employment Precinct

The BREP is a greenfield industrial precinct in Central Victoria. The *Greater Bendigo Industrial Land Development Strategy* (GBILDS), adopted 24th June 2024, emphasises the importance of the BREP in alleviating the City of Greater Bendigo's industrial land supply shortage. According to the Strategy the delivery of the BREP would meet many of the long-term industrial land needs in Greater Bendigo. Specifically, the Strategy states that:

> *"the ultimate development of this precinct would unlock land to meet the medium- and longer-term industrial land needs of existing and new businesses to Greater Bendigo."*

The precinct is located along the Wimmera and Calder Alternative Highways, incorporates 294 hectares of land. In 2021, Greater Bendigo purchased 155 hectares of land within the precinct. In 2022, State Government committed $6 million toward infrastructure planning for the BREP.

According to Council information the BREP is expected to create 6,000 direct and indirect jobs over a 30-year period from 2032 onwards.

The BREP is identified as a key regional employment precinct in *Plan for Victoria*, introduced into the Victorian Planning Provisions by Amendment VC283. *Plan for Victoria* provides the overarching strategic direction that informs State planning policies by identifying Bendigo as a regional economic and employment hub and supporting the establishment of strategic industrial land such as the BREP.

Figure 1: BREP Context Map

Source: Charter Keck Cramer

Investigation Study Area

The study area incorporates locations in which the BREP is positioned to directly support industrial demand needs. The study area incorporates a Prime Study Area and a broader Study Area Region.

Greater Bendigo is the largest settlement in proximity to the BREP. The BREP is a 16-minute private vehicle trip and 14 kilometres from Central Bendigo and is located within 15 minutes to each of Greater Bendigo's established suburbs.

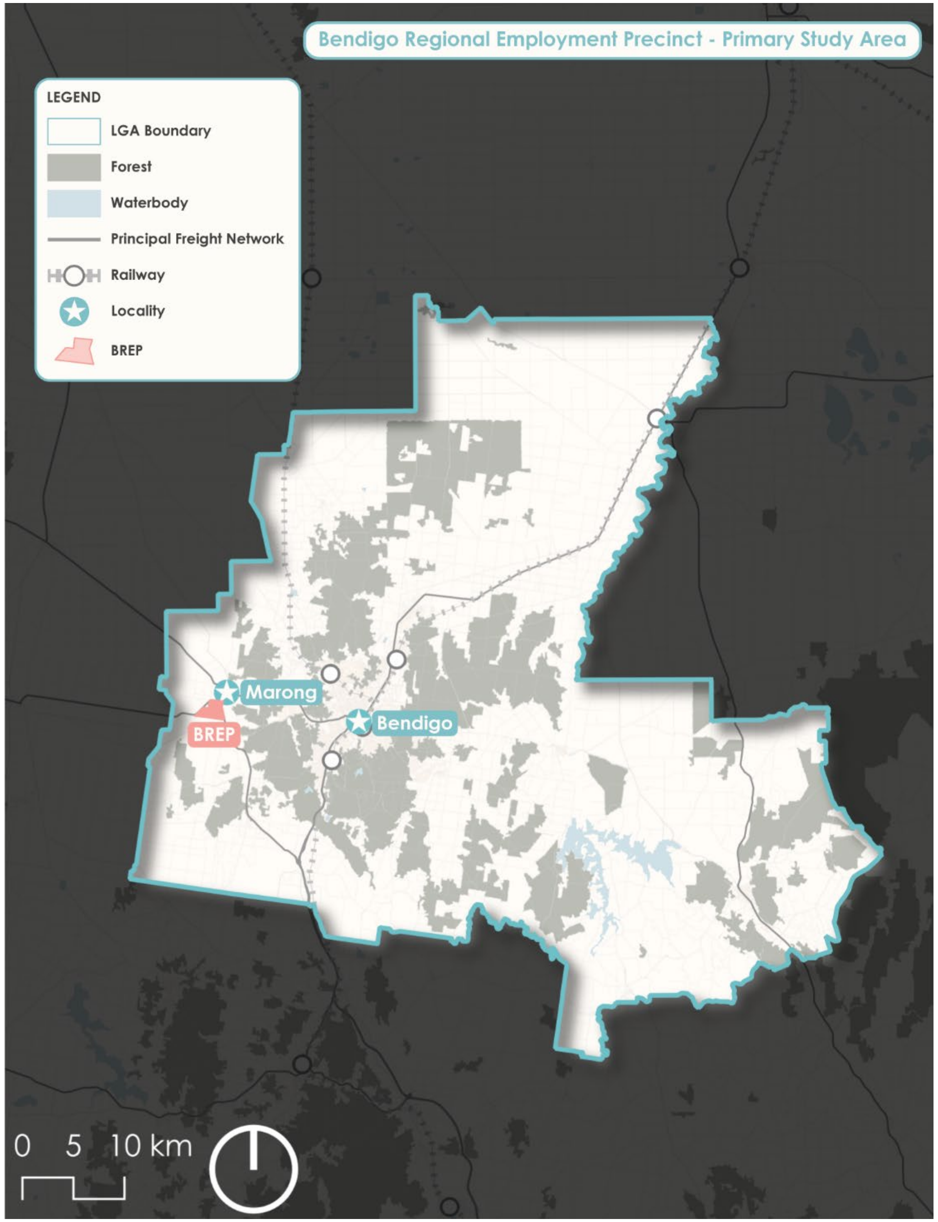
The BREP's core spatial economic relationship is thereby set to emerge from its relationship to the land, workforce and connectivity needs of Greater Bendigo's existing and future community, industry and economy. The City of Greater Bendigo therefore forms BREP's *Prime Study Area*.

The BREP is also within proximity to settlements in the Shire of Mount Alexander – (Harcourt 25 minutes, 33km and Castlemaine 31 minutes, 41km) and The Shire of Loddon (Inglewood 22 minutes, 30km). The BREP is well positioned to support and influence the industrial needs of these locations. In conjunction with Greater Bendigo, the Shires of Loddon and Mount Alexander comprise the *Study Area Region*.

The Shire of Macedon Ranges incorporates an industrial precinct in Kyneton along the Calder Highway that includes vacant industrial land (47 minutes from the BREP). The BREP is thereby unlikely to service industrial land demand needs within Macedon Ranges Shire.

In the course of project engagement, the municipalities of Mitchell, Strathbogie and Campaspe were unclear about BREP's direct local benefits primarily due to their distance from the BREP, road network constraints and geographic barriers.

Figure 2: Primary Study Area



Source: CKC

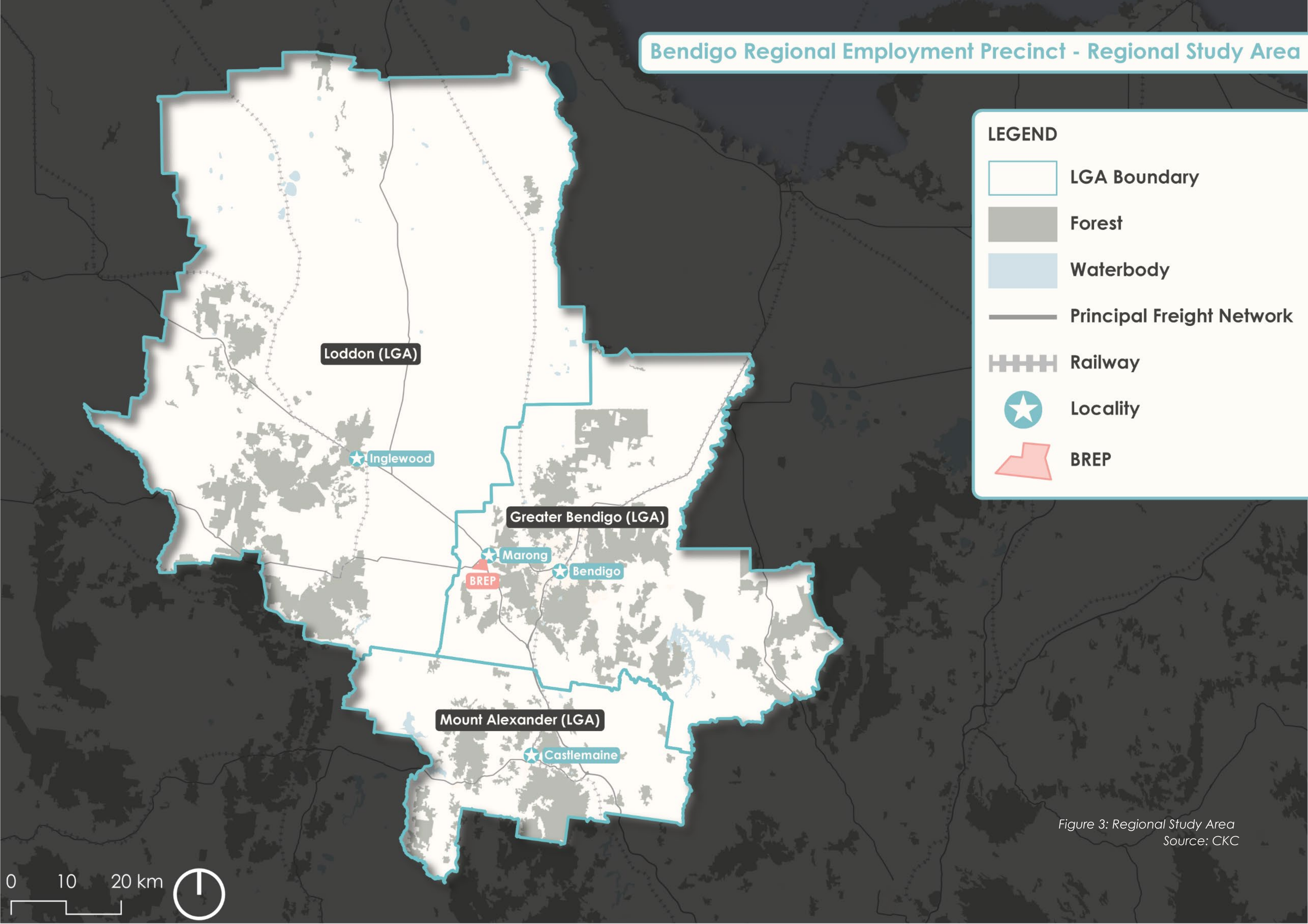


Figure 3: Regional Study Area
Source: CKC

PROJECT ENGAGEMENT

01

3.1 Project Engagement

Over the period May to July 2025, the project team undertook targeted interviews with BREP landholders, local government (primarily economic development staff), State agency and industry stakeholders. The views, experiences and insights of stakeholders gathered over the project engagement inform project recommendations and investigation analysis.

3.1.1 Engagement Objectives

Stakeholder interviews were guided by the following objectives:

1. To gather information on the outlook for the industrial sector in the region.
2. To explore perceptions on the status of local industrial land supply and industrial floor space requirements.
3. To explore perceptions of the BREP, its potential advantages and disadvantages and the foundational elements needed to attract investment and industry.
4. To explore landholder views on the BREP land use vision and to ascertain the extent of landholder support for the vision.

Table 1: Engagement Activities

Activity	Timing	Details
Agency, Local Government and industry interviews	10 interviews approximately 60 minutes per interview – between May to July 2025	Staff from Greater Bendigo City Council*, the Shires of Mount Alexander Shire, Campaspe, Mitchell, Loddon and Strathbogie. Regional Development Victoria, Invest Victoria, Be.Bendigo, and 2 * Bendigo Industrial Agents
Landholder interviews	May 2025	5 BREP Landholders

** Greater Bendigo City Council was interviewed as both a landholder and planning authority.*

3.1.2 Engagement Findings: Agency, Government and Industry

Industrial land supply: Agreement that there is a chronic shortage of industrial land in the Bendigo region.

Views of the BREP: Support for the BREP project as a necessary regional solution, with stakeholders viewing it as providing the region a new regional industrial hub that complements and integrates with existing industrial areas.

Market insights: Respondents identified market demand for larger industrial lots (1+ hectares) that current land supply cannot meet. Businesses are actively seeking new industrial space options due to space constraints.

The attractiveness of the BREP: The site's strategic location on the Calder Highway provides transport connectivity, positioned to serve broader Central and Northern Victoria. Capacity to provide large industrial lots that include storage, circulation and expansion space.

Delivery: Timeline delays are identified as the biggest frustration for industry, with stakeholders emphasising the need for development-ready, properly serviced sites.

3.1.3 *Engagement Insights: Agency, Government and Industry*

Industrial Growth Sectors

Primary industrial growth sectors: Agriculture and food processing, advanced manufacturing, engineering, mining support services, renewable energy and transport/logistics.

Emerging opportunities: Mineral sands, rare earth processing, data centres and defence manufacturing.

Regional industrial strengths: Skilled workforce, diversity of industries, strategic location and established supply chain networks. Bendigo's skilled workforce cited as a competitive advantage along with educational institutions that provide the foundation for skills development. Regional lifestyle, relative housing affordability and amenity were also identified as strengths.

Land Supply

Limited availability: Bendigo-based respondents concur that there is an industrial land supply shortage. There is limited availability of medium to large-scale industrial sites (1+ hectares).

Existing industrial land: According to respondents, existing industrial land is often fragmented, poorly located, or lacks proper infrastructure.

Perspectives on the BREP

The need for the BREP: There was a consensus that the BREP is needed to address regional industrial land shortage.

Advantages: The site's location on the Calder Highway provides transport connectivity, positioned to serve broader Central and Northern Victoria. A further advantage is the capacity to provide large lots that enable circulation, storage and expansion.

Investment attraction: Could attract "footloose" businesses seeking affordable alternatives to Melbourne. Melbourne's high land costs are pushing businesses to seek regional alternatives.

Regional hub: Respondents noted that there is no significant well-located industrial hub in the region equivalent to Logic in Wodonga or the Ballarat West Employment Zone (BWEZ). The BREP will provide an equivalent hub in an export-oriented region.

Market Demand Indicators

Potential demand: Economic development, agency and manufacturing respondents reported that multiple major businesses seeking to locate in Bendigo were unable to find appropriate industrial space.

Industrial demand characteristics: Multiple respondents identified unmet demand for larger lots and medium and larger warehouse spaces. Others indicated that there was unmet demand for all sizes of lots and floor space including small, medium and large industrial spaces. We note that one local agent observed that they had not experienced significant demand for large industrial sites. The agent nonetheless stated that there was a scarcity of industrial land supply in Greater Bendigo.

BREP Implementation Requirements

Utilities: Reliable power, water and energy infrastructure.

Transport: Heavy vehicle access and freight connectivity.

Services: Development-ready sites with servicing certainty – investment ready.

Lot Size Flexibility Versus Prescription: Some respondents advocated for lot size flexibility while also emphasised the need for large lots. Others indicated that the advantage of the BREP was its potential to provide large lots allowing for expansion, lay down and circulation space.

Price: Land in the BREP needs to be at an affordable price to attract investment.

Perceptions of the BREP's Regional and Local Benefits

Municipal perspectives:

- *City of Greater Bendigo*: The BREP represents essential economic infrastructure and the optimal solution to a chronic land supply shortage.
- *Mount Alexander Shire*: The Shire is seeking to identify local industrial land options in the face of industrial land scarcity within the Shire's prime settlement of Castlemaine. For Mount Alexander Shire, BREP will provide a regional option that will complement local options.
- *Loddon Shire*: According to Shire representatives, infrastructure independent industry and industry that requires significant buffers is attracted to Loddon Shire. The BREP will provide an option for infrastructure dependent industry that the Shire's industrial settings may not be able to support.
- Municipalities that are more remote from the BREP (Mitchell, Strathbogie and Campaspe) were unclear about the BREP's direct local benefits.

State benefits: State agencies highlighted Bendigo's role as regional hub for specialist manufacturing. They also noted broader investment trends favouring regional locations particularly those that can provide serviced large format land in buffered locations. They also emphasised the importance of competitive land pricing and workforce availability.

3.1.4 Engagement Findings: Landholders

BREP landholder interviews took place in May 2025.

Views on the BREP

Supportive views: Three land owners strongly supported the BREP as transformative for Bendigo and a logical growth area that presents strategic advantages either for their existing business, and/or for the attraction of new business. Supporters identified access to Melbourne, competitive land pricing and infrastructure potential as likely drivers of development. Supporters acknowledged Bendigo's chronic industrial land shortage as a key issue underpinning the overall commercial merit of the BREP.

Concerned: One owner expressed concerns in relation to the personal disruption that the BREP would entail and its impact on fundamentally changing the rural character that originally attracted them to the area.

Opposed: One owner raised a series of questions in relation to the merit of the BREP including whether:

- The BREP can attract sufficient demand to occupy 300 hectares of employment land – the respondent questioned the scale of land area identified for the BREP and contended that there was a lack of supportive information to justify this scale of land.
- The BREP will attract sufficient industrial demand from Bendigo.
- There are other more optimal locations for the BREP.
- The BREP can attract a sufficiently large workforce catchment to satisfy the labour force needs of future industrial enterprise.

This respondent represented land within the north eastern portion of the BREP, which is land within the *Marong Township Structure Plan*. The respondent contends that this area should be supported for residential uses. The respondent contended that a residential outcome would help fund servicing costs and support the overall speed of precinct development (we note that this report does not consider alternate uses within the BREP). The respondent provided supportive documents providing detailed analysis that questions the merit of the BREP.

Proposed Calder Bypass Route/Marong Western Freight Corridor: Various views expressed concerns in relation to the proposed bypass route. Respondents called it poorly designed.

Infrastructure Investment: Concerns were raised about the scale of up front infrastructure investment needed to commence industrial development.

INVESTIGATIONS

02

4.0 Independent Development Assessment

An independent assessment is an impartial and objective assessment of a situation that aims to provide findings and recommendations that reflect the weight of evidence.

This report provides an independent assessment of the merit of the BREP as a new employment and industry area. The report provides an external perspective on the economic context informing the need for the BREP and the policy, land and connectivity attributes of the location and the extent to which they establish the pre-conditions needed to induce a new economic node.

The assessment undertakes a series of investigations that test, verify and explore the underlying justification, outlook and merit of the BREP. The investigations focus on critical land, industry attraction and land use planning questions, the answers for which, inform the conclusions and recommendations of this report. The report focuses on the merit of the BREP as it is proposed at 2025. The report therefore focuses on examining the merit of the BREP as a new industrial precinct and does not consider the merit of the BREP supporting alternate non-industrial uses.

Investigations

1. The need for a new greenfield industrial estate
2. The merit of the BREP as an industrial greenfield location
3. The optimal planning of the BREP

1 The need for a new greenfield industrial estate

Investigation Focus:

According to the Greater Bendigo Council, the BREP is needed to address Greater Bendigo's ongoing shortage of industrial land.

The objective of this investigation is to verify the need for new greenfield industrial land by establishing the status of the Greater Bendigo's industrial economy, its outlook and industrial land supply status as at 2025. Responses to these investigations define the economic and land supply context for the BREP.

This investigation explores:

> ***Investigation 1A – The role, importance and maturity of the study area industrial sector***
>
> ***Investigation 1B – Industrial sector outlook***
>
> ***Investigation 1C – The status and outlook of industrial land supply***

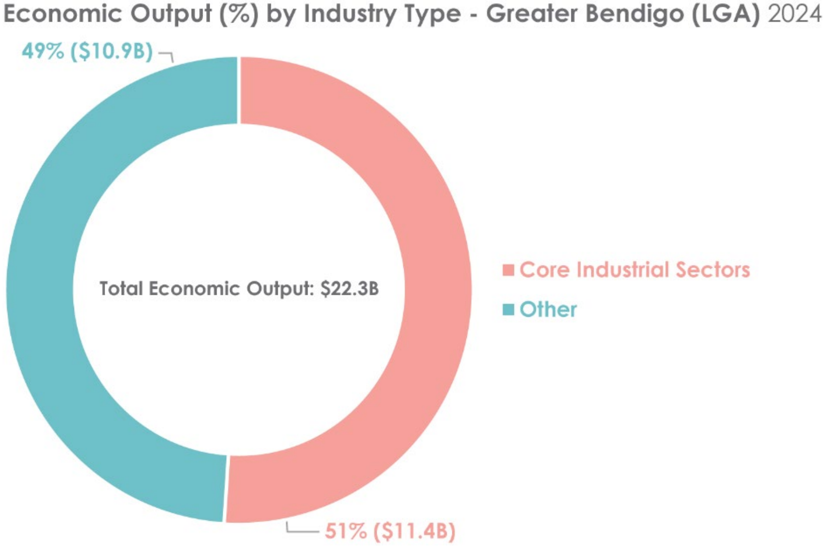
Investigation 1A: Industrial Sector Economic Role, Importance and Maturity

The centrality and importance of a location's industrial economy is indicated by the scale of its industrial output, employment and enterprise.

Industrial output: Sectors that comprise Greater Bendigo's industrial economy (manufacturing, waste, energy, construction, logistics, wholesaling) account for over 50% ($11.9B) of Greater Bendigo's estimated overall economic output of $22.3B in 2024 (REMPLAN). Construction and manufacturing output alone represent one third of the City's total economic output ($7.4B in 2024).

The East Bendigo precinct, which comprises Greater Bendigo's largest industrial precinct, accounted for $2.5B in economic output or approximately 11% of the Greater Bendigo's economy.[1]

Figure 4: Economic Output by Industry Type – Greater Bendigo (LGA) 2024

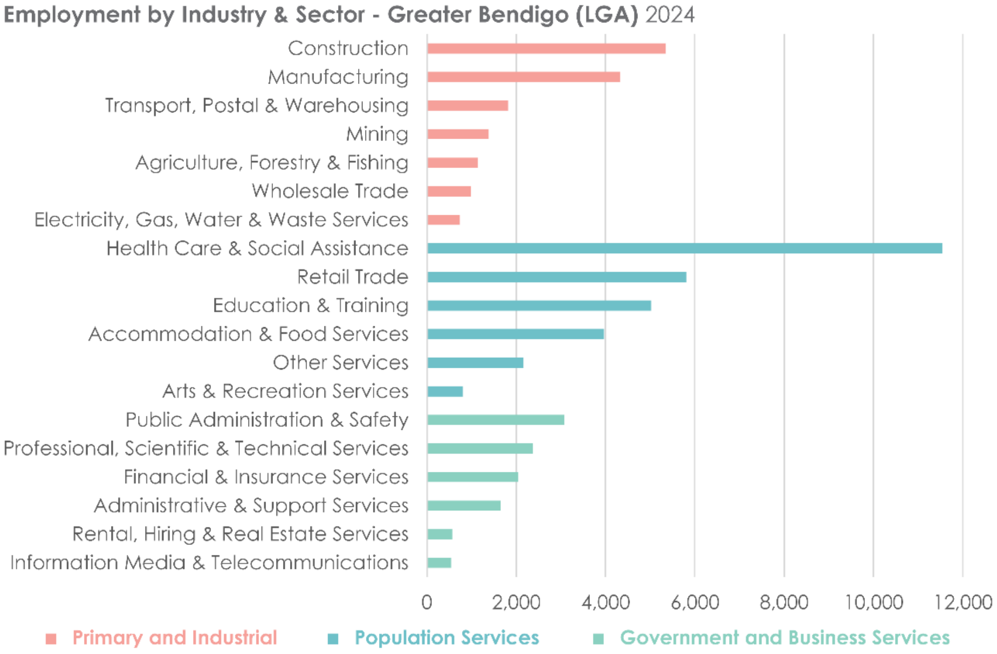


Source: CKC, REMPLAN

Industrial employment: Employment within traditional industrial sectors comprises just over one quarter (28%) of Greater Bendigo's jobs at 2024. Industrial sector employment comprised an estimated 15,700 of the City's 55,200 jobs at 2024. Employment within traditional industrial sectors has been growing at approximately 400 jobs per annum, which has enabled the sector to maintain its share of Greater Bendigo's employment in the context of substantial health and education workforce expansion.

The East Bendigo industrial precinct accounted for approximately 8% of the City's jobs.

Figure 5: Employment by Industry & Sector – Greater Bendigo (LGA) 2024



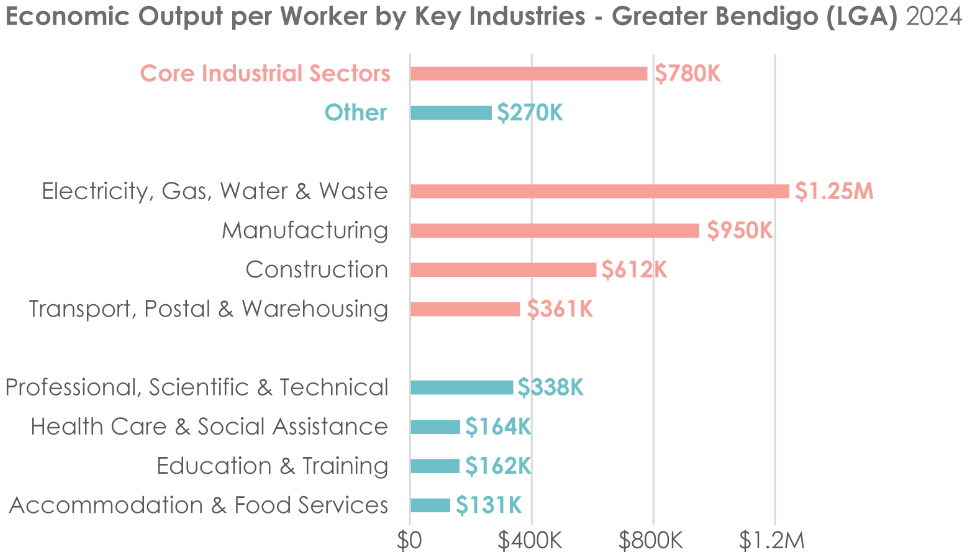
Source: CKC, REMPLAN

[1] Sourced from REMPLAN's scaled data for economic output and employment

Industrial productivity: Industrial industries lead Greater Bendigo's and the region's productivity. Output per worker within industrial sectors is far greater than that of all other sectors. Industrial workers collectively generate near on three times the annual output of service workers - we note that not all industrial industries exceed services in output by a factor of three including transport, wholesaling and construction.

Higher productivity is associated with higher living standards, economic competitiveness and economic efficiency. Given its high levels of productivity, Greater Bendigo's industrial sector is an important contributor to local living standards and prosperity.

Figure 6: Output per Worker by Key Industries – Greater Bendigo (LGA) 2024

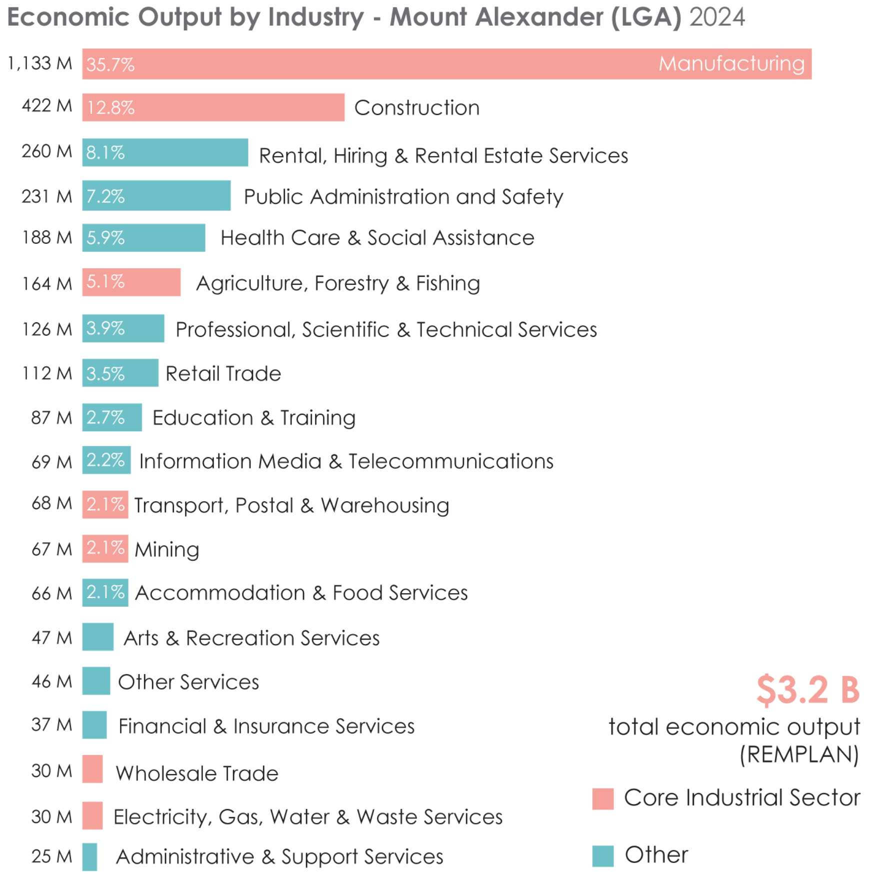


Source: CKC, REMPLAN

Regional economy Mount Alexander Shire: At 2021, the Shire supported approximately 7,600 jobs with industries associated with industrial land (manufacturing, transport, postal & warehouse, construction) making up 30% of jobs. At this time, manufacturing was the Shire's leading employment sector with approximately 1,500 jobs. Approximately 23% of the Shire's workforce travel from Greater Bendigo.

Like Greater Bendigo, the industrial sector is central to the Shire's economic output and productivity. The industrial sector accounts for over 54% of the municipality's economic output.

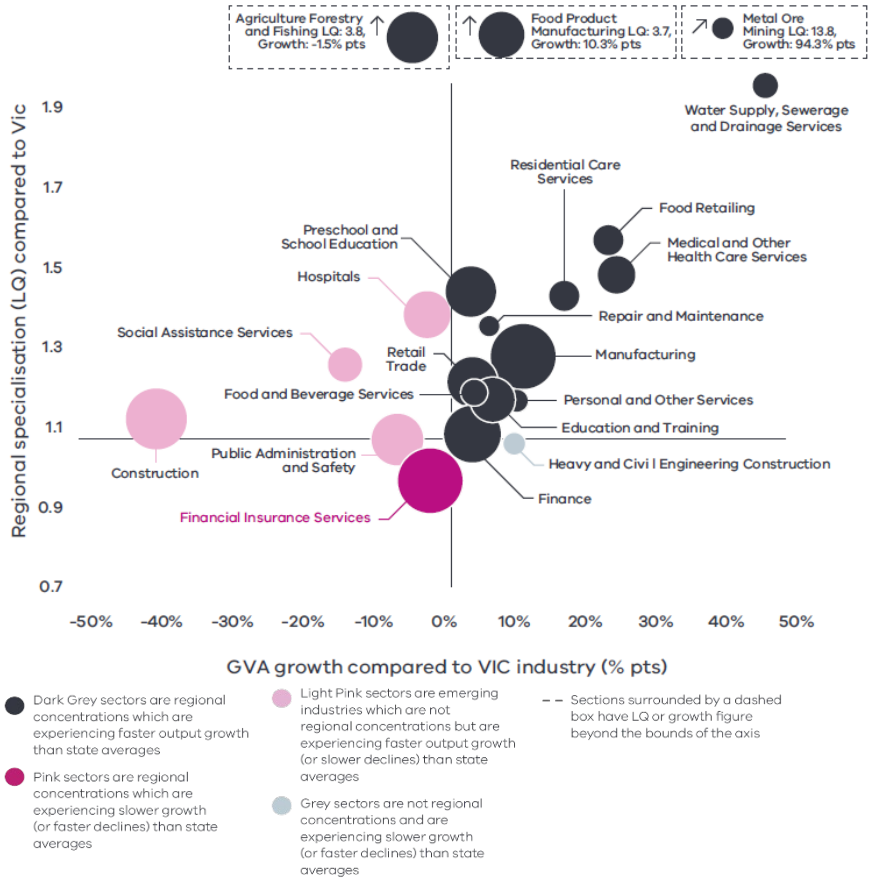
Figure 7: Output by Industry – Mount Alexander (LGA) 2024



Source: CKC, REMPLAN

Across the Loddon region, analysis detailed in *The Loddon Campaspe Regional Economic Development Strategy* (Department of Jobs, Precincts and Regions) identifies manufacturing, mining, water and waste and food manufacturing as established regional economic specialisations that are undergoing faster growth than the Victorian average. The same analysis identifies the construction sector as an emerging sector undergoing growth. Accordingly, the regional strategy concludes that across the Loddon region, output is highly concentrated in manufacturing, mining and agriculture – sectors that draw on industrial land and settings for both inputs and the processing and movement of outputs.

Figure 8: Location Quotient by Industry – Loddon Campaspe Region 2022



Source: Department of Jobs, Precincts and Regions

Key insights - Investigation 1A:

- The industrial sector is central to the region's productivity, economic output and employment.
- Greater Bendigo and Mount Alexander support significant and established industrial sectors that rely on industrial land settings to operate.
- Within Greater Bendigo and Mount Alexander Shire, the industrial sector leads local economic output and productivity while constituting a third of local employment.
- Manufacturing and food product manufacturing are growing economic specialisations in the region. These forms of economic activity rely upon industrial land settings.

Investigation 1B: Industrial Sector Outlook

The scale of industrial floor space investment, industrial land development and industrial employment and business growth is indicative of the economic status and outlook of a local industrial sector.

Industrial Floor Space: Over the 2019 to 2024 period, the value of annual investment in industrial floor space in Greater Bendigo grew by 80%. When construction cost inflation for this period of approximately 30% is accounted for, there is still an appreciable increase in real industrial floor space investment over the period.

The 2024 - 2025 financial year has seen a spike in industrial investment. This includes $26 million in factory approvals and $33 million in warehouse approvals – representing a 65% and 80% increase on the value of 2020 investment. We note that the volume of FY2024/25 industrial investment is likely to grow when the full FY2024/25 data becomes available – the data detailed in this report only includes nine months of data.

Industrial land development:

The City's industrial footprint is undergoing steady expansion. In the period between 2019 and 2024, annual development of vacant industrial land has averaged 10.2 hectares per annum. Prior to 2019, Greater Bendigo City Council estimated vacant industrial land development averaged nine hectares per annum (*Greater Bendigo GBILDS Background-Report May 2020)*.

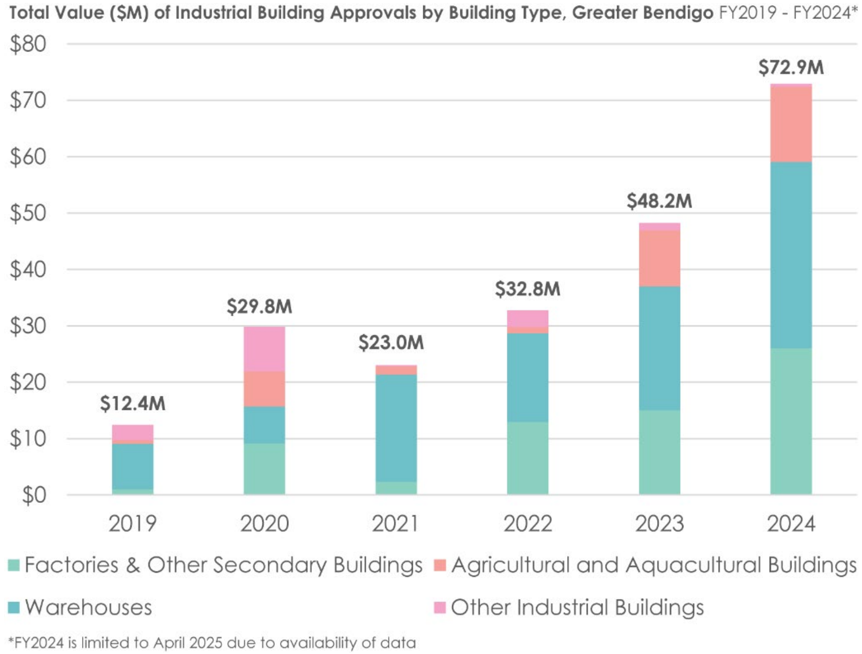
Industrial development pipeline:

The majority of potentially available industrial land within Greater Bendigo is currently subject to a development process. At 2025, 73% of potentially available industrial parcels across the City are subject to either an approved or pending planning permit for industrial development.

Industrial Employment Growth:

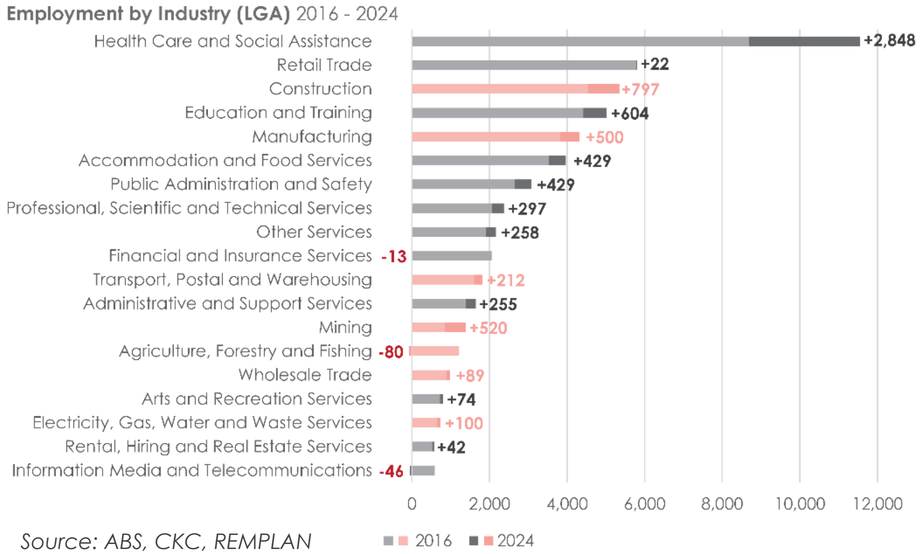
Employment within Greater Bendigo's industrial sector is expanding. Jobs across traditional industrial sectors grew by 2,140 workers in the period from 2016 to 2024. Jobs growth was led by construction, manufacturing and logistics employment. The City's manufacturing growth defies Statewide trends in which manufacturing represents a limited driver of employment growth. Industrial sectors accounted for a quarter of Greater Bendigo's total employment growth for the period.

Figure 9: Value of Industrial Building Approvals – Greater Bendigo (LGA) FY2019 - FY2024



Source: ABS, CKC

Figure 10: Employment Change by Industry– Greater Bendigo (LGA) 2016 -



Source: ABS, CKC, REMPLAN

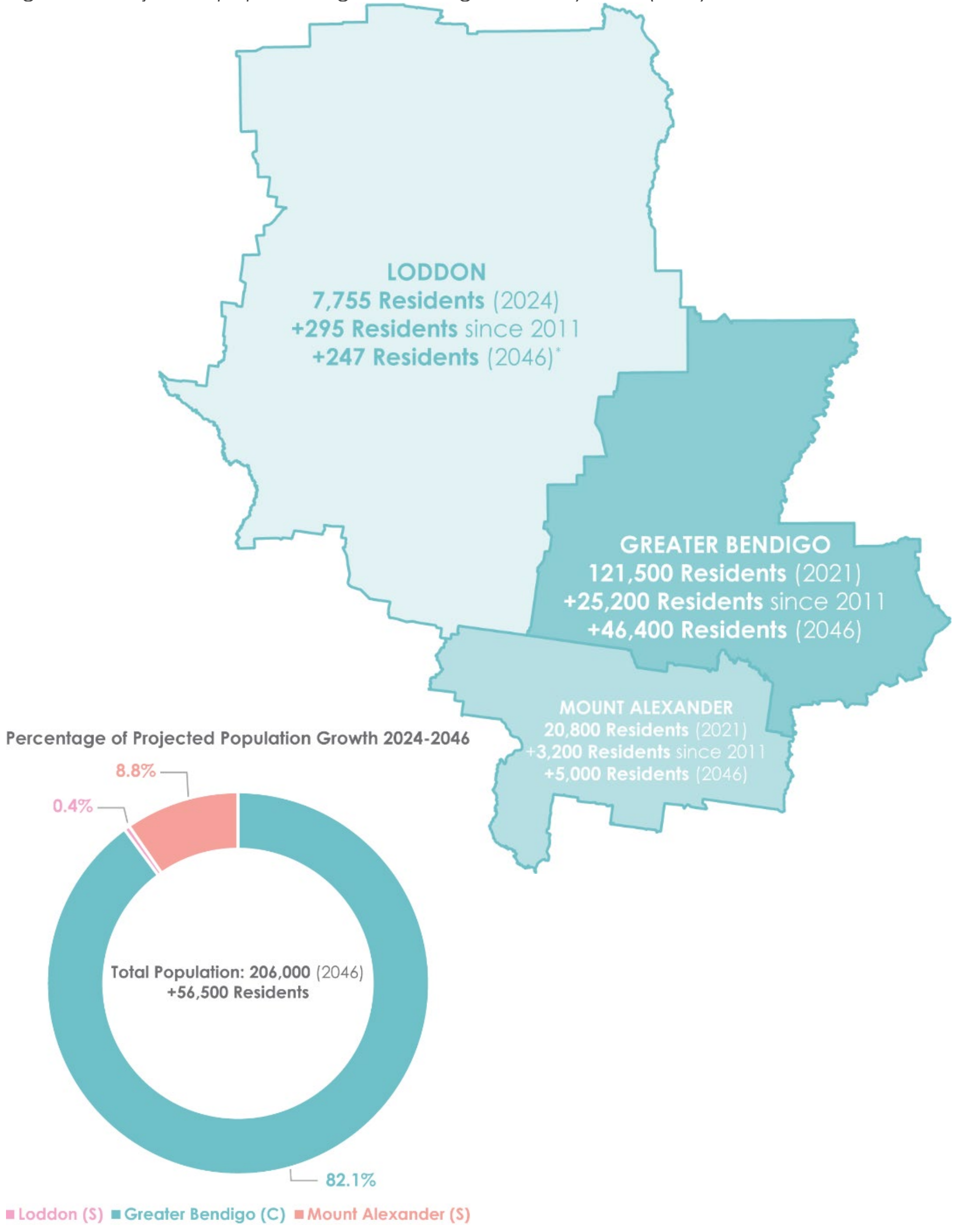
Drivers of Industrial Demand

Population and economic growth stimulated demand for industrial floor space. Population growth boosts trade volumes flowing through to demand for ecommerce, logistics, construction, consumer goods, energy, waste and recreation based industrial floor space. Concomitantly, economic growth stimulates demand for business inputs, economic floor space, transport, energy, and waste requirements and the foundational skills and services needed to enable all industries to function.

Population drivers of industrial floor space demand: The Study Area Region population has been growing on average by 2,100 new residents per annum over the 2011 to 2024 period. To 2046, the region is projected to sustain a similar scale of population growth, adding ~2,260 residents per annum (modeled on *id Forecast*). We note that the Greater Bendigo is the primary focus of the region's population growth and that since 2021 the Study Area Region's annual average population growth has declined to approximately 1,740 new residents per annum.

To 2046, the broader study area region is projected to support a population of over 205,000 residents (*forecast id/REMPLAN*). According to industry per capita industrial provision rates, regional population growth to 2046 has the potential to fuel the need for between 250,000 and 350,000 sqms of additional industrial floor space.

Figure 11: Projected population growth – Regional Study Area (LGA) 2024 - 2046



Source: CKC, Profile.id., REMPLAN, Victoria in Future 2023

Economic Drivers of industrial floor space demand:

Industrial floor space demand is also influenced by structural economic change, trade policy and domestic consumption trends. The following factors are likely to stimulate industrial floor space demand:

Deglobalisation: In the post Covid era, government and industry are conscious of supply chain vulnerability. The Federal Government is seeking to boost local economic resilience via its *Sovereign Manufacturing Capability Plan* which involves ensuring Australia retains productive capacity in key sectors and reducing reliance on complex supply chains. Greater Bendigo is well positioned to attract resulting reshoring and national capability investment in defence, advanced manufacturing, transport infrastructure and food processing.

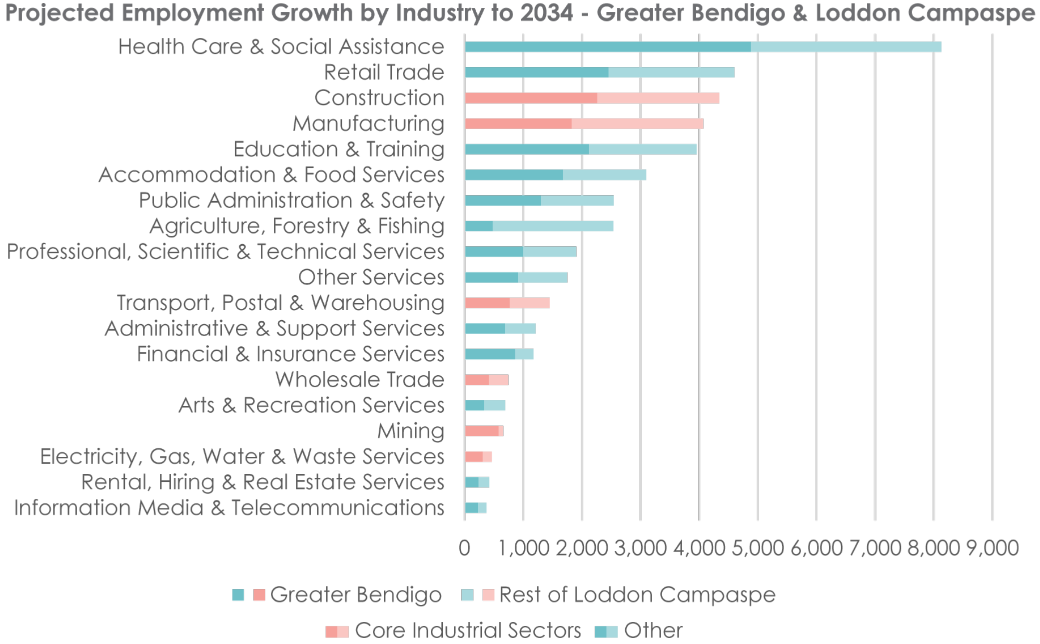
Continued productive investment: In line with manufacturing building approvals, the local manufacturing sector continues to invest in productive capacity and attract external investment. There is $45 million of committed investment in the manufacturing of the Bushmaster in 2024, $75 million of investment in Lactalis in Bendigo in 2024 and a further $290 million in plant and equipment investment according to Bendigo Manufacturing Group in 2023 (Bendigo Advertiser 15 September 2023).

Mining and Minerals: Victoria is subject to a pipeline of major gold, base metal and mineral sands mining projects, in proximity to Bendigo. Greater Bendigo's established mining sector is positioned to grow from resulting service and construction demand. The Goshcen rare earth mine is contracting Bendigo industry to support project delivery (Yellow Iron Fleet).

Online economy: Online commerce spurs demand for industrial floor space - fulfillment centres, logistics hubs and data centres. There is a direct correlation between digital sales and physical space requirements that results in tangible impacts on industrial land demand. We note that in the contemporary property market, industrial assets have become a preferred asset over retail and commercial assets primarily due to the confluence of continued data centre, ecommerce and associated logistical growth.

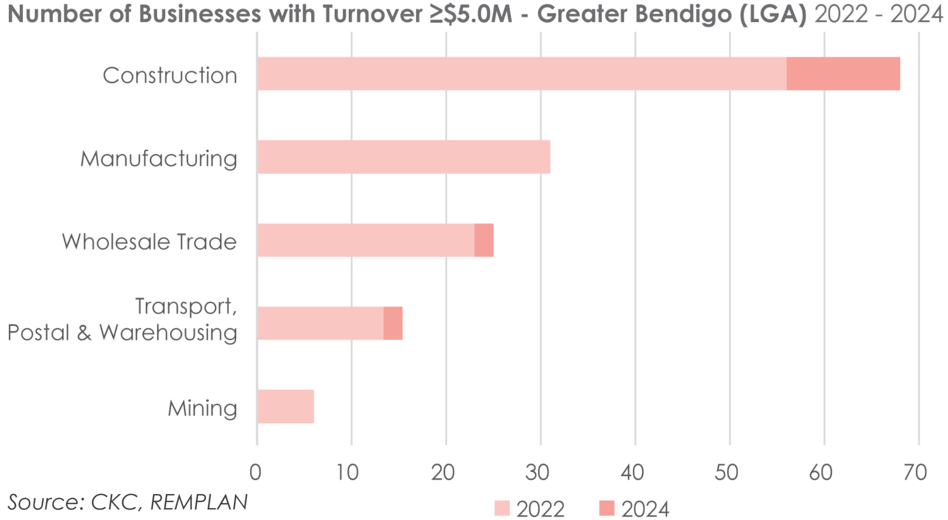
Industrial business: The number of industrial businesses with a turnover of more than $5 million per annum has been growing – in 2024, Greater Bendigo incorporated 144 such businesses including 64 enterprises that turnover more than $10 million per annum (Australian Bureau of Statistics Business Register).

Figure 12: Projected Employment Growth by Industry 2034 – Greater Bendigo & Loddon Campaspe



Source: CKC, Victorian Skills Authority

Figure 13: Number of Businesses with Turnover ≥$5.0M – Greater Bendigo (LGA) 2022 - 2024



Source: CKC, REMPLAN

Key insights - Investigation 1B:

- Based on ongoing land development trends, industrial floor space investment and a range of demographic and economic growth drivers, the region's industrial sector is positioned to continue to grow.
- Since 2019, the value of annual industrial building approvals within Greater Bendigo has consistently grown and is set to spike in 2024/2025.
- Average annual industrial land development since 2019 comprises 10.2 hectares per annum. This is an increase on 2019 annual industrial development as measured by Council of approximately 9 hectares per annum. A high proportion (73%) of Greater Bendigo's vacant industrial land is subject to pending or approved development permits.
- Industrial sector employment is also growing. The industrial sector added 2,140 workers jobs between 2016 and 2021.
- Population-induced demand, manufacturing, mining and logistics investment, construction industry expansion, defence investment, new energy and waste needs and the restructuring of the economy to support local supply chain capacity provide positive conditions to fuel future industrial expansion.

Investigation 1C: Industrial status of industrial land supply

Industry requires vacant and developable industrial land to grow. This investigation examines the availability of vacant industrial land within the study area including the overall quantity and form of vacant land and the resulting capacity of the study area to accommodate historic industrial land demand.

We note that the lack of industrial land supply was a persistent theme of the project engagement. Likewise, the need to boost industrial land supply is the prime objective of the *Greater Bendigo Industrial Land Development Strategy* which aims to deliver a 30-year pipeline of industrial land within the City.

In this context, the following investigation aims to establish Greater Bendigo's industrial land supply status in 2024 and the extent to which this validates previous Council and independent analysis.

4.1 Greater Bendigo Industrial Land Supply 2024

Greater Bendigo includes prime industrial precincts at East Bendigo, Kangaroo Flat, Epsom and Eaglehawk. East Bendigo is the City's largest precinct.

***Land availability*:**

At 2024, Greater Bendigo incorporated a total of 965 hectares of land in lots zoned for industrial uses. Of this near on 79% of zoned land was occupied by an active industrial use. A further 8.5% of land is identified as constrained for development primarily due to significant environmental constraints – Greater Bendigo includes zoned industrial land that comprises dense forest as well as zoned industrial land that comprises historic mining areas.

In 2024, Greater Bendigo incorporated 123.6 hectares of vacant industrial land across 108 lots.

Table 2: City of Greater Bendigo Industrial Land Status 2024

Status	Land Area (ha)	% of Land	# of Lots
Occupied	759.8	78.7%	1,093
Constrained	81.6	8.5%	18
Vacant	123.6	12.8%	108
Total	**964.9**		**1,219**

Source: CKC

Each of the City's main industrial precincts are either at or near full occupancy.

Table 3: City of Greater Bendigo – Occupancy by precinct 2024

Precinct	Occupancy %
Epsom	75.6%
East Bendigo	79.0%
Northwest Bendigo	91.8%
South Bendigo	92.0%

Source: CKC

Three quarters of the City's 123 hectares of vacant land is currently subject to an approved or pending planning permit process. Permitted land in previous land supply studies was classified as unavailable.

Table 4: City of Greater Bendigo – Lots subject to a development process 2024

Status	Land Area (ha)	% of Land	# of Lots
Vacant (no development process)	33.8	27.4%	42
Vacant (development process)	89.8	72.6%	66
Total	**123.6**		**108**

Source: CKC

Vacant Lot Supply

Greater Bendigo's 108 vacant industrial lots comprise an assortment of fragmented lots. Within these lots, there is no single land parcel that comprises a substantive industrial greenfield expansion area (over 50 hectares of contiguous serviced land).

There are 24 vacant lots greater than 5,000 sqms that provide theoretical capacity to support medium and larger format industrial spaces. Of these lots, 16 lots (66% are currently subject to a permit process). Near on 40% of lots are below 2,000 sqms.

Table 5: City of Greater Bendigo – Vacant Lots by Size & Status 2024

Lot Size Range	Permitted	Vacant	Total
0-0.2ha	30	11	**41**
0.2-0.5ha	21	17	**38**
0.5-1.0ha	4	6	**10**
1.0-5.0ha	5	7	**12**
≥5.0ha	6	1	**7**
Total	**66**	**42**	**108**

Source: CKC

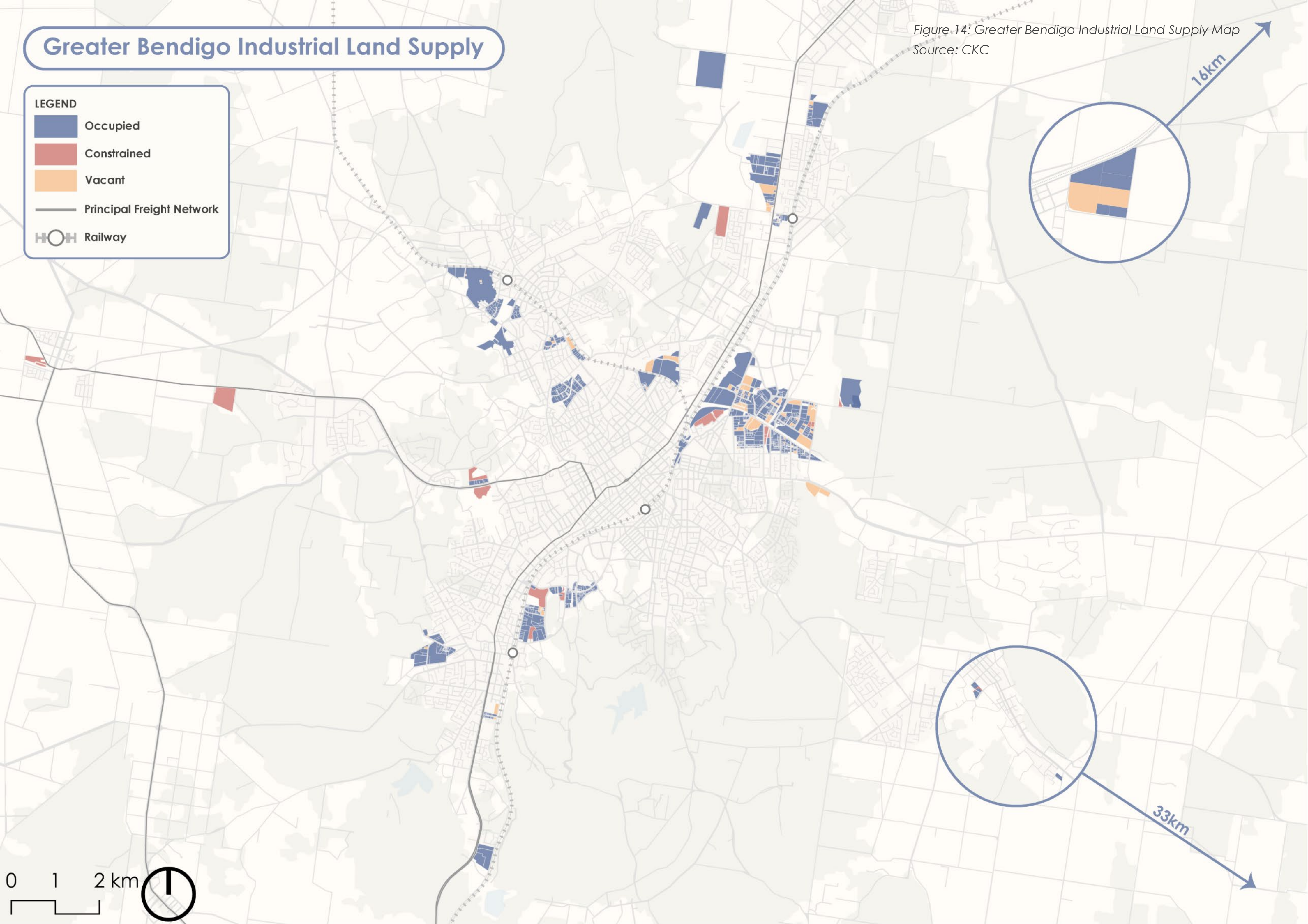


Figure 14: Greater Bendigo Industrial Land Supply Map
Source: CKC

East Bendigo Industrial Precinct

East Bendigo is the City's largest industrial precinct. The precinct accounts for 12% of municipal employment with 4,600 jobs and $2.5 Billion in output (11% of output REMPLAN). In 2024, the precinct is 80% occupied with an additional 2% of land considered to be constrained for development.

In 2024, the precinct comprises 51% of Greater Bendigo's industrial lots and approximately half of Greater Bendigo's vacant industrial land. Of the precinct's 67 hectares of vacant land, 53 hectares are currently subject to a permit process.

Table 6: East Bendigo – Industrial Land Status 2024

Status	Land Area (ha)	% of Land	# of Lots
Occupied	279.6	79.0%	543
Constrained	59.8	16.9%	61
Vacant	14.4	4.1%	27
Total	**353.8**		

Source: CKC

The East Bendigo precinct incorporates 76% of the Greater Bendigo's vacant unconstrained industrial lots. Of these, 82 lots, 70% are currently subject to a planning process.

There are 51 hectares of industrial lots in East Bendigo above one hectare in size, 70% of which are subject to a permit process.

Table 7: East Bendigo – Vacant Lots by Size 2024

Lot Size Range	Permitted	Vacant	Total
0-0.2ha	29	6	**35**
0.2-0.5ha	15	12	**27**
0.5-1.0ha	2	5	**7**
1.0-5.0ha	4	4	**8**
≥5.0ha	5	0	**5**
Total	**55**	**27**	**82**

Source: CKC

Mount Alexander Shire Industrial Land Supply

The Shire incorporates vacant industrial land supply totaling 17.1 ha, or 13% of zoned land.

Castlemaine is the Shire's prime industrial area. In 2023, there was a total of 10 hectares of vacant industrial land which comprised of 12 individual lots. These lots include a number of highly irregular shaped lots, in which the shape and size of the lot may restrict future development. Across the municipality, there are only 16 vacant industrial lots.

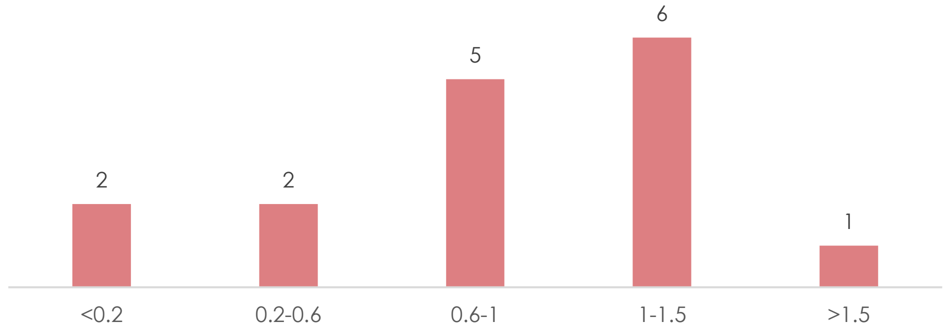
Table 8: Mount Alexander – Industrial Land Status by Zoning 2023

Zone	Occupied	Vacant	Vacant-Constrained	Total
IN1Z	79.4	13.9	13.7	106.9
IN3Z	15.4	3.2	1.3	19.9
Total Land Area (ha)	**94.8**	**17.1**	**15**	**126.8**

Source: CKC

In both Castlemaine and Bendigo, it is important to note that industrial areas are largely now enveloped by natural constraints and sensitive residential areas which reflect both the ongoing growth of these settlements and the historic siting of major industry within the settlement boundaries.

Figure 15: Vacant industrial lots by size (ha) – Mount Alexander Shire 2023



Source: CKC

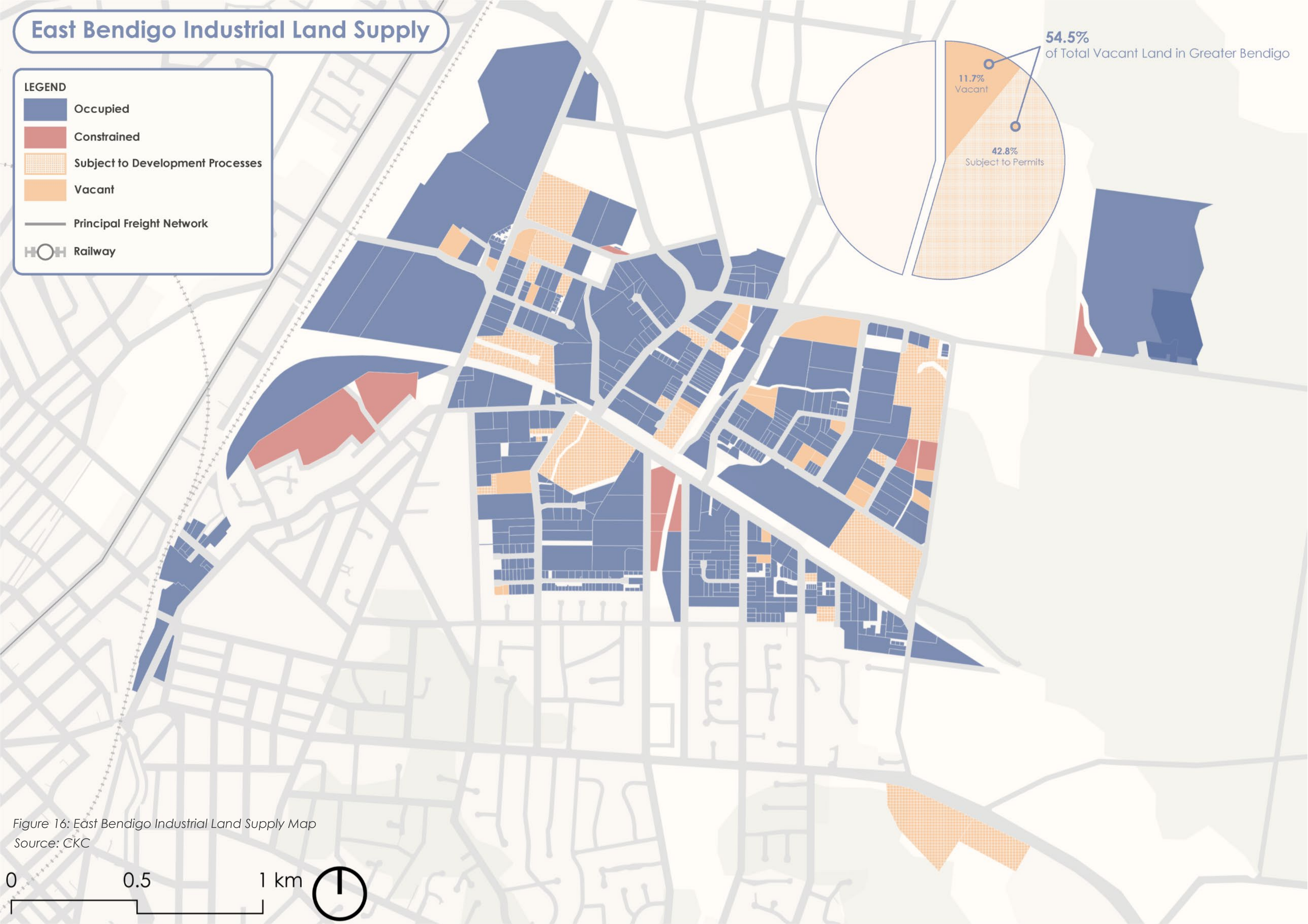


Figure 16: East Bendigo Industrial Land Supply Map
Source: CKC

4.2 Industrial Land Consumption 2019 - 2024

Since 2019, Greater Bendigo has seen a total of 61 hectares of industrial land developed at an average annual rate of 10.2 hectares per annum.

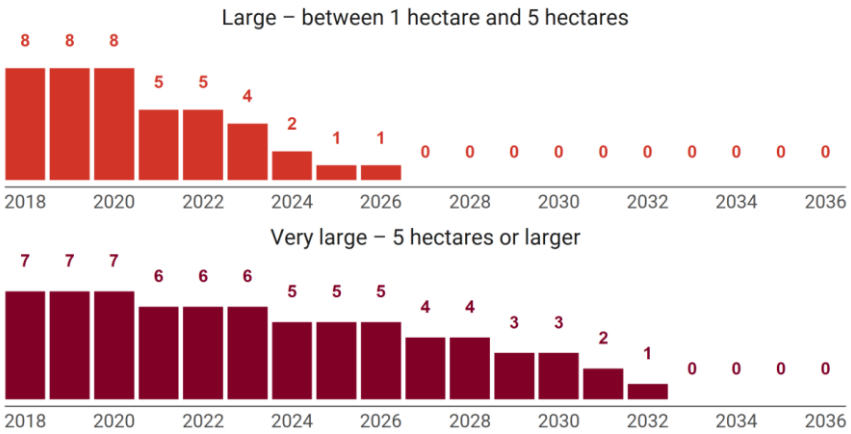
This is largely consistent with pre-2019 average annual development identified by City of Greater Bendigo Council of approximately 9 hectares per annum.

Industrial development experienced peaks in 2019 and 2021, with moderate levels of development from 2022-2024. Development over this period was fueled by the development of larger lots. Lots greater than one hectare in size, accounted for 66% of total land developed.

The supply of large lots is limited. As of 2024, Greater Bendigo incorporates approximately 19 vacant lots greater than one hectare in size, 11 of which are currently subject to development processes. As these lots are developed, it follows that the supply of larger developable will concurrently decline.

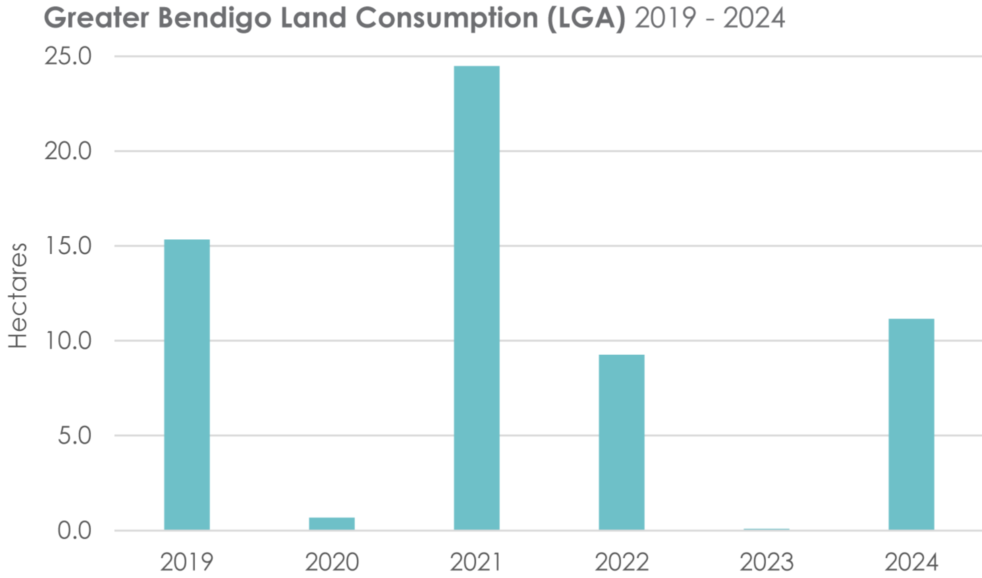
This is an outcome anticipated in the 2019 REMPLAN *Bendigo Industrial Land Review – Strategic Economic Inputs* which projected an ongoing decline in larger developable lots over the course of this decade (page 5).

Figure 18: CoGB Industrial Land Supply Projection by Lot Size - 2019



Source: REMPLAN

Figure 17: Greater Bendigo Industrial Land Consumption (LGA) 2019 - 2024



Source: CKC

Table 9: City of Greater Bendigo – Industrial Land Consumption 2019 – 2024

Year	Land Developed (Ha)	Lots Developed
2019	15.3	19
2020	0.7	1
2021	24.5	49
2022	9.3	25
2023	0.1	1
2024	11.2	27
Total	**61.0**	**122**

Table 10: City of Greater Bendigo – Industrial Land Consumption by Lot Size 2019 – 2024

Lot Size Range	Land Developed (Ha)	Lots Developed
0-0.2ha	5.2	64
0.2-0.5ha	7.6	28
0.5-1.0ha	7.9	17
1.0-5.0ha	23.2	11
≥5.0ha	17.1	2
Total	**61.0**	**122**

Source: CKC

Industrial Land Supply Outlook

As discussed, since 2019, 61 hectares of industrial land has been developed in Greater Bendigo over a 6-year period.

To investigate the municipality's industrial supply outlook, a land consumption scenario has been developed which assumes the continued average annual industrial development since 2019 of 10.2 hectares per annum. For the purpose of this scenario, all undeveloped lots, regardless of whether they are subject to development processes, have been classified as vacant.

The scenario projects that based on the City's current rate of industrial development, Greater Bendigo's industrial land supply is expected to be fully exhausted by mid-2036. We, however, note that:

(a) whilst Charter's projection estimates that Greater Bendigo incorporates over 10 years of industrial land supply, close to three quarters of identified vacant land is subject to development processes that may see accelerated development, particularly if the value of industrial land grows due to scarcity.

(b) there are limited numbers of larger lots to sustain historic growth. The decline in larger lots may see historic growth rates decline and the potential level of unmet demand increase.

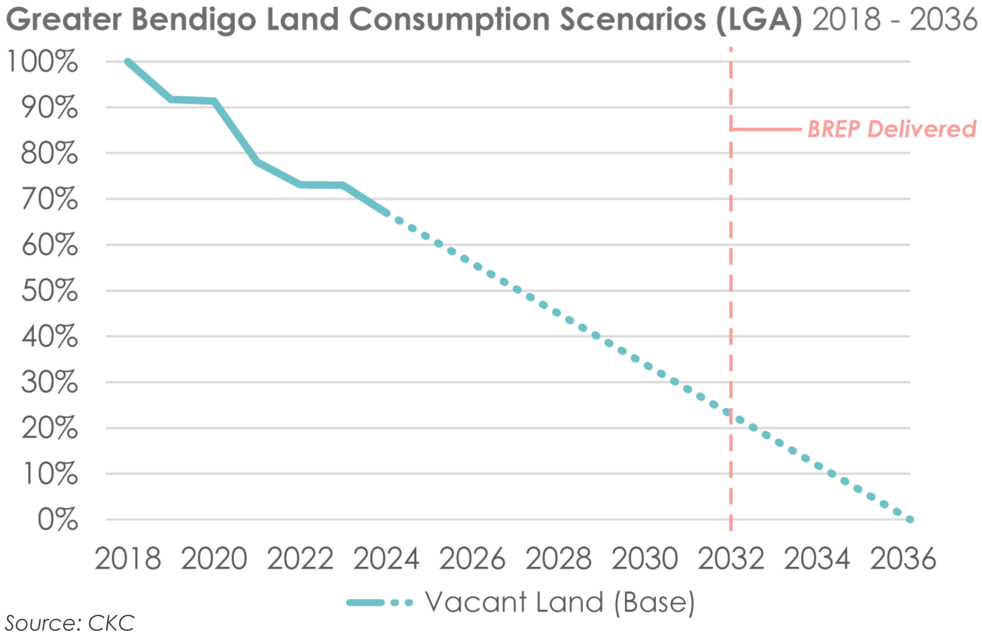
In 2019, REMPLAN projected industrial land supply exhaustion by 2032. Charter's projection broadly approximates to REMPLAN's as both anticipate significant land supply constraints in the early 2030s under current conditions. We note that in the course of industry and landholder engagement, a lack of floor space was consistently identified as a barrier to industry growth and further investment. REMPLAN identify ~ between 680 and 1,000 forgone jobs in the City by 2036 without new industrial land (REMPLAN 2019). Additionally, during the course of project engagement, government and industry identified the lack of large developable lots as a key barrier to inducing new industry to the City and a potential source of lost economic opportunity in the region.

Table 11: City of Greater Bendigo – Industrial Land Supply Consumption Rate & Projection

Status	
Subject to development processes	89.8
Vacant	33.8
Total Vacant Land Supply	**123.6**
Consumption Rate (p.a.)	**10.2**
Years of Supply	**12**

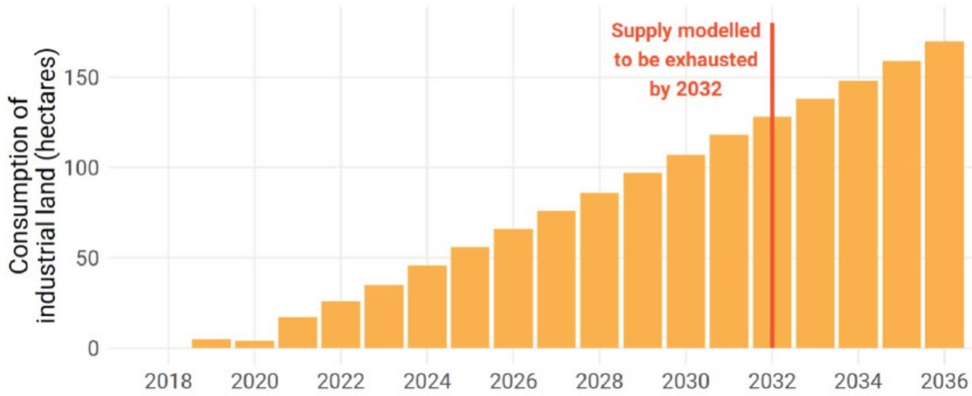
Source: CKC

Figure 20: Greater Bendigo Land Consumption Scenario (LGA) 2018 - 2036



Source: CKC

Figure 19: Greater Bendigo Land Consumption Modelling (REMPLAN)



Source: REMPLAN

Regional Perspective- Mount Alexander

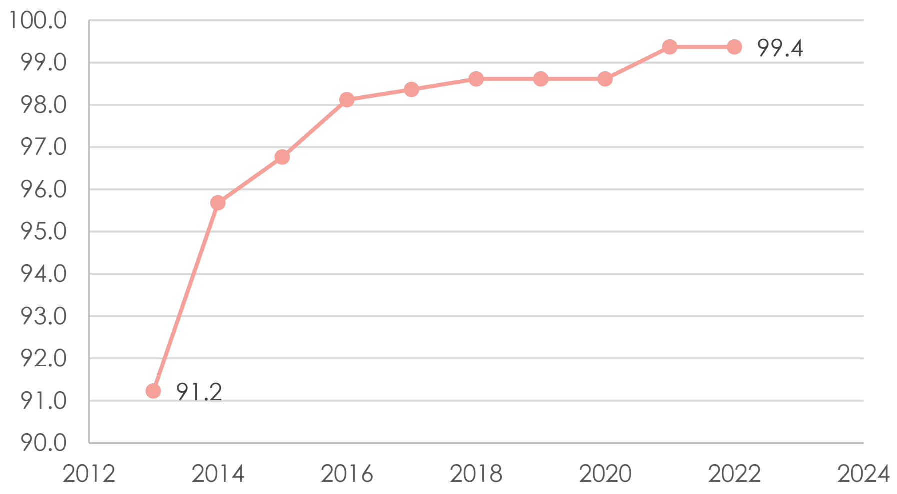
Within Mount Alexander Shire, average annual industrial land development over the 2012-2022 occurred at a rate of approximately 9,000 sqm per annum.

This development average encompasses a high development period between 2013 and 2016 when an average of 23,000 sqms of industrial land was developed per annum and the period between 2016 and today when industrial land development slowed to an average of 2,000 sqms per annum.

It is important to note that the post 2016 decline in industrial development coincides with ongoing population and housing growth in the Shire and, in turn, the likely underlying growth in the need for trades and construction services by the community. It is, therefore, highly unlikely that the need and demand for industrial floor space has declined since 2016. Rather a lack of available industrial land in the Shire's prime population and economic area in Castlemaine Township is more likely responsible for the decline in industrial development post 2016.

Accordingly, in the recent past the Shire is seeing increasing evidence of industrial uses in non-industrial land, such as farm land and residential land.

Figure 21: Industrial land consumption (Ha) - Mount Alexander (LGA) 2013-2022



Source: CKC

Key insights - Investigation 1C

- Greater Bendigo lacks land to sustain medium to long term industrial expansion. Both REMPLAN and Charter anticipate near exhaustion of industrial land supply options in the early 2030s.
- In 2024, Greater Bendigo incorporated an estimated 123.6 hectares of vacant industrial land comprising 12.8% of Greater Bendigo's industrial land and 108 vacant land parcels.
- Under post 2019 land development trends Greater Bendigo incorporates approximately 11 years of industrial land supply at 2024. Charter's land supply projections are consistent with REMPLAN's 2019 analysis which anticipates full theoretical industrial occupancy in the 2030s.
- There is a small and diminishing number of larger, greater than one-hectare developable sites to sustain ongoing industrial development within Greater Bendigo. Over two thirds of recent industrial land development was derived from the development of larger (1 hectare +) vacant lots. In 2024, there were 19 large (1 hectare +) vacant industrial lots within Greater Bendigo. Eleven of these lots are subject to a development processes.
- As larger vacant industrial sites become increasingly scarce industrial land development is likely to slow.
- The City's prime industrial area in East Bendigo is nearing full occupancy. The vast majority of developable lots in East Bendigo are currently subject to a permit process.
- The Shire of Mount Alexander incorporates 17.1 hectares of vacant industrial land. Within the Shire industrial development has slowed in the context of a growing population. Industrial uses are also increasingly prevalent in non-industrial areas.
- The analysis validates industry feedback obtained during engagement with stakeholders. Stakeholders consistently identified a lack of industrial land as an ongoing issue for the industrial sector and the region, particularly the shortage of larger lots which was identified as a constraint on the growth of existing business and a barrier to inducing new business to Greater Bendigo.

2 The merit of the BREP as an industrial greenfield location

Investigation focus:

This investigation examines the land, infrastructure and connectivity attributes of the BREP with the aim of assessing the BREP's relative suitability for economic investment. The investigation additionally reviews equivalent new arterial geographies, to establish work force and land development benchmarks for the BREP.

Investigation 2A: Industrial Land Supply Options

Investigation 2B: BREP Industrial Demand Outlook

Investigation 2C: BREP Industrial Land Capacity

Investigation 2A: Industrial Land Supply Options

The BREP was chosen as one of the few optimal locations able to support industrial expansion in Greater Bendigo. The following reviews the guiding logic for the selection of the BREP.

4.3 Industrial Land Supply Options

***Expansion of existing precincts**:* The project further reviewed the status of the City's established industrial precincts. As per previous 2019 analysis conducted by Charter Keck Cramer in 2019, the project concludes that topographic, residential and environmental constraints eliminate the potential for Greater Bendigo to expand its industrial footprint through the logical expansion of its existing industrial areas which would be the preferred industrial expansion option.

In addition, established industrial areas are limited in their capacity to accommodate higher impact industrial uses that generate noise, odor and entail substantive hours of operation given their (a) proximity to residential areas and environmentally sensitive locations and (b) 2024 Environmental Protection Authority threshold guidelines for industrial uses. In addition, the *Bendigo Freight Study 2017* identifies transport constraints for large and heavy vehicles in accessing established industrial areas. The logical expansion of existing industrial areas would therefore incur equivalent transport constraints.

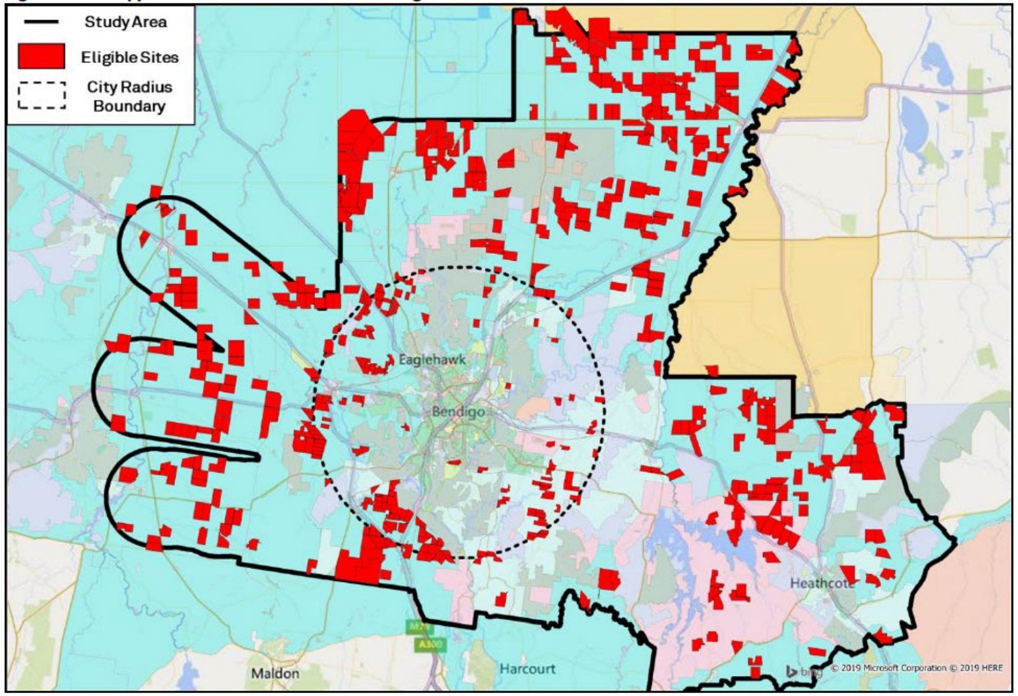
Greenfield industrial land: To resolve Greater Bendigo's industrial land shortage the City needs to transform non-industrial land into an industrial location.

The same situation is evident in Mount Alexander, in which the Shire's three core industrial precincts provide either no or limited logical expansion opportunities due to their historical settings nestled within Castlemaine's established settlement and due to a range of environmental and topographic constraints.

The City in 2019 commissioned Charter Keck Cramer to undertake a land search to identify industrial land expansion options. The search identified the site that would become the BREP.

The land search entailed two stages of analysis (1) the identification of potential parcels (2) the selection of optimal sites that merit further investigation by Greater Bendigo Council. This process is summarized as follows.

Figure 22: Identified Industrial Expansion Sites – Greater Bendigo (LGA) 2019

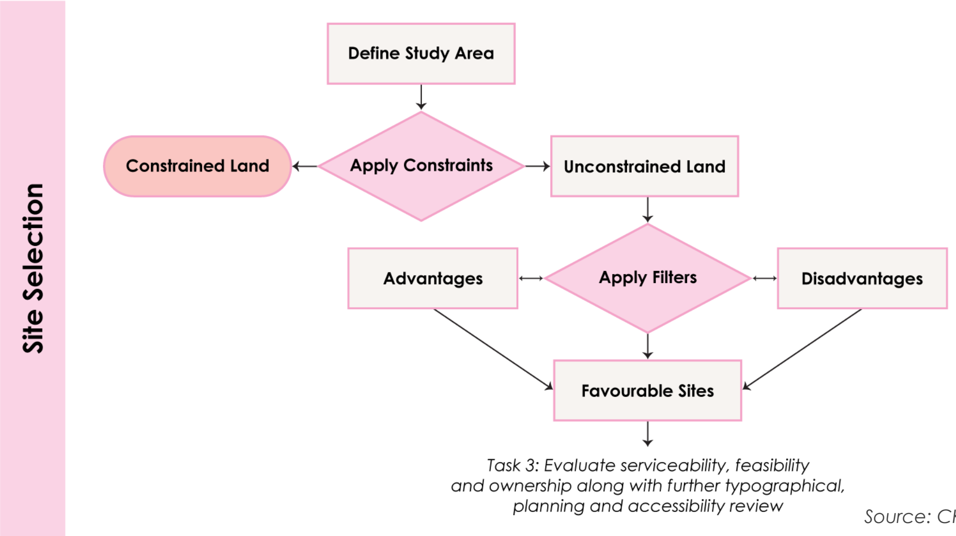


Source: CKC

Greater Bendigo Industrial Land Search: Stage 1 Parcel Identification

This stage entailed applying a series of land attribute tests to circa 80,000 land parcels to identify potential industrial parcels that warrant further review and testing.

Figure 23: Industrial land search site selection criteria



Source: CKC

Attribute tests entailed filtering lots that did not meet land size criteria and removing parcels subject to environmental and zoning constraints. The process resulted in the identification of 485 parcels.

Table 12: Industrial Land Search Attributes and Filters

Attribute	Filters
Parcel Size	Ensure appropriate land size by removing parcels that are: <30ha and within the 15 km of the city centre <100ha and greater than 15 kms from the city centre.
Lot Attributes	Remove constrained lots subject to the following zones and overlays: • Low Density Residential Zone, Mixed Use Zone, Township Zone, Residential Growth Zone, General Residential Zone, Neighbourhood Residential Zone, Rural Conservation Zone • Public Conservation and Resource Zone, Public Park and Recreation Zone, Public Use Zone • Any form of open space, significant natural habitat or recreational facility is inappropriate for future industrial uses • Urban Floodway Zone

Source: CKC

Greater Bendigo Industrial Land Search: Stage 2 Identification of investigation sites

The 485 parcels identified in stage 1 were clustered into 40 investigation sites. These sites were viewed and visited by Charter Keck Cramer staff and assessed in relation to their:

- Proximity to compatible commercial or industrial uses – sites in proximity to existing commercial/industrial uses were preferred
- Proximity to existing settlements – sites in proximity to population were preferred
- Topography – flat topography was preferred
- Water bodies and constraints – sites not incorporating major water bodies were preferred
- Aboriginal significance – sites that did not include areas of cultural sensitivity were preferred
- Environmental and bushfire constraints – sites that did not require bushfire buffers and that were not subject to environmental constraints were preferred
- Transport accessibility – sites with access to the Principal Freight network were preferred
- Lot shape – regularly shaped lots were preferred
- Existing uses – sites with minimal existing active uses were preferred

The resulting analysis identified five optimal sites within 15 kilometers of central Bendigo. This included sites in Ravenswood, Bagshot and Huntly, Shelbourne and the BREP site. These sites were recommended for further investigation and engagement by Greater Bendigo City Council.

BREP Industrial development potential advantages and disadvantages

The 2019 land search did not identify the BREP as the leading investigation area. No site was identified as the leading area. Rather the study identified a small collection of opportunity sites (five within 15 kilometres of central Bendigo) that based on perceived industrial development potential advantages warranted further verification and investigation.

Each of the identified opportunity sites incorporated substantial industrial development potential advantages and some disadvantages. In case of the future BREP site these were identified as:

Advantages

- Exemplary connectivity and capacity to support heavy vehicle movements. The intersection of Wimmera and Calder Alternative Highways was considered to provide an opportunity for integrated access points for heavy vehicles.
- Proximity to Marong township, without directly abutting residential uses.
- Land form - the cluster was considered to have the capacity to create a distinct precinct.
- Limited constraints - limited environmental constraints. Most of the land comprises open grass land with minimal bushfire risk. The other recommended sites were subject to potential bushfire constraints.
- Utilities – a review of water, power and sewer connections indicated potentially favourable infrastructure conditions.

Disadvantages:

- The study noted that some of the land will eventually be included in the Marong Township boundary. The future town boundary and its implications for the site and industrial uses at the time were not clear.
- Existing uses – there were a limited number of existing uses, including dwellings. These were recommended for further investigation.
- Ownership – multiple ownership was also identified as potential disadvantage.

The study observed that the BREP cluster:

> *The cluster is suited to logistics uses and manufacturing uses given its exemplary accessibility and potential to incorporate buffers. Location, accessibility and size are key advantages, while ownership and potential land use conflict with surrounding rural residential uses represent disadvantages.*

Post 2019 Actions

In general, a land search tends to result in the identification of a group of optimal sites which based on further investigation, landholder motivation, and infrastructure capacity result in options that may, nonetheless, still incorporate delivery constraints and barriers that require further action. In the case of the BREP, we note that regulatory and landholder actions have, since 2019, diminished locational disadvantages related to ownership and proximity to sensitive uses and strengthened the site's policy advantages and the status of its infrastructure planning. Specifically:

Industrial land use capability: The Marong Structure Plan 2024 sets out the future expansion of the township. Based on the township's future footprint, the BREP can provide land that meets recommended threshold distances for industrial uses as specified by the Environmental Protection Authority's *Separation Distance Guideline* 2024 for industrial uses.

Ownership: Following the acquisition of 155 hectares of land in the BREP by the City of Greater Bendigo in 2021, the BREP's largest landholder is supportive of industrial development. According to engagement results, a further two of BREP's five landholders are supportive of industrial development. Not all landholders are supportive.

Regulatory support: State and Local Government land use Planning Policy recognize the economic role of the BREP. This includes recognition of BREP in *Plan Victoria* and the adopted *Greater Bendigo Industrial Strategy 2024*. The *Victorian Economic Statement* commits government to achieving a ten year pipeline of industrial land, including in regional Victoria by unlocking land for jobs in greenfield locations.

Marong Business Park – the rejection of the compulsory acquisition of the business park due to land holder views fundamentally eliminated this land as a short term option for industrial expansion. We note that within the *Greater Bendigo Industrial Land Development Strategy 2024* BREP is prioritised above the Marong Business Park as a priority expansion area. The Strategy proposes to review the need for the Marong Business Park in the future.

Infrastructure – in 2022, State Government committed $6 million toward the infrastructure planning of the BREP. The full cost of infrastructure delivery is currently under review.

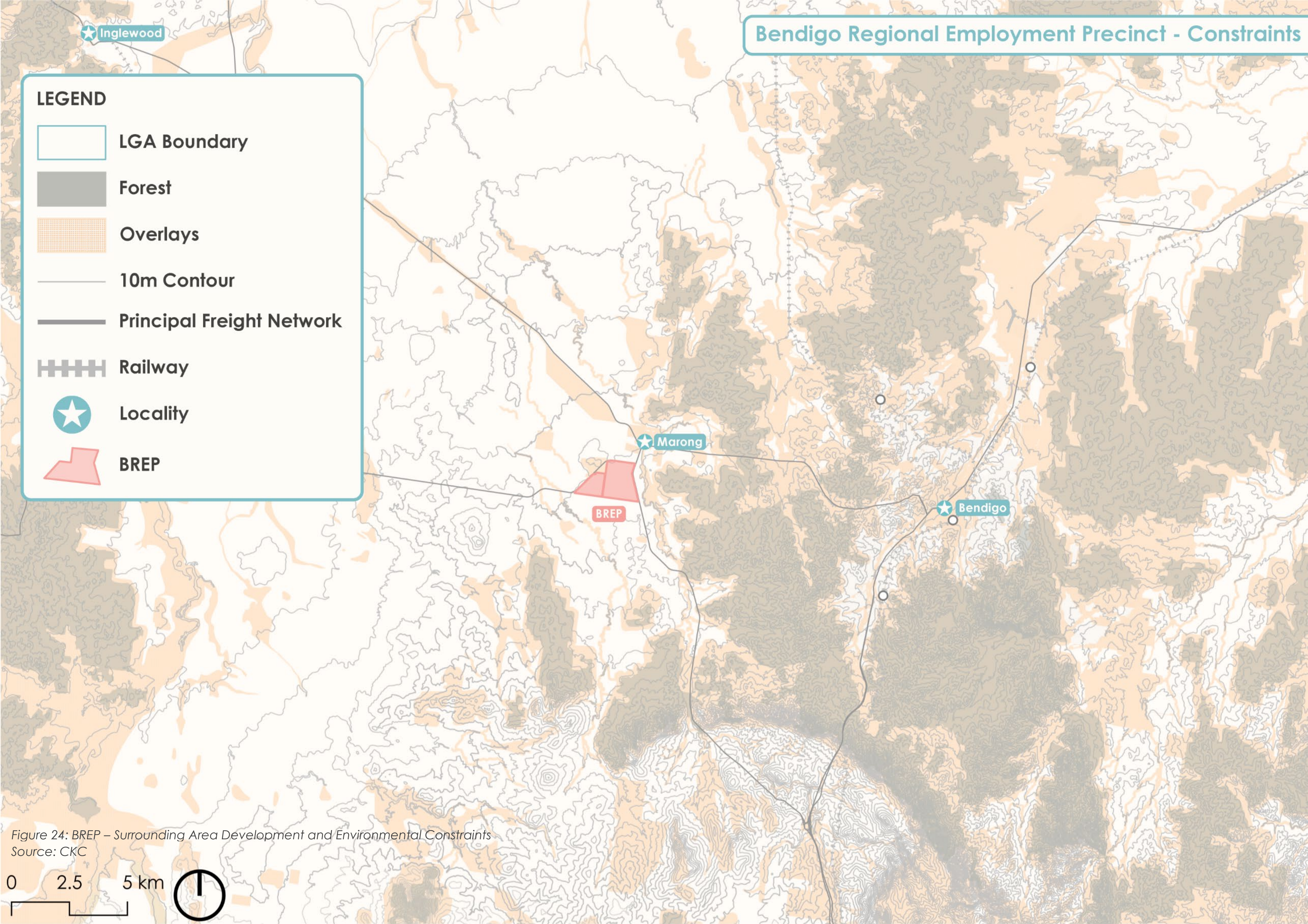


Figure 24: BREP – Surrounding Area Development and Environmental Constraints
Source: CKC

Mount Alexander

In 2023 and 2024, Charter investigated industrial land expansion options in Mount Alexander (see *April 2024 Shaping an Industrial Future Discussion Paper Mount Alexander Shire Council*). Like Greater Bendigo, the Shire lacks logical industrial expansion options. Due to environmental constraints and their proximity to sensitive uses, the Shire is unable to expand its established industrial precincts.

Like Greater Bendigo, to support industry growth, the Shire will need to investigate greenfield land options in locations not previously subject to industrial uses. This will inevitably require significant environmental, infrastructure and transport analysis, infrastructure investment and community and landholder engagement.

We note that the *Draft Mount Alexander Industrial Strategy 2025* acknowledges the potential of the BREP to support regional industrial land supply needs and commits the Shire to monitoring the delivery of the BREP and its implications for the Shire.

Key insights - Investigation 2A

- Greater Bendigo requires new land to sustain the expansion of its industrial sector.
- Greater Bendigo lacks options to expand the footprint of its existing industrial precincts – which would be a preferred expansion option. Due to environmental constraints and their proximity to sensitive uses, potentially vacant land parcels in proximity to Greater Bendigo existing industrial areas are unable to support the logical expansion of Greater Bendigo's existing industrial precincts.
- The expansion of Greater Bendigo's industrial footprint requires the redevelopment of a previously non-industrial area into a new industrial precinct.
- A land search in 2019 was undertaken to identify industrial land supply options. The land search applied a range of assessment criteria to identify industrial potential expansion sites that merit further investigation by Greater Bendigo Council.
- The investigation filtered over 80,000 parcels of which 485 parcels were subject to detailed assessment which resulted in the identification of 5 optimal investigation sites within 15 kilometres of central Bendigo that warranted further investigation. This included the site that would become the BREP.
- The BREP site was identified based on key advantages related to connectivity, potential size, land form, evidence of limited constraints and potential infrastructure connectivity. Multiple ownership, the site's relationship to a potentially expanded Marong town boundary and proximity to low density rural dwellings represented potential industrial development disadvantages.
- Since 2019, a number of the site's disadvantages have diminished. This is as result of (a) the purchase of land within the BREP by the City of Greater Bendigo which is now the site's largest land holder and (b) the resolution of Marong's town boundary. Based on the BREP's relationship to the town boundary, the BREP will be able to provide land that meets recommended threshold distances for industrial uses as specified by the Environmental Protection Authority's *Separation Distance Guideline* 2024.

- Since 2019 BREP’s site has accumulated further policy and infrastructure planning advantages as a result of Victorian Government infrastructure investigation funding commitments and the recognition of the BREP in State planning policy.
- Mount Alexander, like Greater Bendigo, lacks options to expand the footprint of its existing industrial precincts . Similarly, the Shire will need to investigate new greenfield land in locations not previously subject to industrial uses. This will inevitably require significant environmental, infrastructure and transport analysis, infrastructure investment and community and landholder engagement. The Shire has committed to investigating the BREP as a potential regional industrial development option.

Investigation 2B: BREP Industrial Demand Outlook

Greater Bendigo's industrial footprint has been expanding as reflected in average annual post 2019 industrial land development of approximately 10.2 hectares per annum which is consistent with pre 2019 development rates of 9 hectares per annum.

Population-induced demand, manufacturing, mining and logistics investment, construction industry expansion, defence investment, new energy and waste needs and the restructuring of the economy to support local supply chain capacity provide positive conditions to fuel future industrial expansion.

The outlook for industrial investment and expansion in Greater Bendigo is favourable. A key question is the extent to which the BREP incorporates the necessary industrial supply drivers to attract demand. This investigation explores the demand elasticity of the BREP as follows:

Investigation focus: The following investigates the extent to which the BREP is positioned to attract industrial demand and the potential scale of this demand. To do so, the investigation:

- ***examines the extent to which the BREP incorporates industrial supply intensity factors,***
- ***reviews the development experience of equivalent arterial greenfield locations,***
- ***models the demand outlook for the BREP.***

BREP investment attraction review

Industrial supply side intensity factors influence the extent to which industrial settings are attractive for investment.

Table 13: Supply Intensity Factors

Supply Intensity Factors	Attribute
Land Form	To what extent will the land require changes to land form to support drainage, access and circulation.
Operational Freedom	The extent to which the land provides land use freedom for industrial uses. Is the site subject to environmental constraints and is it in proximity to sensitive uses that may constrain future industrial uses?
Connectivity (highway, port and airport adjacent)	The extent to which the land provides connectivity to major transport networks and supports heavy vehicle movement.
Proximity to Population and Workforce	To what extent is land in proximity to population enabling optimization of e-commerce, construction and service delivery, without being so close to population as potentially constraining industrial operations. The extent which industry is able to access a sufficiently large workforce and whether the workforce is growing.
Industry Networks	Does the location incorporate commercial networks needed to support and foster supply chain resilience and diversity.
Access to Infrastructure	Does the location incorporate high-capacity water, energy, sewer and drainage infrastructure.

Source: CKC

The following assesses the BREP in relation to key supply side investment metrics.

Table 14: Supply Side Investment Metrics

Attribute	Observation	Rating
Land Form	The land is flat. The land will require earthworks to ensure the land form provides appropriate drainage and flood mitigation.	**Requires foundational investment**
Transport Connectivity	Direct highway access represents a locational advantage. Highway access provides logistical advantages to support regional supply chains, wholesaling and distribution. In equivalent locations this has included supermarket distribution centres, intermediate logistics hubs, construction supplies, direct to public outlets, and businesses that support agricultural supply chains, processing and services. North of the township of Kyneton there is no industrial area along the Calder Highway that enjoys direct highway access. Beyond Kyneton heavy vehicles are required to traverse urban areas in order to access industrial destinations. We note that in engaging with industry in 2019, direct access to the highway was identified as a key barrier and frustration identified by Bendigo businesses, and that connectivity to Melbourne and direct access to the Melbourne market were also identified as a key criteria for large tenants. The 2017 Bendigo Freight Study identified Bendigo as a major freight forwarding location in which goods are disaggregated to forward onwards. 208 businesses that took part in the study that, at the time, accounted for an average of 156,000 freight vehicle movements per month to and from Greater Bendigo. The Study identified a range of issues related to heavy vehicle movement in Bendigo's urban areas including verification of the use of B-doubles on undeclared roads. The study identifies the need for a transport hub that: • Provides access to key freight routes. • Minimises impact on residential amenity. • Can accommodate facilities and services required to attract and support relevant business operations (e.g. freight operators and allied businesses such as mechanics, re-fuelling stations, panel-beating, engineering, warehousing, equipment hire, R&D). The BREP would seem to address each of the above attributes. We note according to the Freight study findings businesses: *identified a "freight terminal/hub" as one of top three improvements that would make their freight operations more efficient and productive. Some operators saw it as an opportunity to relocate to a larger site, expand their operations and establish allied businesses, such as a truck wash. The proposed Marong Business Park was cited as one potential location. (page 43)*	**Investment advantage**

Attribute	Observation	Rating
Operational Freedom	Within the region, accessible established industrial land is largely enveloped by an urbanizing population and natural limitations. Accordingly, engagement with the business sector in Mount Alexander Shire and Greater Bendigo identified the need to address odour, noise, vibration, heavy vehicle impacts as ongoing and increasing constraints on the land use freedom of industrial operations. The scale of the BREP provides opportunity to deliver land that (a) can accommodate 1 kilometre and 500 metre buffer thresholds from sensitive uses (b) land that provides substantial storage and circulation space. We note that the Bendigo Freight Study 2017 identified the availability of land as a frustration and constraint on business. The Study observes: • Large vehicles are being parked in inappropriate locations because there are no designated facilities in urban Bendigo that offer sufficient space to safely accommodate large vehicles and provide 'load security'. • A grouping of freight operators expressed dissatisfaction with their current business location contending that their existing Bendigo site does not meet their current operational needs - "site is too small" was noted as the most common reason for their dissatisfaction with their current business location. Local agents contended that the BREP was its ability to provide ample storage, circulation and lay down space for industry while noting that industrial space in urban Bendigo was becoming increasingly dense. This is consistent with views expressed in the Freight Study. As noted in the land search analysis, the site is largely free of environmental constraints which, relative to the majority of locations throughout Bendigo, is relatively unique.	**Investment advantage**
Proximity to Population and Workforce	The BREP is positioned to attract workforce from surrounding population. Equivalent arterial industrial locations such as the Geelong Regional Employment Precinct (GRREP) in North Geelong and Logic in Wodonga draw over 85% of their workforce within a 25 kilometre radius. Assuming the same workforce gravity as the GRREP and Logic, by 2032 the BREP will be situated within a workforce catchment of potentially 69,000 people (based on VIF2023 projections). We note that in the engagement, Loddon economic development representatives observed that regional workforce will drive beyond 30 minutes for work which is validated in Mount Alexander, in which 23% of the Shire's workforce resides in Greater Bendigo.	**An emerging advantage**
Infrastructure	The site is in proximity to established infrastructure which will need to undergo expansion as the township expands. Previous industrial industry engagement has emphasised the need for high capacity and reliable power and sewer. The site will require foundational investment. We note equivalent greenfield industrial locations such as Ballarat West Employment Zone, Logic in Wodonga and the Geelong Ring Road Employment Precinct have each benefited from either direct or indirect foundational government infrastructure investment.	**Requires foundational investment**

Attribute	Observation	Rating
Industry networks	The region supports an established, substantial and diverse industrial sector. The region is well positioned to support the skill and service needs of new industry.	**Investment advantage**

Source: CKC

A further consideration is land price. The BREP industrial land is well positioned to provide a competitive industrial land price point relative to industrial land in Melbourne. Through the engagement, industry and government economic development representatives repeatedly identified the price of land in Metropolitan Melbourne as a critical issue and disbenefit for firms and investment. Equally, engagement respondents identified regional industrial land as providing a competitive price point that in some cases enabled firms to purchase land and develop new industrial facilities in regional settings at the same cost as purchasing industrial land in Metropolitan Melbourne alone.

Local agents emphasised the need for land in the BREP land to be price competitive to attract investment which, at 2025, they identified at between $200 to $250 per square metre. By 2032, this figure will have changed influenced by ongoing demand, and the impact of regional industrial land scarcity.

Regional Industrial Benchmarks

The BREP will function as an autonomous arterial greenfield industrial precinct in regional Victoria that:

- Is distant from sensitive population areas and other constraints
- provides high levels of land use autonomy due to its isolation
- supports direct heavy vehicle access to major motorways that are of national or state significance.

In the recent past Victoria has delivered new greenfield industrial precincts in regional locations including in Geelong (the Geelong Ring Road Employment Precinct (GRREP)) and Wodonga (Logic) and in Ballarat (the Ballarat West Employment Zone (BWEZ)).

Of these, the GRREP and Logic are classified as autonomous arterial greenfield industrial precincts. The GRREP in North Geelong emerged as a significant industrial precinct in 2014 following the delivery of the Geelong Ring Road. The GRREP provides heavy vehicle access to the Geelong Ring Road which forms part of the state significant Princes Freeway Network. The GRREP is set within an isolated context that satisfies buffer requirements for heavy industry. The GRREP is approximately 5 to 10 minute private vehicle journey from residential areas. The GRREP has developed in the context of significant industrial land supply constraints across the City of Geelong. As of 2025, the GRREP is the only greenfield industrial location in the City of Geelong.

Logic in Barnawartha North in the City of Wodonga is over a 15 minute journey to Wodonga's primary population centre. Logic is set in a stand alone isolated location along the Hume Highway enabling Logic to leverage from its isolation and Hume Highway accessibility to support heavy vehicle access to Australia's eastern coast.

The development experience of the GRREP and Logic – both autonomous greenfield arterial industrial precincts - provides a benchmark for:

- Demand gravity – the extent to which new autonomous arterial precincts have historically proven to attract industrial land demand.
- Workforce gravity – the extent to new autonomous arterial precincts have historically proven to attract workforce
- Long term land supply – the land supply impact of new precincts.

Figure 25: Geelong Ring Road Employment Precinct Land Development 2015 - 2024

Source: CKC, Google Earth

Demand Benchmark

Each of Victoria's recent regional greenfield industrial precincts (BWEZ, GRREP, Logic, and the Wimmera Intermodal Freight Terminal) have each successfully generated active industrial development markets and continue to attract investment leading to ongoing industry growth.

In the case of Logic and the GRREP:

- The GRREP incorporates 550 hectares of industrial land. Since 2015, the GRREP has experienced an annual land consumption rate of 8.3 hectares per annum, bringing its total occupied area to 220 hectares in 2024. Between 2015 – 2024, the GRREP accounted for approximately 54% of annual industrial land development across the City of Geelong (if the northern Geelong market is considered in isolation, this level of attraction would increase to over 90%).
- Logic incorporates 567 hectares of industrial 1 zoned land, of which 108 hectares have been developed since 2009. In this period, Logic absorbed 63% of Wodonga's total industrial development at a rate of 6.8 hectares per annum.

The BREP shares similar locational and connectivity attributes to Logic and the GRREP including heavy vehicle connectivity to national and state significant transport infrastructure, land form, market context and the provision of operational autonomy for industrial uses. The BREP is positioned to experience similar market dynamics to Logic and the GRREP. Shared locational and connectivity attributes include:

- Arterial access: The BREP will provide direct access to nationally significant road infrastructure for heavy vehicles.
- Land use isolation: The BREP will provide industrial land use autonomy by providing land that addresses threshold distance requirements for higher impact industrial uses.
- Market context: The BREP in alleviating regional industrial land supply constraints will serve an equivalent role to that of the GRREP which is the only greenfield industrial market within a rapidly growing Greater Geelong.

Since their inception, Logic and GRREP have on average attracted 58.6% of expressed industrial demand within their local markets. Logic and GRREP provide a demonstrated market share benchmark for new autonomous greenfield arterial industrial locations in Victoria's regions.

Assuming the BREP attracts a benchmark share of regional industrial demand, the BREP is projected to attract 6.5 hectares of annual average regional industrial land demand.

Projected Industrial Land Development and Workforce Attraction

When considering the extent of demand the BREP may attract we note:

- Each of Victoria's recent regional greenfield industrial precincts (the BWEZ, the GRREP, Logic, the Wimmera Intermodal Freight Terminal) have each successfully generated active industrial development markets and continue to attract investment leading to industry growth.
- Isolated arterial industrial locations at Logic and the GRREP have attracted high shares of municipal industrial land development.
- There is no example of an unsuccessful substantive new well-located greenfield industrial development precinct in Victoria.

The scale of demand that the BREP will attract is unclear, particularly at 2025, which is seven years from delivery. As discussed, the confluence of population growth, regional industrial land supply constraints, positive manufacturing, mining and construction growth drivers, the logical need for a regional arterial transport hub, and the absence competing industrial greenfield locations, provide favourable demand conditions for industrial growth.

Logic and the GRREP provide strong regional industrial demand gravity benchmarks for new greenfield arterial industrial estates. Logic is a similar distance from its main population centre in Wodonga/Albury (19 kms and 15 minutes) to that of BREP/Bendigo and competes for industrial demand within Wodonga/Albury. The GRREP is located within a more complex context that includes multiple markets in South Geelong and Western Melbourne. It nonetheless attracts a significant share of demand in a highly constrained market.

Together, Logic and the GRREP provide a benchmark for regional demand for new arterial industrial estates. Notably, each of Logic and the GRREP have now been operational for more than a decade, providing relatively established indicators for regional land demand in autonomous industrial estates.

4.4 The BREP Workforce Catchment

At 2021, Bendigo (SA4) incorporated an employment pool of approximately 80,000 workers. This workforce catchment is largely concentrated within Bendigo and Castlemaine town centres.

According to Charter analysis, the majority of GRREP and Logic workers travel from within a 25 kilometre catchment. Assuming, that the BREP achieves the same workforce gravity as the GRREP and Logic, the BREP will, by 2031, incorporate a core workforce catchment of approximately 69,000 workers. Specifically:

- In 2021, approximately 30,000-35,000 of the study region's workers lived within 15km of the BREP and a further 24,400 lived within 25km.
- Drawing on VIF 2023 projections, the SA4's workforce is likely to grow to a total of 98,000 workers by 2031, just prior to the anticipated establishment of the BREP. Of this workforce, 34,000-40,000 are set to reside within 15km of the BREP, with an additional 29,000 within 20-25km from the precinct's boundaries.

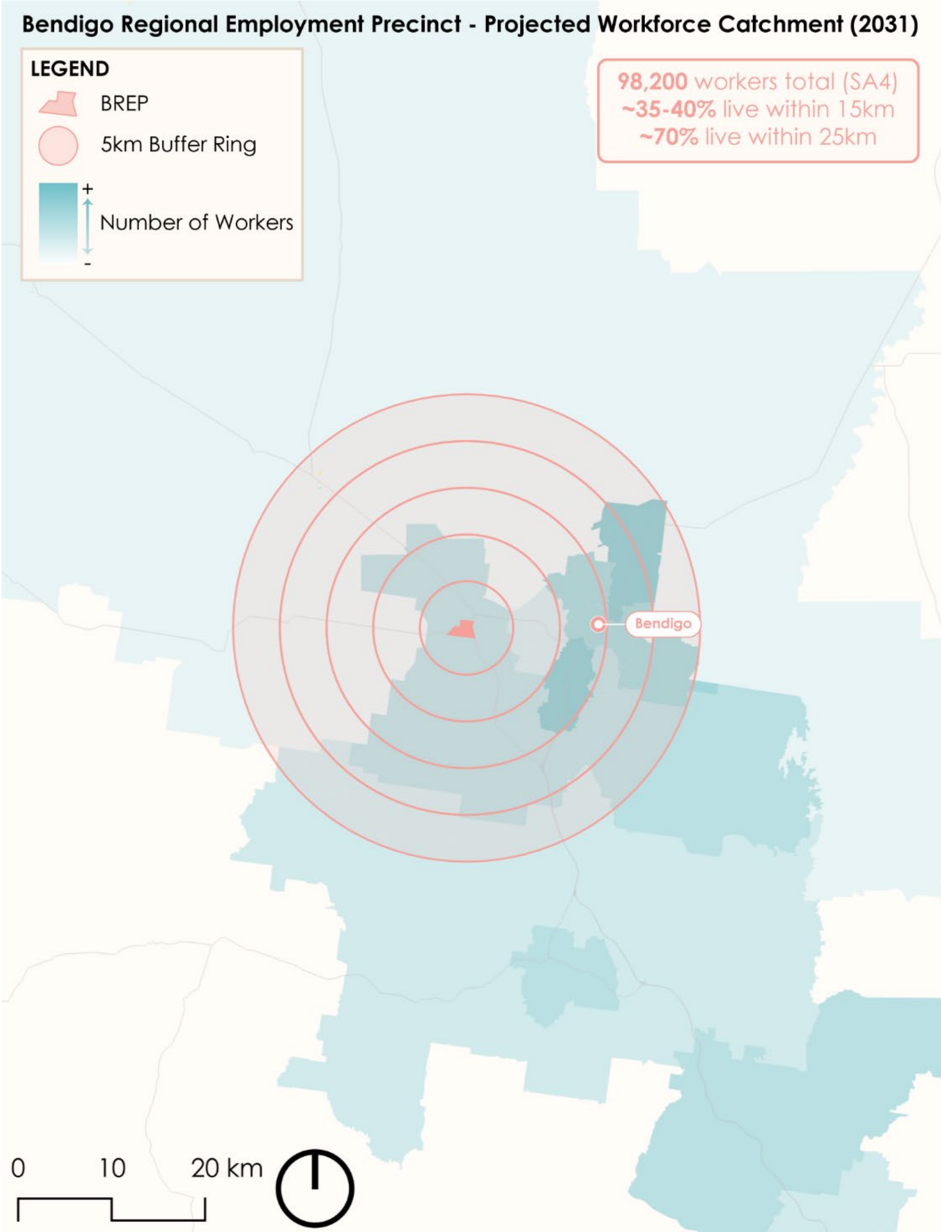
We also note that at 2021 over 2,200 Greater Bendigo residents worked in either the Shires of Loddon or Mount Alexander and over 1,700 workers that live in the Shires of Loddon or Mount Alexander worked in Greater Bendigo (ABS Census 2021).

Table 15: BREP Projected Workforce Catchment 2021 – 2036

Year	Workforce (15km)	Workforce (25km)
2021	***29,800 – 35,100***	***59,300***
2026	***31,900 – 37,600***	***64,300***
2031	***34,400 – 40,600***	***70,000***
2036	***36,900 – 43,600***	***75,300***

Source: ABS, CKC, VIF

Figure 26: BREP – Projected Workforce Catchment (2031)



Source: ABS, CKC, VIF

Workforce Projections

New industrial estates provide both development and workforce benchmarks.

Employment density in Logic at 2021 was approximately 8.9 workers per occupied hectare of industrial land; GRREP was approximately 13.3 workers per occupied hectare of industrial land while the East Bendigo industrial precinct supported 16.1 workers per occupied hectare of industrial land.

As will be discussed shortly, this report recommends that the land use structure of the BREP reflects the location's capacity to accommodate threshold buffer distances which at 2025 represents a significant competitive advantage for the site. For the purpose of this report, we have assumed:

- 206 hectares of developable industrial land
- areas able to accommodate high impact uses and required buffer will comprise large lots resulting in lower density employment consistent with lot and employment outcomes in the GRREP and Logic.
- all other areas will comprise a mixture of lots that support a mixture of industrial uses. The East Bendigo industrial area incorporates a mix of large-format lots, medium and small lots that support a wide array of enterprise providing a local employment benchmark for mixed lot industrial development.

Overall, at full occupancy based on the above assumptions the BREP is projected to accommodate approximately 2,800 workers at full development. We note that over time, employment densities are likely to increase such that this estimate represents a base case conservative estimate.

Employment densities in the benchmark industrial areas are incrementally increasing. Assuming that the precinct gradually intensifies its job density at a rate of 1% per annum over a thirty year period the precinct may ultimately achieve a job density of 18 jobs per hectare resulting in a workforce of 3,700 workers.

Table 16: BREP Precinct Areas – Projected Workforce and Job Density

Precinct Areas	Total Area (ha)	Projected Workforce	Job Density (Jobs/ha)
High Impact	75	666	8.9
Other Areas	131	2,106	16.1
Total	206	2,772	12.7

Source: CKC

Key insights - Investigation 2B

- The BREP incorporates a number of industrial investment attractors. These include direct connectivity to major arterial road infrastructure for heavy vehicles, capacity to provide industry with relatively unconstrained operational conditions, and the sites proximity to established industrial networks. The land is also subject to potential investment constraints including infrastructure constraints and land form constraints which will require foundational investment to deliver the BREP.
- Victoria incorporates a number of precedents for the successful delivery of greenfield industrial development precincts including at the Geelong Ring Road Employment Precinct (GRERP), Logic Wodonga and the Ballarat West Employment Zone.
- The BREP shares similar locational and connectivity attributes to Logic and the GRREP including heavy vehicle connectivity to national and state significant transport infrastructure, land form, market context and operational autonomy for industrial uses. The BREP is well positioned to experience similar market dynamics to Logic and the GRREP.
- Since their inception, Logic and the GRREP have on average attracted 58.6% of expressed industrial demand within their local markets. Logic and GRREP provide a demonstrated market share benchmark for new autonomous greenfield arterial industrial locations in Victoria's regions.
- Assuming the BREP attracts a benchmark share of regional industrial demand, the BREP is projected to attract 6.5 hectares of annual average regional industrial land demand.
- Logic and the GRREP attract the majority of their workforce from within a 25 kilometre catchment. Assuming the same workforce gravity at the BREP, by 2032 the BREP will incorporate a core workforce catchment of approximately 69,000 workers.
- At full occupancy, the BREP will support a workforce of 2,800 workers. This is based on existing workforce densities in equivalent industrial locations.

Investigation 2C: BREP Estimate Years of Supply

Investigation 2C seeks to determine the years of land supply incorporated by the BREP and whether the precinct will provide a long term solution that addresses industrial land supply needs.

At their commencement, each of Logic and the GRREP provided substantial industrial land supply. Based upon observed rates of consumption in Greater Geelong, the GRREP incorporated a total land supply of 47 years of land supply at its initial establishment as a precinct in 2010 (noting that the GRREP is set to exhaust its supply of smaller lots < 1 hectare lots within the next 8 to 10 years requiring Greater Geelong Council to deliver new land supply options). In Wodonga, Logic incorporated a total land supply of 88 years from its commencement in 2009.[2]

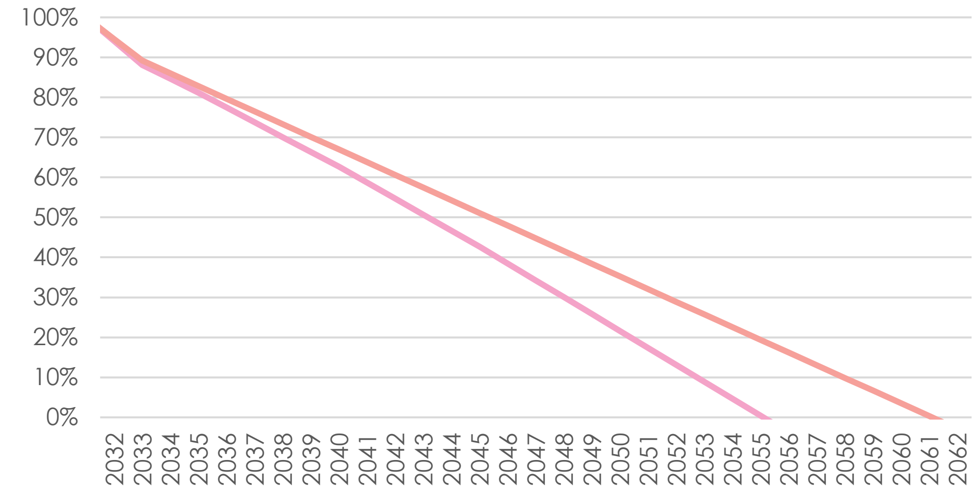
The following models the years of potential supply afforded by the BREP. Across both land supply scenarios, Charter assumes a net developable area of 206 hectares reflecting the assumed impact of drainage systems and roads on the land available for industrial development in the precinct.

Base Case Land Supply:

The base case assumes that the BREP will commence by attracting a significant share of industrial demand replicating the initial stages of both the GRREP and Logic which attracted a spike in demand at their commencement. The model assumes an initial 2-year period that will see a rate of 11.2 hectares of land developed per annum representing the totality of regional demand for that period. We note, each of Logic and GRREP attracted significant initial demand at their commencement.

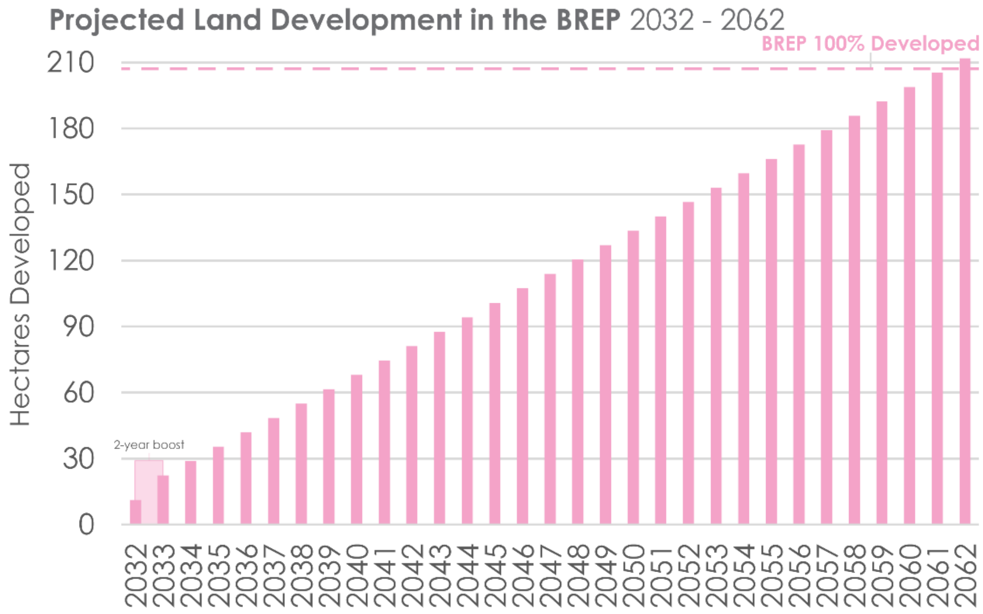
From 2034 onwards, the base case scenario adopts the regional industrial demand benchmark, in which the BREP attracts 58.6% of regional industrial land demand resulting in annual average consumption of 6.5 hectares per annum. Under these conditions, the BREP is projected to provide land supply for approximately 30 years to 2062.

Figure 27: Projected BREP Land Supply (%) Consumption Scenarios 2032 - 2062



Source: CKC

Figure 28: Projected BREP Land Development in the BREP (Base) 2032 – 2062



Source: CKC

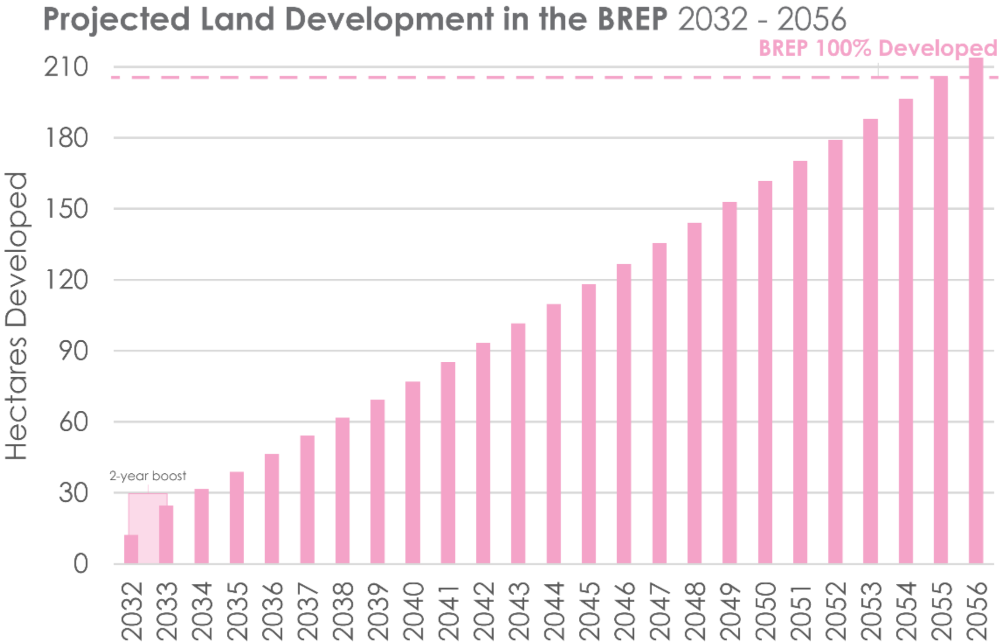
[2] Average annual consumption rates observed in the GRREP and Logic from their commencement to 2024 have been used to estimate the years of supply at their commencement.

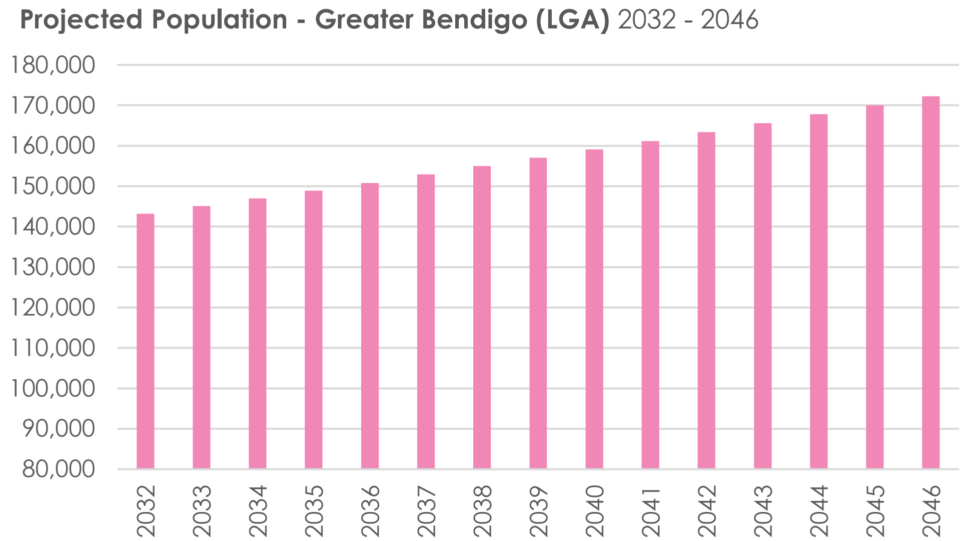
Per Capita Case:
This scenario models industrial land demand based on a per capita method.

As of 2024, Greater Bendigo was home to 125,470 residents having grown since 2019 by 7,955 residents. In this time, the City's industrial land foot print grew at a per capita rate of 64 sqms per new residents. As the City's population grows industrial land and floor space demand will likewise grow according to the needs of a larger population. The model assumes Greater Bendigo will achieve a projected population of 172,200 by 2046 (*forecast id*) and continue to grow thereafter at the average annual growth rate projected between 2026 and 2046 (approximately 2,100 net additional new residents per annum)[3].

Under this scenario, population growth generates continued annual industrial land demand of which the BREP attracts a 58.6% share of demand as per the benchmark. Following the initial 2-year commencement period (as per the base case), the BREP's industrial land development rate averages 8 hectares per annum until the BREP is fully developed.

Figure 29: Projected Land Development in the BREP (Per Capita) 2032 - 2056





Source: CKC

[3] The projected annual population growth is based on VIF 2023 growth to 2036 and Forecast id projected growth to 2046 as at October 2025. In both projections population growth estimates vary on a 5 year basis. For the purposes of modelling Charter has applied the average growth rate over the period.

Key Insights

The aspirations of *The Greater Bendigo Industrial Land Development Strategy 2024* anticipate the need for 30 years of industrial land supply. According to the above modelling the BREP will provide between 24 and 30 years of industrial land supply.

There are a variety of plausible conditions in which the estimated years of land supply delivered by BREP may inflate or decline. Specifically:

(a) if the net developable area declined, years of supply would also decline. The above assumes 206 hectares of net developable area. The need for additional drainage and or road space would see a reduction in net developable area and, in turn, the overall years of supply. A net developable area of 180 hectares would result in a decline of 3 to 4 years of supply.

(b) if the BREP attracts a higher rate of regional demand years of supply will also decline. For instance, if the precinct were to attract 75% of average annual regional demand, the precinct would be nearing capacity in the early 2050s. This is realistic given regional supply constraints and a lack of competitive markets.

(c) if the BREP were to attract a lower share of regional demand this would extend the years of estimated supply. A 45% share of supply, for instance, would extend the longevity of the BREP to 2070 equating to 39 years of supply.

Table 17: BREP Projected Land Supply Summary

BREP Projected Land Supply	
Vacant industrial zoned land supply (ha)	**206**
Base Case	
Annual average consumption rate (ha) (2032-2033)	11.2
Annual average consumption rate (ha) (2034-onwards)	6.5
Period of land availability (yrs)	**30**
Per Capita Case	
Annual average consumption rate (ha) (2032-2033)	11.2
Annual average consumption rate (ha) (2034-onwards)	8.0
Period of land availability (yrs)	**24**

Source: CKC

The BREP and Victorian Planning Provisions (Clause 17.03-1S)

Clause 17.03-1S - Industrial Land Supply of the Victorian Planning Provisions details industrial land supply policy directions across the State.

Accordingly, planning authorities are directed to "provide an adequate supply of industrial land in appropriate locations including sufficient stocks of large sites for strategic investment." Additionally, authorities are directed to identify accessible industrial land supply that can accommodate industrial buffer requirements.

In light of the analysis detailed in this report, the delivery of the BREP will contribute to the achievement of Clause 17.03-1S via the following:

- **Land Supply**: the BREP provides for a projected 24–30 years of industrial land capacity.
- **Investment**: the BREP will deliver large industrial sites that incorporate the potential to induce and accommodate strategic and complex industrial investment.
- **Accessibility**: the BREP delivers new industrial land with direct access to the Calder and Wimmera Highways as well as the proposed Marong Western Freight Corridor. Additionally, the BREP is accessible to the region's workforce.
- **Buffer Distances**: the BREP includes land that can theoretically accommodate the requirements of the *Environmental Protection Authority 2024 Separation Distance Guidelines*, including land that is 1 kilometre from existing and proposed sensitive uses.

3 The optimal planning of the BREP

Investigation focus:

This investigation examines the optimal land configuration of the BREP. The investigation draws from the above research to provide recommendations in relation to the optimal form of the BREP to induce investment.

Arterial Industrial Estates Overview:

Arterial industrial precincts are flat/non-hierarchical locations. Benchmark estates do not promote a central location or priority node. Each element of the precinct is subject to the same uniform priority.

These precincts are generally low-density environments which reflect the space needs of occupants. This results in large distances between lots. Metropolitan contemporary industrial estates that include urban service locations include more dense areas that provide a shorter rhythm between lots and uses, that in some estates provide higher levels of formal pedestrian amenity.

Arterial industrial precincts leverage from access to high volume roads and accessibility. The flexibility of the reformed Industrial zones provides for a wide range of consumer uses in the Industrial 1 and 3 Zones that result in these areas attracting higher levels of visitation than traditional industrial areas. It follows that new estates planning subject to the reformed Industrial 1 Zone should anticipate higher levels of visitation in their urban form.

We note that industrial areas are almost exclusively accessed by private vehicles, provide limited public transport accessibility and typically poor pedestrian amenity as most of these areas were not planned to support high levels of visitation as has occurred since the reform of the Industrial 1 Zone. Newer estates should anticipate urban service uses within an industrial context and plan their urban form accordingly.

Industrial estates that incorporate office business parks and denser consumer areas achieve higher employment densities.

Economic Land Use Recommendations

Large lots and capacity to accommodate buffers are critical competitive advantages for the BREP.

The proposed economic development framework reflects (a) the role of the BREP in meeting an array of unmet demand by smaller and larger format industry (b) the capacity of the BREP to accommodate land use thresholds for industrial uses (c) the assumption that the BREP will ultimately attract consumer oriented uses.

In planning the BREP Charter thereby recommends the following:

- Threshold Areas: In areas in which land can accommodate EPA threshold distances, support the development of large format industry, 24-hour operations, heavy vehicle movement and higher impact uses. Discourage small lot subdivision in these locations.
- High Road Access and Visibility Areas: In areas with high road access and visibility, support uses that will attract consumer visitation, particularly locations that are unable to achieve threshold distance requirements. Ensure these areas are planned to anticipate consumer oriented uses as per contemporary industrial environments. This includes adequate pedestrian amenity and circulation space.
- Business Parks: Encourage a variety of lot sizes and floor space outcomes in new business parks. Ensure business parks that will attract consumer visitation provide adequate pedestrian amenity and car parking.

CASE STUDIES

03

CASE STUDY

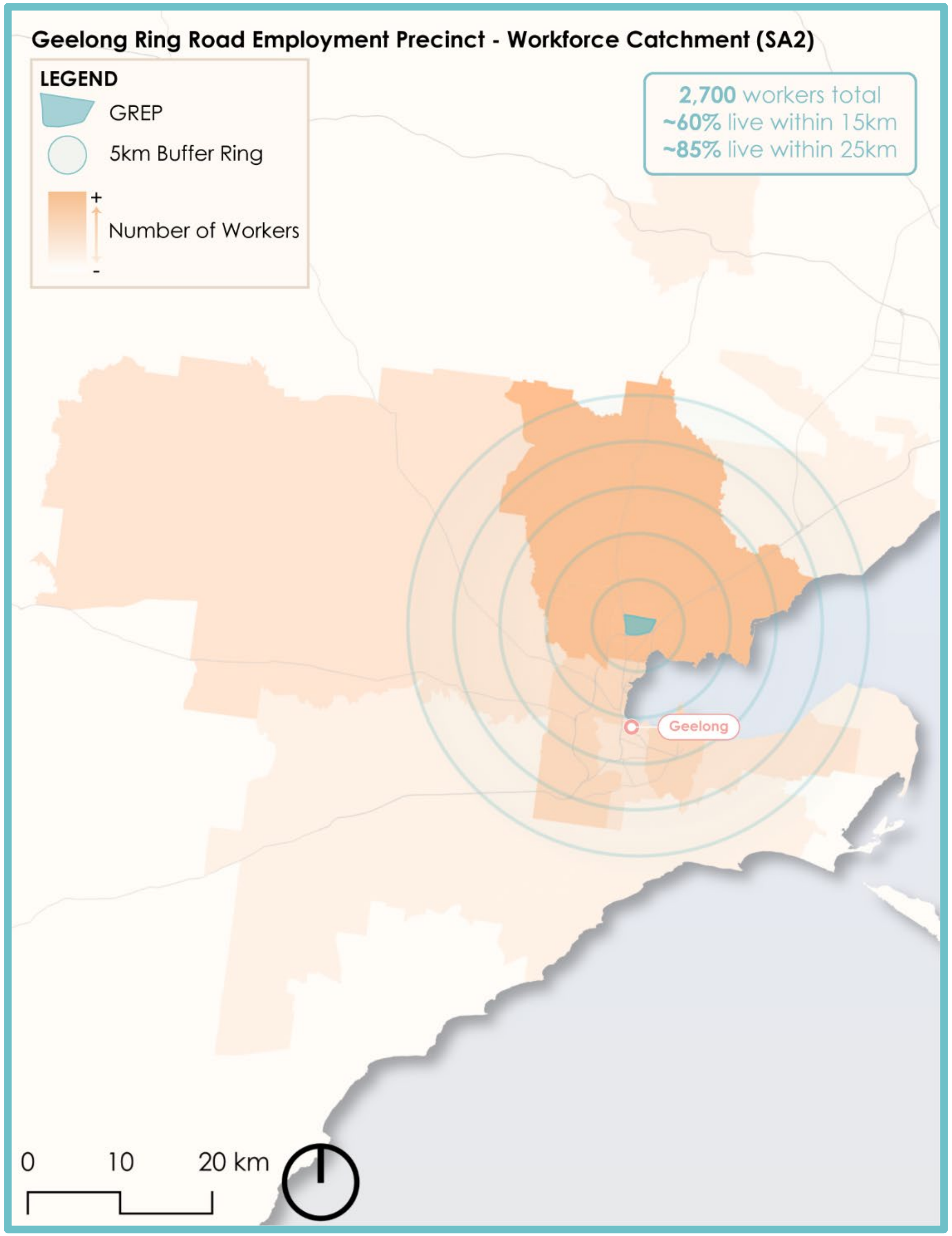
Established in 2010, the Geelong Ring Road Employment Precinct (GRREP) is a major industrial precinct 10km north of the Geelong CBD, with the designated purpose of accommodating industrial development for Greater Geelong's heavy industry

Following its initial establishment in 2010, the GRREP has grown to incorporate close to 60 traditional industrial businesses, employing 2,700 workers. Approximately 60% of the GRREP's employment base live within 15km of the precinct, with a further 25% located within 25km of the GRREP's boundary.

Figure 30: Geelong Ring Road Employment Precinct

Source: Real Commercial

Figure 31: Geelong Ring Road Employment Precinct – Workforce Catchment (SA2)



Source: ABS, CKC

CASE STUDY

The GRREP incorporates approximately 550 hectares of zoned industrial land. In line with its designation as a major precinct for heavy industry, the GRREP is predominately zoned as industrial 2 land.

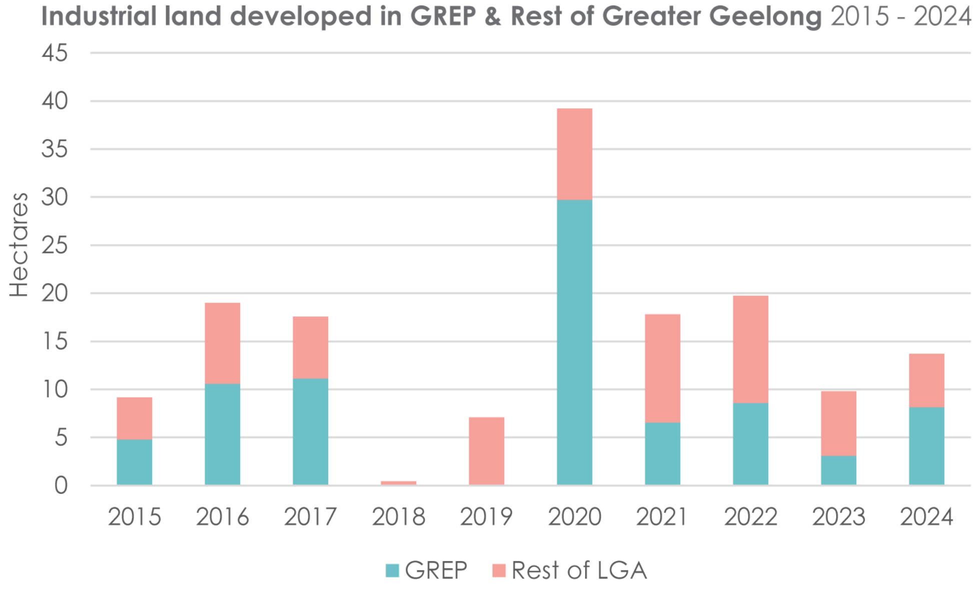
The development of the GRREP as a distinct precinct began in 2015, with an average annual land consumption rate of 8.3 hectares per annum, bringing its total occupied area to 220 hectares. During the period between 2015 and 2024, the GRREP absorbed close to 54% of the City of Greater Geelong's total industrial development. Notably, the GRREP saw a significant acceleration in development from 2020 onwards, with the average annual rate for the following 5-year period reaching 11.2 hectares per annum. Based upon occupied land at 2025, the GRREP's current employment density is approximately 12.2 jobs per hectare.

In the context of Greater Bendigo, if the BREP was to absorb a similar proportion of future demand, the average annual rate of consumption would likely range between 5 and 6.3 hectares per annum, with an initial boost to consumption expected following its establishment.

As of 2025, Greater Geelong's industrial land demand is overwhelmingly concentrated in the GRREP. The BREP incorporates minimum lot size requirements that most likely constrain the volume of land demand.

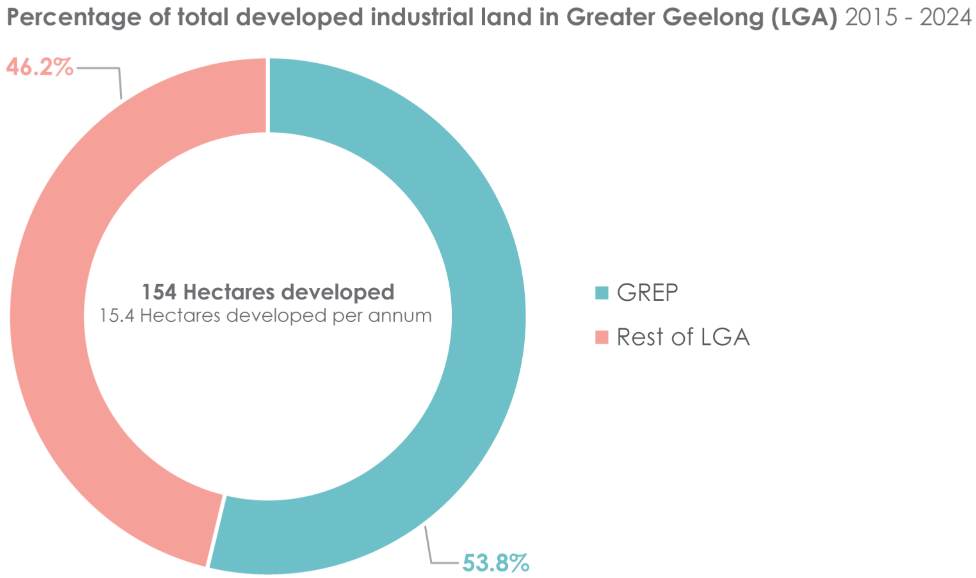
Based upon observed rates of consumption, the GRREP incorporates a total of land supply of 47 years from its initial commencement as a precinct.

Figure 33: Industrial land developed in GRREP & Rest of Greater Geelong 2015 - 2024



Source: CKC – City of Greater Geelong Industrial Land Supply Review 2025

Figure 32: Percentage of developed industrial land in Greater Geelong (LGA) 2015 - 2024



Source: CKC – City of Greater Geelong Industrial Land Supply Review 2025

CASE STUDY

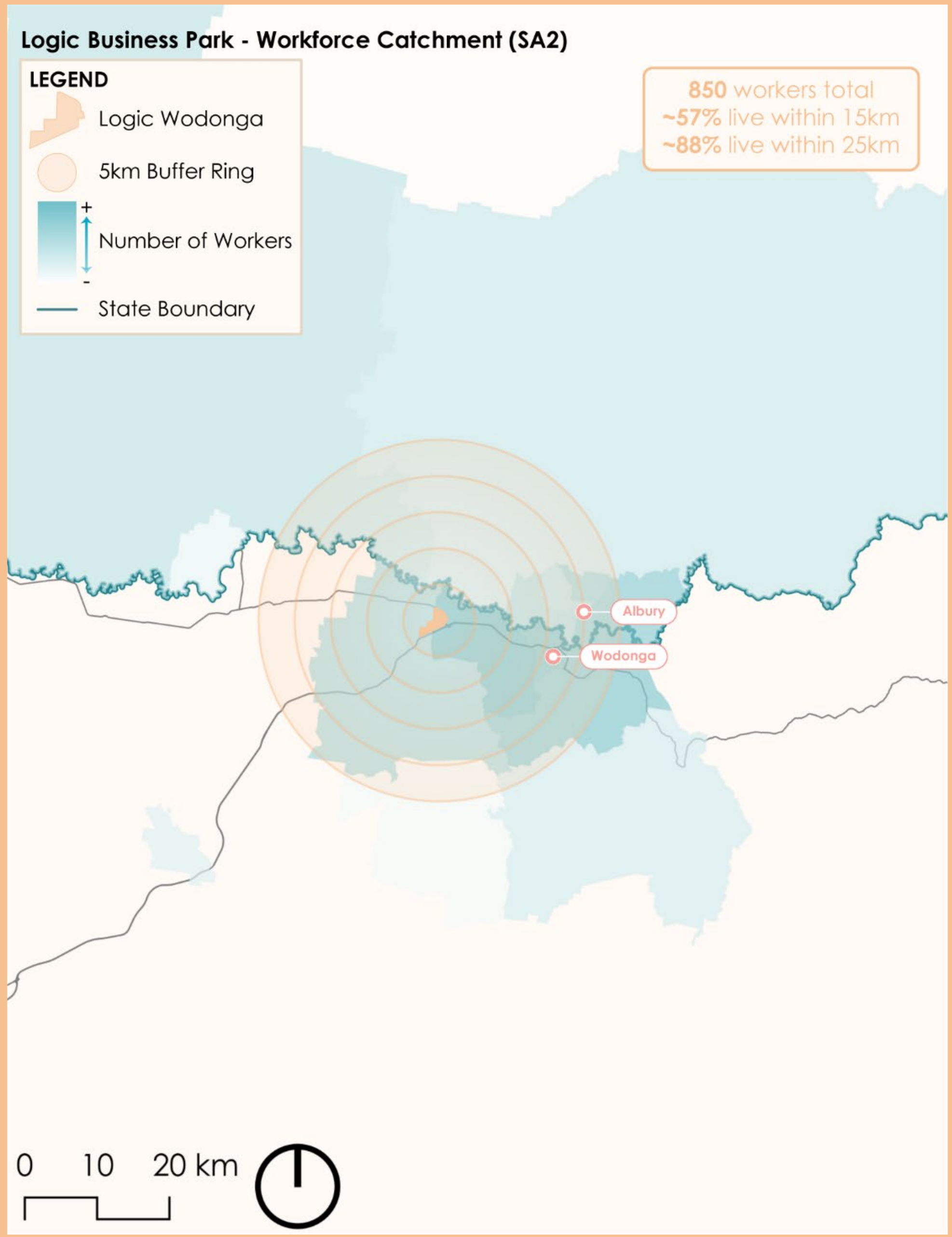
Logic Business Park (Logic) is a major logistics hub located approximately 14km west of Wodonga's centre, on the Hume Freeway, as well as the north east railway. The business park is situated between Melbourne and Sydney, with direct access to the Murray Valley Highway, making transportation of goods to Australia's key capital cities within 24 hours possible.

Logic is as a multi-decade project, with development beginning in the late 2000s. Since then, the precinct has come to incorporate 11 major education, logistics and recycling enterprises that employ approximately 850 workers. Approximately 57% of Logic's employment base live within 15km of the precinct, with a further 31% located within 25km of Logic.

Figure 35: Logic Business Park

Source: The Border Mail

Figure 34: Logic Business Park – Workforce Catchment (SA2)



Source: ABS, CKC

CASE STUDY

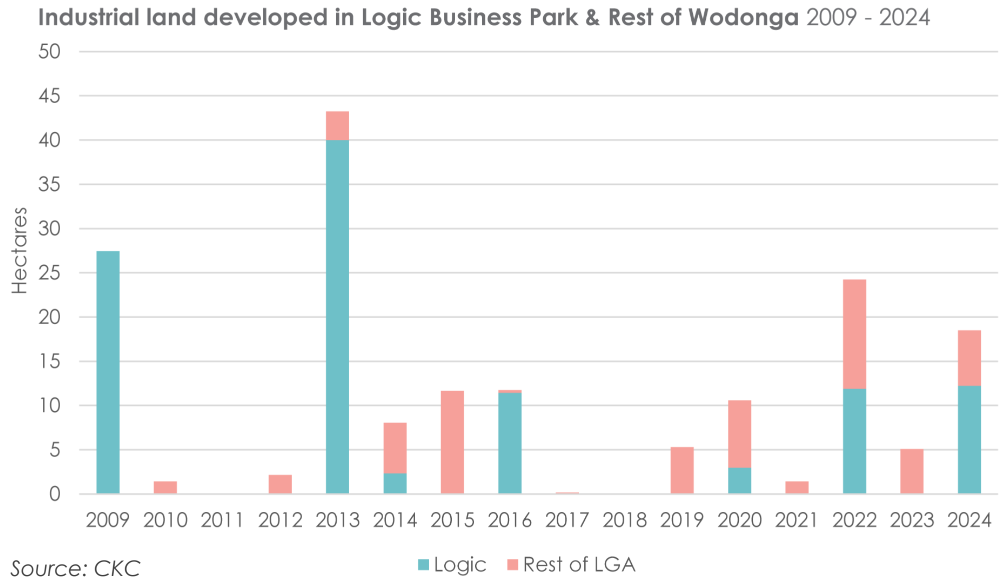
Logic incorporates 567 hectares of industrial 1 zoned land, of which 108 hectares have been developed for use as of 2025. Based upon developed land at 2025, Logic's current employment density is approximately 7.9 jobs per hectare.

Initial development of the business park began in 2009, with an average annual land consumption rate of 6.8 hectares per annum in the period since. During this period, Logic absorbed 63% of Wodonga's total industrial development, with peak development occurring in 2009 and 2013.

In the context of Greater Bendigo, if the BREP was to absorb a similar proportion of future demand, the average annual rate of consumption would likely range between 6 and 7.4 hectares per annum, with an initial boost to consumption expected following its establishment.

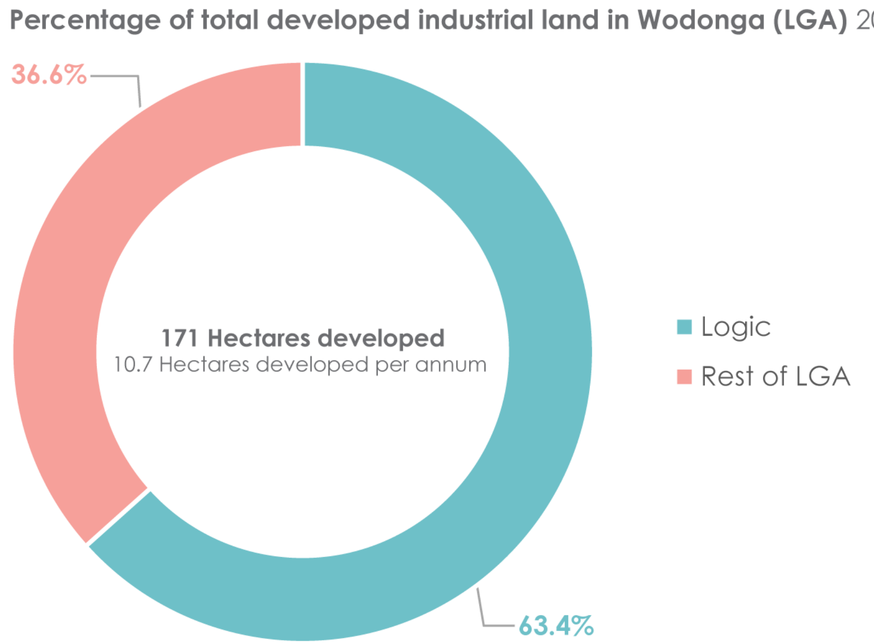
Based upon observed rates of consumption, Logic incorporates a total of land supply of 88 years from its initial commencement as a precinct.

Figure 37: Industrial land developed in Logic & Rest of Wodonga 2009 - 2024



Source: CKC

Figure 36: Percentage of developed industrial land in Wodonga (LGA) 2009 - 2024



Source: CKC

CASE STUDY

Caribbean Park represents an exemplar metropolitan industrial development of a similar scale in size to BREP. Caribbean Park encompasses 185 hectares of commercial and industrial land located in the City of Knox, approximately 24km east of Melbourne's CBD. The business park directly abuts the Monash and Eastern Freeways, making the Melbourne CBD and Airport accessible in under an hour for enterprises.

Established as a commercial hub in the mid-2010s, Caribbean Park has seen rapid development of its sites and now incorporates commercial offices, logistics hubs, hospitality venues and function centres, accommodation and retail spaces.

As of 2021, enterprises in Caribbean Park employed approximately 16,900 workers, with 82% of its workforce living within 25km. The draw Caribbean Park possesses as a major commercial and industrial hub is demonstrated in its far reaching employment base, with its core catchment travelling from inner city locations including Collingwood and South Yarra, as well outer suburban areas such as Cranbourne and Pakenham.

Figure 38: Caribbean Business Park

Source: Oculus

Figure 39: Caribbean Park – Workforce Catchment (SA2)

Source: ABS,CKC

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