
INDUSTRIAL LAND SUPPLY & DEMAND ASSESSMENT

Golden Plains Shire

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EXECUTIVE SUMMARY

In early 2022 Golden Plains Shire engaged Spatial Economics to undertake an industrial land needs assessment for the Shire "... to inform and accompany a shire wide Housing Strategy ..." to be prepared subsequently.

The assessment includes:

- the identification of historical and current industrial lot construction activity by location;
- the identification of historical and current industrial land consumption by location;
- identification of all zoned and unzoned industrial land supply stocks including estimates of the net developable land area on a lot by lot basis;
- presentation of potential future land consumption scenarios; and
- estimation of future industrial land requirements as measured from 2021 to 2051.

Supply of Industrial Land

As at December 2021, there was a total of 29.4 gross hectares of zoned industrial land stocks, of which 22.1 hectares were assessed as available (supply) for industrial purpose development.

However, of this vacant industrial land stocks, 21 gross hectares are located in Smythesdale and only 1.1 gross hectares are located in the Bannockburn industrial precinct.

Within the Bannockburn industrial precinct, the quantum of zoned industrial land supply relative to unavailable industrial land stocks equates to a total land area vacancy rate of just 13%. The vacancy land rate is considered low, indicating a lack of zoned industrial land stocks.

All of the zoned industrial land stocks in both Bannockburn and Smythesdale are zoned Industrial 1.

Of the industrial lots identified as supply across Golden Plains:

- 4 are located in Bannockburn; and
- 3 in Smythesdale.

There are two sites identified for future industrial zoning across Golden Plains. These include:

- Gheringhap Employment Precinct. As identified by the Gheringhap Structure Plan, the precinct is approximately 170- hectares in size; and
- Bannockburn. As identified in the Bannockburn Growth Plan (2021), an area has been allocated for future industrial zoning within the south west growth precinct. The site is approximately 52 gross hectares in size and is adjacent to the existing zoned industrial precinct.

The industrial land stocks (zoned and unzoned) are illustrated in maps 2 to 4, located at the end of this report.

Spatial Economics have identified that there are insufficient stocks of **zoned** industrial land across the municipal area of Golden Plains to meet the likely underlying requirements in the short, medium and longer term and in terms of demand for both smaller and larger allotments.

In addition, there is an imbalance in the spatial distribution of the existing stock (zoned) and identified future stocks (unzoned). In essence the available land stock is limited to



the southern region of the Shire. There is effectively no zoned or identified future (unzoned) industrial land within the central and northern region of the Shire.

The lack of larger zoned allotments is an issue for potential large industrial land users to locate/expand in the Shire and as a land supply source for potential subdivision. However, a potential source of larger industrial lots could be sourced from the yet to be zoned (industrial) Gheringhap Employment Precinct.

Industrial Building Approval Activity

There is strong regional industrial development activity in the wider region. In 2020/21, for the municipal areas of Ballarat, Geelong and Golden Plains there was a total value of \$112 million for industrial building approval activity.

Over the last five financial years, the value of industrial building approval across the municipal area of Golden Plains has averaged \$2.6 million, this is comprised of:

- \$1.7 million for agricultural buildings;
- \$0.4 million for warehouses; and
- \$0.2 million for factories.

Recent Subdivision Activity

For Golden Plains, from July 2008 to March 2022, there were a total of 16 industrial land subdivisions, with the majority (13) located in Bannockburn. The remaining three subdivisions were in Smythesdale.

An assessment was also undertaken of the composition of industrial subdivision activity for the neighbouring municipal areas of Ballarat and Geelong. Examining the composition of both industrial land subdivision and industrial land consumption, provides insights into industrial land demand in the wider regional economy.

From 2018 to March 2022 there was an average annual basis:

- 38 lots in Ballarat; and
- 115 lots in Geelong.

The vast majority of the recent industrial land subdivisions in both Ballarat (79%) and Geelong (84%) were sized less than 1,000 sqm (post subdivision).

There is significant demand (ranging from 10 to 15% of all subdivision activity) for lots sized between 1,000 to 5,000 sqm in both Ballarat and Geelong.

It is recognised that diverse lot size configurations are required to support a range of industrial land users. However, 'smaller' lot sizes represent the bulk of the industrial land supply market and typically are used by locally serviced based industries.

Land Consumption

'Consumption' of industrial land's refers to the construction, over-time, of buildings on previously unoccupied industrial land.

Over-time there has been a steady and substantial decline in the consumption of industrial land across Golden Plains. As measured on an average annual basis:

- 2008 to 2013 – 0.28 hectares of industrial land was consumed;
- this declined to 0.15 hectares per annum from 2013 to 2018; and
- further declined to 0.04 hectares per annum from 2018 to 2021.



All industrial land consumption activity was located in Bannockburn on land zoned Industrial 1.

The overall quantum and declining levels of industrial land production and consumption across the municipal area of Golden Plains appears to be directly attributable to a) the overall undersupply of zoned industrial lands; and b) the lack of supply opportunities distributed across the municipality. The only active industrial estate in the municipality is located in Bannockburn.

There is an opportunity for Golden Plains to a) potential capture a proportion of industrial activity from both Geelong and Ballarat; and b) reduce and/or recapture 'escaped/lost' local industrial land users due to the lack of local industrial land supply opportunities.

Demand Forecasts

Spatial Economics have developed two industrial demand scenarios utilising a combination of techniques and then applied to the population growth scenarios outlined in the Golden Plains Housing Needs Assessment, 2022. The demand scenarios are solely focussed on local service industrial land supply requirements.

They do not include provision for potential export orientated industrial land supply needs. The latter is often characterised by 'one off' approaches from potential investors and is inherently difficult to predict in smaller regional council areas. They can also involve requirements for larger sites or sites with specific transport or services requirements. In the case of Golden Plains such industrial land requirements will most likely be largely supplied by the Gheringhap Employment Precinct.

The two industrial demand scenarios are presented below:

Scenario One is based on the population forecasts sourced from the Golden Plains Housing Needs Assessment (policy based intervention scenario).

- Population growth is assumed to increase from 24,765 persons in 2021 to 60,547 persons in 2051, a 3% average annual increase.
- Scenario One assumes an average annual industrial land requirement from 2021 to 2051 of 1.7 net hectares per annum for the municipality.

Scenario Two is based on the population forecasts sourced from the Golden Plains Housing Needs Assessment (VIF2019 extended scenario).

- Population growth is assumed to increase from 24,765 persons in 2021 to 43,423 persons in 2051, a 1.9% average annual increase.
- Scenario Two assumes an average annual industrial land requirement from 2021 to 2051 of 0.9 net hectares per annum.

Existing and Future Land Supply Requirements

Based on the above industrial land demand scenarios from 2021 to 2051, it is estimated that:

- a total of 80 net developable hectares of zoned industrial land is required for Scenario One; and
- a total of 56 net developable hectares of zoned industrial land is required for Scenario Two.

It is estimated that there is a current deficiency of zoned industrial land of approximately 29 net developable hectares across the municipality. Of which, there is an approximate deficit of eight net hectares in the northern region and 21 net hectares in the southern



region. It is anticipated that an additional 21 gross hectares of zoned industrial land will be released in the Bannockburn industrial precinct within the next twelve months.

From our analysis it seems clear that ongoing planning for industrial land supply in Golden Plains Shire will need to provide for two distinct types/sources of demand.

The first is the local demand for, primarily smaller, industrial sites. Being largely driven by population growth this demand should be, relatively speaking, steady and predictable.

The second source of demand comes from outside the Shire and is typically for larger sites. This demand comes from users for whom a decision to invest in the Shire reflects an assessment of the comparative advantage of Golden Plains as opposed to other potential regional locations.

The existence of these two distinct types of demand has implications for Council in framing a housing strategy (industrial component). In particular it points to the need for Council to both plan for and facilitate developments to meet the reasonably predictable local demand and also to have clear strategies to enable it to respond quickly to the hard to predict but potentially very important demands from outside the Shire.



1.0 Introduction

1.1 Context

The assessment provides a robust and transparent assessment of the supply and demand for industrial land across the Shire of Golden Plains. The assessment will facilitate informed decision making in terms of the existing and future industrial land supply requirements and importantly a sound basis to inform the municipal wide Housing Strategy.

In addition, the information will be of assistance to other related planning processes such as infrastructure and service planning.

The assessment includes:

- the identification of historical and current industrial lot construction activity by location;
- the identification of historical and current industrial land consumption by location;
- identification of all zoned and unzoned industrial land supply stocks including estimates of the net developable land area on a lot by lot basis;
- presentation of potential future land consumption scenarios; and
- estimation of future industrial land requirements as measured from 2021 to 2051.

1.2 Report Structure

This report is structured as follows:

Section 1 outlines the project brief and thus the scope of this report.

Section 2 discusses the methodological approach in assessing the supply, demand and future industrial land requirements for the Shire.

Section 3 outlines the recent industrial land development activity within Golden Plains and its' neighbouring municipalities of Ballarat and Geelong.

Section 4 examines the existing stock of zoned and unzoned land stocks in the Golden Plains Shire.

Section 5 estimates the future demand for industrial lands across the Shire and the associated estimate of the likely quantum, zone type and lot size distribution.



2.0 Approach & Methodology

The following provides a brief outline of the major methodologies and approach in the assessment of recent industrial lot construction, industrial land supply areas, industrial land consumption and associated demand projections and determination of assessing the existing and future industrial land requirements for Golden Plains from 2021 to 2051.

2.1 Industrial Land Supply

Industrial land is used for a defined set of industrial uses although there are often a significant proportion of non-industrial uses that occupy industrial land. In line with the definition used by the State Government in the Metropolitan and Regional Urban Development Program, the zones that are considered primarily for industrial use across the municipality of Golden Plains is Industrial 1 Zone (IN1Z).

The industrial zone types assessed for the municipal areas of Ballarat and Geelong include: Industrial 1 Zone (IN1Z), Industrial 2 Zone (IN2Z), Industrial 3 Zone (IN3Z), selected Special Use (SUZ) and Commercial 2 Zone (C2 Zone).

Township (TZ) zoned land has been excluded from this assessment. Whilst Township (TZ) zoned land does provide for industrial uses in small towns, however, the industrial use must not adversely affect the amenity of the neighbourhood. In practicality, the townships across the Golden Plains Shire are increasingly evolving into more residential/lifestyle focussed centres/villages. The likely potential conflict within Township zoned areas from residential and industrial uses therefore results in an unreliable and/or unlikely industrial land supply source.

Future (unzoned) industrial land is identified through various strategic planning policy documents and consultation with municipal officers. Future industrial land is currently unzoned to support industrial development; however the land is designated for future industrial purpose.

In this project every parcel of land is deemed to be unavailable or available as supply.

- *Supply* – zoned industrial land classified as available for industrial development. This includes land that is vacant, disused or assigned to marginal non-industrial uses with little capital value, such as farm sheds.
- *Unavailable* – zoned industrial land classified as unavailable for industrial development. This includes land already occupied by industrial uses, construction sites, major infrastructure, capital intensive farming operations, established residential premises or where it is known that the owner has strong intentions not to develop the land in the medium to long term or when there is a known development commitment.

For all industrial land, each individual parcel is recorded with its size and the applicable zone. This enables an assessment of the overall or gross stock of land either as unavailable or available as supply.

The supply of industrial land must take into account the likelihood of a reasonable level of infrastructure servicing. However, the level of servicing required for industrial land in small towns is not necessarily high and industrial land may be considered as supply with only limited services available.

All industrial land that is identified as available supply is assessed to determine the “net developable land”, which is the land available to develop for industrial uses. This is after allowing for local roads and open space as well as allowing for any constraints that are on the land. These constraints including native vegetation, flooding, or terrain can be very



significant and have large effects on the availability of land. The determination of net developable land is done on a site by site basis with reference to any constraints.

2.2 Industrial Lot Construction

Analysis of the cadastral database on land zoned for industrial purposes from July 2008 to March 2022 was undertaken to determine the location, volume and resultant lot size of industrial lot subdivisions.

2.3 Industrial Land Consumption

To determine industrial land consumption, examination of aerial imagery between specific periods was undertaken and updated to December 2021 via a land use survey of each previously identified vacant industrial allotment.

In comparing the extent to which consumption has occurred, land has been 'back cast' against previous periods to ensure like for like areas have been compared. This has been done to ensure that the effect of the rezoning of new industrial land or the rezoning of industrial land to non-industrial uses does not distort the actual consumption that has occurred between periods.

2.4 Future Demand

The method utilised by the State Governments' Metropolitan and Regional Urban Development Program utilises the recent industrial land consumption method. Forecasting industrial land demand is therefore based on recent industrial land consumption that calculates the use of industrial land by location, by zone and importantly area.

This method is particularly appropriate for large metropolises, regional centres and larger townships where there is sufficient demand for industrial land as well as unconstrained supply.

Historical industrial land consumption under the above conditions is a sound base to assess future consumption of industrial land consumption.

Spatial Economics consider the above method alone was not suitable to be employed for the Golden Plains industrial land supply assessment due to:

1. a current and historic constrained industrial land supply market; and
2. a policy choice via the yet to be drafted Golden Plains Housing Strategy that could aim to 'capture' a greater share of regional population growth from both the Ballarat and Geelong markets.

Spatial Economics have developed two industrial demand scenarios utilising a combination of techniques, and then applied to the population growth scenarios outlined in the Golden Plains Housing Needs Assessment, 2022.

The industrial land demand forecasts were based on industrial land needs that service the local community/economy. They do not include provision for potential export orientated industrial land supply needs.

2.5 Industrial Land Requirements

Industrial land requirements are based on: a) current estimates of existing deficiencies of land provision; and b) future requirements as estimated from the presented demand scenarios.

Future industrial land requirements in term of land use zone type and lot size distribution are also presented.



Industrial land is usually clustered together in definitive nodes or clusters due to the negative external effects of industrial uses on other land uses. Hence, industrial land is analysed through identified industrial precincts.

For Golden Plains, the following industrial precincts have been identified, and subsequently land supply information reported and assessed at an industrial precinct and municipal level.

- Bannockburn;
- Gheringhap; and
- Smythesdale.

Industrial land requirements are reported at a municipal and sub-municipal level.

2.6 Geography

The following geographic areas are utilised for the land supply assessment and demographic analysis.

Localities/Townships: Locality boundaries are as defined by Local Governments and registered by the Registrar of Geographic Names (GeoNames). There are 31 localities within the Golden Plains Shire that have residential land stocks.

ABS SA2: Statistical Areas Level 2 (SA2s) are medium-sized general purpose areas built up from whole Statistical Areas Level 1 (SA1s). Their purpose is to represent a community that interacts together socially and economically. There are four SA2's within the Golden Plains Shire, these include:

1. Bannockburn;
2. Golden Plains South;
3. Golden Plains North; and
4. Smythes Creek.

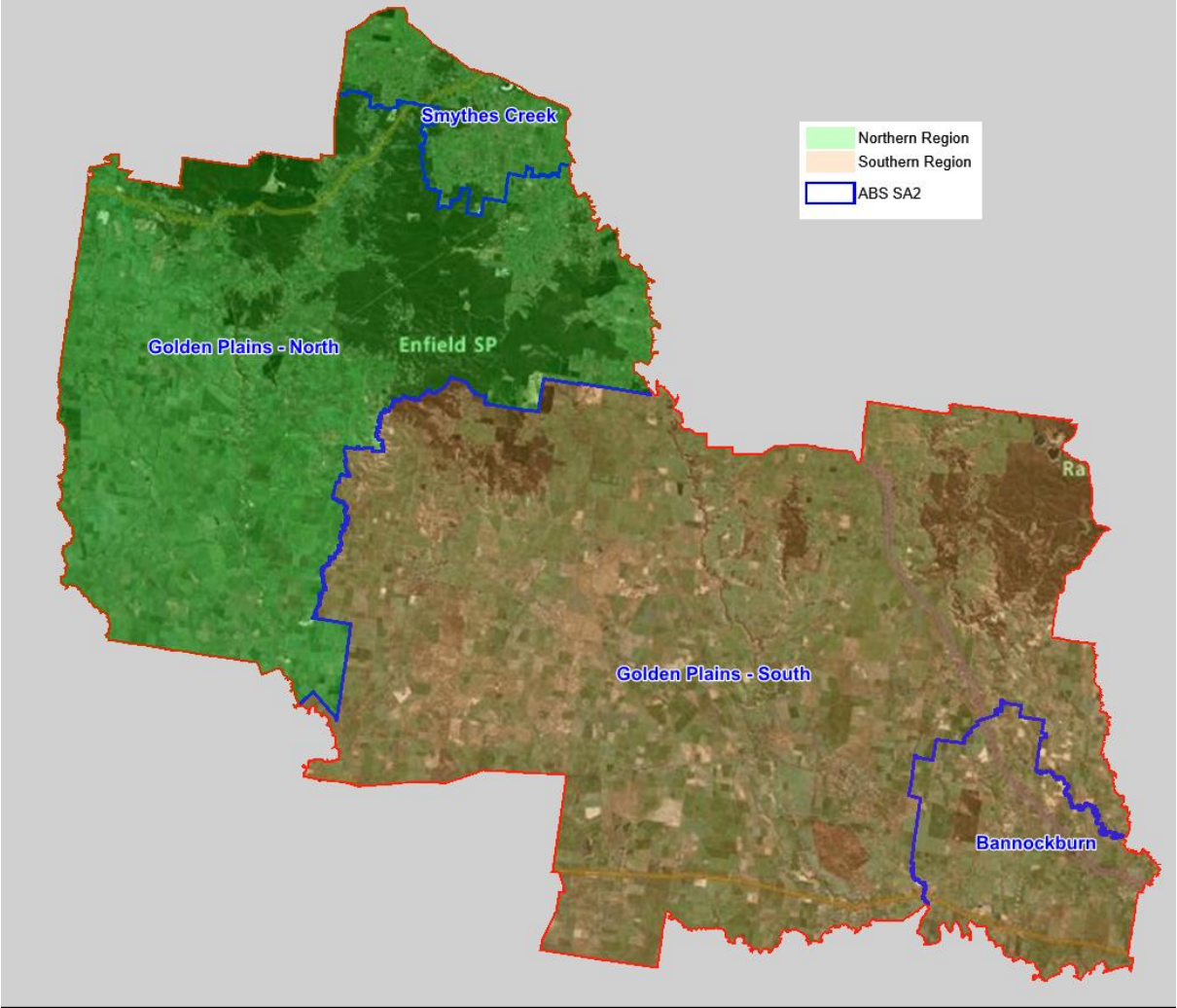
Region: Spatial Economics have defined two broad regions within the Golden Plains Shire, namely the southern and northern regions. The regions are composed of ABS SA2 boundaries.

The southern region includes the SA2's of Bannockburn and Golden Plains South. The northern region includes the SA2's of Golden Plains North and Smythes Creek.

The maps below illustrate the location of the localities, ABS SA2's and regions with the Golden Plains Shire.



Map 1: SA2's and Regions – Golden Plains Shire



3.0 Recent Industrial Development Activity

Key Findings

In 2021/22 the total value of industrial building approvals within the municipal areas of Golden Plains, Ballarat and Geelong was \$112 million. By building type this is comprised of:

- *\$87 million for warehouses;*
- *\$12 million for agricultural buildings; and*
- *\$6 million for factories.*

The value of industrial building approval activity in 2021/22 by municipal area was:

- *\$2.6 million in Golden Plains;*
- *\$26 million in Ballarat; and*
- *\$85 million in Geelong.*

In terms of industrial land development, the vast majority of recently subdivided industrial lots in both Ballarat (79%) and Geelong (84%) were sized less than 1,000 sqm. There was also significant (ranging from 10 to 15% of all subdivision activity) for lots sized between 1,000 to 5,000 sqm in both Ballarat and Geelong.

For Golden Plains, from July 2008 to March 2022, there were a total of 16 industrial land subdivisions, with the majority (13) located in Bannockburn. The remaining three subdivisions were in Smythesdale.

There has been a steady and substantial decline over-time in the consumption of industrial land across the Golden Plains municipal area. As measured on an average annual basis:

- *from 2008 to 2013 – 0.28 hectares of industrial land was consumed;*
- *this declined to 0.15 hectares per annum from 2013 to 2018; and*
- *there was a further decline to 0.04 hectares per annum from 2018 to 2021.*

The following provides an overview of the quantum, location and composition of industrial (and related) development activity in terms of:

- industrial subdivision activity;
- consumption of industrial land (i.e., buildings constructed on industrial lots); and
- the value of industrial building approvals.

To provide the context for industrial development activity in Golden Plains this report also assesses industrial land development in Geelong and Ballarat.

3.1 Industrial Subdivision Activity – Golden Plains

Detailed analysis of the cadastral database of industrial zoned land across the Golden Plains Shire was undertaken to establish the location, volume and resultant lot size of industrial subdivision activity. Table 1 summarises the results of this analysis.

From July 2008 to March 2022 there were a total of 16 industrial land subdivisions, with the majority (13) located in Bannockburn. The remaining three subdivisions were located in Smythesdale.

The majority (81%) of subdivisions resulted in industrial allotments sized less than 1,000 sqm, whilst the three subdivisions in Smythesdale resulted in lots typically around four hectares in size.



Table 1: Number of Industrial Subdivisions by Lot Size, 2008 to 2022

Locality/LGA	Less than 0.1 hectares	0.1 to 0.5 hectares	0.5 to 1 hectare	1 to 5 hectares	5+ hectares	Total
Bannockburn	13					13
Smythesdale				3		3
Golden Plains Shire	13			3		16

Source: Spatial Economics Pty Ltd

Note: As at March 2022

All of the subdivision activity was on land zoned Industrial 1 (INZ1).

From July 2008 to March 2022, there has been on average 1.2 industrial subdivisions per annum in Golden Plains.

Table 2 below summarises the timing of the industrial subdivisions across the Golden Plains Shire. Over recent years (since 2018) there has been no industrial land subdivision across the municipality. As will be outlined in more detail later, in Spatial Economics view the subdued level of industrial land development activity across the Shire is primarily attributable to the lack of industrial land supply opportunities.

Table 2: Number of Industrial Subdivisions, by Time Period

Locality/LGA	2008 to 2013	2013 to 2018	2018 to 2022
Bannockburn	5	8	0
Smythesdale	0	3	0
Golden Plains Shire	5	11	0

Source: Spatial Economics Pty Ltd

Note: As at March 2022

3.1.1 Industrial Subdivision Activity – Geelong & Ballarat

An assessment was also undertaken of the composition of industrial subdivision activity for the neighbouring municipal areas of Ballarat and Geelong. Examining the composition of both industrial land subdivision and industrial land consumption, provides insights into industrial land demand in the wider regional economy. As a result of our analysis Spatial Economics has formed the opinion that there is an opportunity for Golden Plains to 'capture' a component of industrial land demand from the neighbouring municipalities.

As summarised in Table 3, from 2018 to March 2022 there was a total of:

- 160 industrial land subdivisions (or on average, 38 per annum) in Ballarat; and
- 488 industrial land subdivisions (or on average, 115 per annum) in Geelong.

The vast majority of the recent industrial land subdivisions in both Ballarat (79%) and Geelong (84%) were sized less than 1,000 sqm (post subdivision).

There is significant demand (ranging from 10 to 15% of all subdivision activity) for lots sized between 1,000 to 5,000 sqm in both Ballarat and Geelong.

In terms of larger sized industrial subdivisions, i.e. above 1 hectare, there has been minimal activity. Since 2018 there has been only ten larger sized subdivisions in Ballarat and 14 in Geelong - although in total the larger lot subdivision activity accounted for 64 hectares of industrial land (24 lots) compared to 45 hectares of land for smaller sized subdivisions (624 lots)



Table 3: Number of Industrial Subdivisions by Lot Size, 2018 to 2022

LGA	Less than 0.1 hectares	0.1 to 0.5 hectares	0.5 to 1 hectares	1 to 5 hectares	5+ hectares	Total
Ballarat	127	20	3	8	2	160
Greater Geelong	410	47	17	14		488

Source: Spatial Economics Pty Ltd

Note: As at March 2022

Table 4: Number of Industrial Subdivisions by Zone Type, 2018 to 2022

LGA	C2Z	IN1Z	IN2Z	SUZ	Total
Ballarat		149		11	160
Greater Geelong	93	309	86		488

Source: Spatial Economics Pty Ltd

Note: As at March 2022

In terms of zone type, as typically seen across both metropolitan Melbourne and regional Victoria, industrial land subdivisions have been predominantly on Industrial 1 zone. Across both Ballarat and Geelong, approximately 70% of industrial land subdivisions are zoned Industrial 1.

In summary the purpose of the major industrial zone types is:

Industrial 1: To provide for manufacturing industry, the storage and distribution of goods and associated uses in a manner which does not affect the safety and amenity of local communities

Industrial 2: To provide for manufacturing industry, the storage and distribution of goods and associated facilities in a manner which does not affect the safety and amenity of local communities.

To promote manufacturing industries and storage facilities that require a substantial threshold distance within the core of the zone.

To keep the core of the zone free of uses which are suitable for location elsewhere so as to be available for manufacturing industries and storage facilities that require a substantial threshold distance as the need for these arises.

Industrial 3: To provide for industries and associated uses in specific areas where special consideration of the nature and impacts of industrial uses is required or to avoid inter-industry conflict.

To provide a buffer between the Industrial 1 Zone or Industrial 2 Zone and local communities, which allows for industries and associated uses compatible with the nearby community.

To allow limited retail opportunities including convenience shops, small scale supermarkets and associated shops in appropriate locations.

Commercial 2: To encourage commercial areas for offices, appropriate manufacturing and industries, bulky goods retailing, other retail uses, and associated business and commercial services.



3.2 Consumption of Industrial Land- Golden Plains

Detailed analysis of existing and historic aerial imagery combined with zoning/cadastral information and land use surveys from 2008 to 2021 has been used to establish the consumption of industrial land. 'Consumption' of industrial land's refers to the construction, over-time, of buildings on previously unoccupied industrial land.

From this assessment the consumption of industrial land can be established by location, lot size and zoning. Consumption of industrial land is used as a primary indicator of future demand for industrial land.

Over-time there has been a steady and substantial decline in the consumption of industrial land across Golden Plains. As measured on an average annual basis:

- 2008 to 2013 – 0.28 hectares of industrial land was consumed;
- this declined to 0.15 hectares per annum from 2013 to 2018; and
- further declined to 0.04 hectares per annum from 2018 to 2021.

All industrial land consumption activity was located in Bannockburn on land zoned Industrial 1.

Table 4: Total Industrial Land Consumption (hectares), 2008 to 2021

Locality/LGA	2008 to 2013	2013 to 2018	2018 to 2021	Total
Bannockburn	1.4	0.7	0.2	2.3
Smythesdale	0	0	0	0.0
Golden Plains Shire	1.4	0.7	0.2	2.3

Source: Spatial Economics Pty Ltd

Table 5: Number of Lots Consumed by Lot Size Cohort, 2008 to 2021

Locality/LGA	Less than 0.1 hectares	0.1 to 0.5 hectares	0.5 to 1 hectares	1 to 5 hectares	5+ hectares	Total
Bannockburn	12	5	1			18
Smythesdale						
Golden Plains Shire	12	5	1	0	0	18

Source: Spatial Economics Pty Ltd

As illustrated in Table 5, there is a strong prevalence of industrial land consumption for lots sized less than 1,000 sqm, followed by lots sized from 1,000 to 5,000 sqm.

Although, the prevalence of the consumption of 'smaller' industrial lots in Bannockburn, this is directly influenced by the historical and existing lack of industrial land supply opportunities. The lack of existing industrial land supply opportunities is illustrated in more detail later in the report.

3.2.1 Consumption of Industrial Land – Ballarat & Geelong

An assessment was also undertaken of the composition of industrial land consumption activity in Ballarat and Geelong. Coupled with recent subdivision activity, this information provides an accurate 'picture' of the regional context for production of and demand for industrial land in Golden Plains.



As measured from January 2018 to December 2021, the average annual industrial land consumption was:

- 13 hectares for Ballarat; and
- 14 hectares for Geelong.

In terms of the number of lots consumed (i.e. the conversion of a vacant lot to a capital intensive use) there was on an average annual basis:

- 40 lots in Ballarat; and
- 122 lots in Geelong.

Table 6: Total Industrial Land Consumption (hectares) – by Lot Size Cohort, 2018 to 2021

LGA	Less than 0.1 hectares	0.1 to 0.5 hectares	0.5 to 1 hectares	1 to 5 hectares	5+ hectares	Total
Ballarat	3.2	6.2	1.6	26.0	15.3	52.3
Greater Geelong	10.1	10.8	13.4	22.4		56.7

Source: Spatial Economics Pty Ltd

Table 7: Number of Lots Consumed by Lot Size Cohort, 2018 to 2021

LGA	Less than 0.1 hectares	0.1 to 0.5 hectares	0.5 to 1 hectares	1 to 5 hectares	5+ hectares	Total
Ballarat	127	20	3	8	2	127
Greater Geelong	410	47	17	14		410

Source: Spatial Economics Pty Ltd

As measured by the number of lots consumed, the greatest demand as illustrated in both Ballarat and Geelong is for smaller sized industrial lots. While the larger sized industrial allotments involve small numbers they dominate the total land area consumed.

As measured from 2018 to 2021 for both the municipal areas of Ballarat and Geelong combined:

- 82% (134 lots per annum) of industrial land consumption was on lots sized less than 1,000 sqm;
- 10% (17 lots per annum) of industrial land consumption was on lots sized from 1,000 to 5,000 sqm;
- 3% (6 lots per annum) of industrial land consumption was on lots sized greater than one hectare;
- consumption of industrial land on lots sized less than one hectare consumed a total of 45 hectares; and
- consumption of industrial land on lots sized greater than one hectare consumed a total of 64 hectares.

As measured from 2018 to 2021, 56 hectares of industrial land was consumed across Greater Geelong. The majority (53% or 30 hectares) of this consumption was on land zoned Industrial 2 This is followed by land zoned Industrial 1 (21 hectares) and land zoned Commercial 2 (6 hectares).

For the same time period for the City of Ballarat, 52 hectares of industrial land was consumed. The majority (80% or 42 hectares) was on land zoned Special Use. The



remaining 11 hectares was zoned Industrial 1.

The Special Use zone land consumption in Ballarat is known as the Ballarat West Employment Zone. The purpose of this industrial precinct is to:

“To foster employment generating uses primarily through the manufacturing, construction, transport and logistics, wholesale trade and enabling industries sectors, and by limiting the extent of land in the BWEZ used for retailing, offices and warehouses.”

3.3 Industrial Building Approval Activity

The following provides an overview of the value of selected industrial building approvals by type for the municipal areas of Golden Plains, Ballarat and Geelong. Tables 8 to 11 summarises the outcomes.

Table 8: Value (\$ million) of Industrial Building Approvals - Factories

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Golden Plains	0.5	0.0	0.4	0.6	0.0	0.0
Ballarat	6.3	2.1	3.4	18.0	3.5	3.9
Geelong	6.2	12.4	42.0	3.0	4.2	2.4

Source: Australian Bureau of Statistics: Building Activity. Cat# 8752.0

Table 9: Value (\$ million) of Industrial Building Approvals - Warehouses

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Golden Plains	0.9	0.3	0.1	0.2	0.6	0.5
Ballarat	11.5	14.8	14.3	23.8	22.8	21.0
Geelong	58.2	37.3	52.5	87.7	54.2	65.4

Source: Australian Bureau of Statistics: Building Activity. Cat# 8752.0

Table 10: Value (\$ million) of Industrial Building Approvals - Agricultural Buildings

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Golden Plains	2.7	0.5	0.8	1.0	3.1	1.9
Ballarat	0.7	0.6	0.2	1.3	1.5	2.6
Geelong	6.7	2.3	4.2	10.9	10.3	7.6

Source: Australian Bureau of Statistics: Building Activity. Cat# 8752.0

Table 11: Value (\$ million) of Industrial Building Approvals - Total

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Golden Plains	4.0	0.9	1.5	2.2	4.0	2.8
Ballarat	19.0	18.5	18.9	44.4	29.0	28.0
Geelong	73.0	55.9	120.3	108.5	70.1	81.3

Source: Australian Bureau of Statistics: Building Activity. Cat# 8752.0

In 2021/22 the total value of industrial building approval activity with the municipal areas of Golden Plains, Ballarat and Geelong combined was valued at \$112 million. By industrial building type this is comprised of:

- \$87 million for warehouses;
- \$12 million for agricultural buildings; and
- \$6 million for factories.



The value of industrial building approval activity in 2021/22 by municipal area was:

- \$2.8 million in Golden Plains;
- \$28 million in Ballarat; and
- \$81 million in Geelong.

To give a relative perspective of the value of industrial building approvals by municipal area, the value of building approvals per capita for 2021/22 is presented:

- \$111 per person in Golden Plains;
- \$246 per person in Ballarat; and
- \$300 per person in Geelong.

Over the last five financial years, the value of industrial building approval across the municipal area of Golden Plains has averaged \$2.6 million, this is comprised of:

- \$1.7 million for agricultural buildings;
- \$0.4 million for warehouses; and
- \$0.2 million for factories.

Key Issues

There is strong regional industrial development activity in the wider region. In 2020/21, for the municipal areas of Ballarat, Geelong and Golden Plains there was a total value of \$112 million for industrial building approval activity.

The volume (measured in lots) of industrial land subdivision and consumption in both Ballarat and Geelong is dominated by smaller lots i.e. sized less than 5,000 sqm.

It is recognised that diverse lot size configurations are required to support a range of industrial land users. However, 'smaller' lot sizes represent the bulk of the industrial land supply market and typically are used by locally serviced based industries.

The overall quantum and declining levels of industrial land production and consumption across the municipal area of Golden Plains appears to be directly attributable to a) the overall undersupply of zoned industrial lands; and b) the lack of supply opportunities distributed across the municipality. The only active industrial estate in the municipality is located in Bannockburn.

There is an opportunity for Golden Plains to a) potential capture a proportion of industrial activity from both Geelong and Ballarat; and b) reduce and/or recapture 'escaped/lost' local industrial land users due to the lack of local industrial land supply opportunities.



4.0 Industrial Land Stocks

Key Findings

As at December 2021, there was a total of 29.4 gross hectares of zoned industrial land stocks in Golden Plains, of which Spatial Economics assesses 22.1 gross hectares are actually available (supply) for industrial development purposes.

Of this vacant industrial land stocks, 21 gross hectares are located in Smythesdale and only 1.1 gross hectares are located in the Bannockburn industrial precinct.

There are two sites identified, but currently unzoned, for future industrial development. These sites include:

Site One: *Gheringhap Employment Precinct. As identified by the Gheringhap Structure Plan, the precinct is approximately 170- hectares in size and is currently zoned Farm. It is located on the Midland Highway at Gheringhap and is close to Geelong and with good access to Ballarat and Melbourne via major transport routes.*

Site Two: *Bannockburn. As identified in the Bannockburn Growth Plan (2021), an area has been allocated for future industrial zoning within the south west growth precinct. The site is approximately 52 gross hectares in size and is adjacent to the existing zoned industrial precinct.*

The following section of the report provides an overview of:

- existing zoned industrial land stocks;
- identified future (unzoned) industrial land stocks;
- stock of available (supply) and unavailable industrial land stocks;
- lot size distribution; and
- estimated net developable area.

The main industrial land market in Golden Plains is located in Bannockburn. The majority (if not all) of historical activity in terms of subdivision, construction and existing industrial uses are located within the Bannockburn industrial precinct.

There are some stocks of industrial land in Smythesdale, however, this stock is significantly constrained from a land development perspective.

4.1 Industrial Land Stocks - Area

As at December 2021, there was a total of 29.4 gross hectares of zoned industrial land stocks, of which 22.1 hectares were assessed as available (supply) for industrial purpose development.

However, of this vacant industrial land stocks, 21 gross hectares are located in Smythesdale and only 1.1 gross hectares are located in the Bannockburn industrial precinct.

Within the Bannockburn industrial precinct, the quantum of zoned industrial land supply relative to unavailable industrial land stocks equates to a total land area vacancy rate of just 13%. The vacancy land rate is considered low, indicating a lack of zoned industrial land stocks.

All of the zoned industrial land stocks in both Bannockburn and Smythesdale are zoned Industrial 1.



There are two sites identified for future industrial development, but are currently unzoned for industrial development purposes, these sites include:

Site One: Gheringhap Employment Precinct. As identified by the Gheringhap Structure Plan, the precinct is approximately 170- hectares in size and is currently zoned Farm. It is located on the Midland Highway at Gheringhap and is close to Geelong, *and with good access to Ballarat and Melbourne via major transport routes.*

The employment precinct has the potential to provide sufficient industrial lands to provide 'export' orientated industrial/employment-oriented development. In addition, the precinct is intended as a source for large lot industrial land users.

Site Two: Bannockburn. As identified in the Bannockburn Growth Plan (2021), an area has been allocated for future industrial zoning within the south west growth precinct. The site is approximately 52 gross hectares in size and is adjacent to the existing zoned industrial precinct. As detailed in the Bannockburn Growth Plan:

"In response to the location of the business park expansion and its proposed interface with residential development (existing and proposed), an appropriate land use zone should be considered at the detailed planning stage to minimise potential land use conflicts. The Industrial 3 Zone should form part of this consideration."

The expansion of the existing industrial precinct in Bannockburn will likely supply the industrial land supply needs for localised industrial service-based requirements.

A state government grant has enabled the construction of an onsite retarding basin and pipe network to manage stormwater issues. This will facilitate the release, in the short-term, of approximately 22 gross hectares of industrial land stocks.

There are no identified but unzoned industrial land stocks outside of Gheringhap and Bannockburn. In particular there is a lack of land identified for future industrial use in the north of Golden Plains.

Maps 2 to 4 at the end of the report illustrate the industrial land stocks (zoned and unzoned) across the municipal area of Golden Plains.

4.2 Industrial Land Stocks – Lot Size Distribution

Table 12 below details the number of zoned industrial lots by selected lot size cohorts (unavailable and supply). As at December 2021, there was a total of 49 zoned industrial allotments, of which seven lots were identified as available supply – four in Bannockburn and three in Smythesdale.

Of the 49 industrial allotments 84% are sized below 0.5 hectares - 16 lots are sized less than 1,000 sqm and 25 lots sized from 1,000 to 5,000 sqm.



Table 12: Number of Zoned Industrial Allotments by Lot Size Cohort, 2021

	Less than 0.1 hectares			0.1 to 0.5 hectares			0.5 to 1 hectare			1 to 5 hectares			5 to 10 hectares			10+ hectares			Total Lots		
Industrial Precinct/LGA	Unavailable	Supply	Lot Vacancy Rate %	Unavailable	Supply	Lot Vacancy Rate %	Unavailable	Supply	Lot Vacancy Rate %	Unavailable	Supply	Lot Vacancy Rate %	Unavailable	Supply	Lot Vacancy Rate %	Unavailable	Supply	Lot Vacancy Rate %	Unavailable	Supply	Lot Vacancy Rate %
Bannockburn	15	1	6%	23	2	8%	3	1	25%	0	0		0	0		0	0		41	4	9%
Smythesdale	0	0		0	0		0	0		0	3	100%	1	0	0%	0	0		1	3	75%
Golden Plains	15	1	6%	23	2	8%	3	1	25%	0	3	100%	1	0	0%	0	0		42	7	14%

Source: Spatial Economics Pty Ltd

4.3 Supply of Industrial Land

As at December 2021, there was 22 gross hectares of zoned available industrial land supply across Golden Plains, 1 hectare in Bannockburn and 21 hectares in Smythesdale .

Of this identified supply, there will be a proportion of land not available for development. This includes the normal land development take-outs including, but not limited to local and regional roads, supporting infrastructure, and open space requirement. It also includes land where development is likely to be constrained by native vegetation, excessive slope and other environmental constraints such as waterways. Land development take-outs vary by site and particularly according to the size of the allotment.

Specific land development take-outs have been assessed on a parcel by parcel basis. This results in Spatial Economics estimate of the net developable area i.e. the area available for actual industrial site development.

Bannockburn

Zoned Stocks: There are currently four zoned vacant industrial lots located in Bannockburn with a total area of one hectare.

Unzoned Stocks: The Bannockburn Growth Plan has identified an area adjacent to the existing industrial precinct in Bannockburn of approximately 52 gross hectares in size. Spatial Economics estimate that this will yield approximately 34 net developable hectares. It is understood that approximately 21 gross hectares will be released within the next twelve months.

Gheringhap

Unzoned Stocks: Known as the Gheringhap Employment Precinct it is approximately 170 hectares in size as defined by the area in the Gheringhap Structure Plan. This precinct is likely to yield a total of 95 net developable hectares of industrial/employment lands.

Significant private investment is required for the development of this proposed precinct to be realised.

Smythesdale

Zoned Stocks: There is three vacant industrial lots located in Smythesdale totalling 21 gross hectares. It is estimated that the identified zoned industrial land stock in Smythesdale would yield five net developable hectares. Specific land development constraints include excessive slope, the Nintingbool Bushland Reserve, land subject to flooding, bushfire risk and areas of environmental significance.

Further investigation is required to ascertain the economic feasibility of accessing hydraulic infrastructure and it is possible that very little of the nominal industrial land supply is actually available/likely to be developed.

Key Issues

*Spatial Economics have identified that there are insufficient stocks of **zoned** industrial land across the municipal area of Golden Plains to meet the likely underlying requirements in the short, medium and longer term and in terms of demand for both smaller and larger allotments.*

In addition, there is an imbalance in the spatial distribution of the existing stock (zoned) and identified future stocks (unzoned). In essence the available land stock is limited to the southern region of the Shire. There is effectively no zoned or identified future (unzoned) industrial land within the central and northern region of the Shire.

The lack of larger zoned allotments is an issue for potential large industrial land users to locate/expand in the Shire and as a land supply source for potential subdivision. However, a potential source of larger industrial lots could be sourced from the yet to be zoned (industrial) Gheringhap Employment Precinct.



5.0 Industrial Land Stock Requirements

Key Findings

Spatial Economics considers there are currently insufficient zoned broadhectare industrial land stocks to meet both the immediate and future requirements.

It is anticipated that from 2021 to 2051 between 0.9 to 1.7 net hectares of zoned industrial land per annum is required to service the needs of the local community/economy. This equates to a total zoned industrial land stock of between 56 to 80 net developable hectares is required across the municipality. Of this 12 to 27 hectares is required in the northern region and 44 to 54 hectares in the southern region.

It is estimated that there is a current deficient of zoned industrial land of approximately 29 net developable hectares across the municipality - . approximately eight hectares in the northern region and 21 hectares in the southern region.

The process of site selection for potential additional industrial land supply areas involves the identification of total industrial land needs for the Golden Plains Shire and at a sub-municipal/regional level. This needs to be further clarified in terms of the required zone type and broad lot size configuration.

The discussion below provides a broad summary of the criteria used to inform the identification of potential industrial sites.

In addition, the following chapter of this assessment explores:

1. future industrial land demand scenarios; and
2. current and future industrial land requirements.

5.1 Industrial Land Supply and Development Characteristics

The development of industrial land has very particular drivers -particularly so for smaller towns. Demand can be hard to predict while it is not possible to release industrial land incrementally due to the nature of the costs involved in development.

The inherently 'lumpy' nature of industrial land development means that developers need to have a reasonably sure expectation of at least medium-term demand to justify the required capital investment. In many region areas, especially outside the major regional centers, industrial land development can often be of marginal economic viability, given uncertainties regarding the extent, nature and timing of future demand. Issues involving the availability and cost of infrastructure provision can also make industrial development financially marginal in some regional areas.

Furthermore, financial returns on industrial development can often be both lower and more uncertain than returns from residential development. Residential land has a much larger customer base and in general is easier to sell and can provide an earlier and more predictable income stream than industrial developments. There can therefore be pressure on councils to amend zoning provisions to allow land planned for industrial uses to instead be developed for housing.

At the same time the ready availability of sites for development of industrial buildings/facilities is a critical part of an effective economic development strategy for regional councils. Potential investors in industrial projects in regional areas are often at least partly 'footloose' (i.e. not tied to a particular location) and will often choose to shift their investment to another council area if a suitable site and services are not available, or if a lack of prior planning means that the development approval process is likely to uncertain or protracted.

Especially in smaller regional markets there can be what is in essence a form of 'market failure' which requires public (i.e. either state or council) intervention to ensure that a suitable stock of industrial land is available.



The timely provision of industrial land is paramount to the economic development of a town both directly and indirectly. Industrial activity directly engenders local jobs which through multiplier effects increases the prosperity of the town. Having local services means that locals have less need to travel to larger centers (like Geelong or Ballarat) for basic services. This reduces the leakage of spending from smaller towns and increases local prosperity. Land within industrial estates can also be used to facilitate economic activity somewhere else within the town. For example, a business may use industrial land effectively as a warehouse with little or no direct on-site employment, but the facility may be critical to the operation of the business which may have substantial employment.

In regional Victoria some councils have therefore, as part of their economic development strategies, chosen to step in to facilitate industrial land development. The form of such intervention may include:

- public purchase of some areas of land designated for future industrial development;
- councils working with service providers to ensure that suitable provision can be made for the provision of water, sewer and other services to key areas proposed for future industrial development. In some instances, this may involve the council providing a subsidy to reduce the costs of service provision;
- arrangements for fast tracking of approval processes for proposed industrial developments. This is possible if there has been suitable provision made for suitable buffer zones and council development requirements are clear and able to be handled by planning staff under delegation from the council; and
- as a matter of last resort council acting as developer or 'buyer of last resort' for industrial estates.

Examples of such successful action by regional councils include Moyne and Pyrenees.

The following provides an outline of the key characteristics regarding industrial land provision.

Location

- proximity to existing (and proposed) urban growth areas, labour force and transport, without conflicting with residential areas or other sensitive land uses
- close to or contiguous with other industrial activities
- potential for long-term land supply expansion
- located near suppliers and complementary businesses
- minimal or no adjoining land use constraints
- access to site not through significant residential areas

Site

- minimum developable area, not constrained by legislative and statutory constraints
- suitable site conditions (with consideration for development costs, drainage, soils, topography)
- relatively flat, ideally less than 5% slope
- does not have significant environmental or heritage values
- is not prime agricultural land
- compatibility with existing and adjoining land uses and possible buffer requirements
- potential for business to expand on-site



- potential to operate for 24-hour operations
- minimal or no environmental, geotechnical or drainage constraints
- unconstrained vehicle access and egress
- sufficient space for adequate parking and turning space for industrial vehicles
- the site needs to be of a minimum scale to foolproof the future due to the difficulties of creating industrial land

Infrastructure

- access to infrastructure and services (water, sewerage and power)
- serviced with appropriate infrastructure in terms of type and capacity
- near to freight connections and other important road and/or rail networks

Financial

- commercially viable development including land yield, resolving planning and environmental constraints and infrastructure servicing

5.2 Demand for Industrial Land - Measurement

Spatial Economics have typically utilised various techniques to determine the current and future need of industrial land uses. These techniques include:

1. **Recent Consumption method** - this technique relies on the geographic area of investigation having historically an unconstrained land supply market and recent history of unconstrained industrial land consumption.

This technique could not readily be used for Golden Plain as historically and currently the industrial land supply market is constrained.

2. **Comparative benchmarks** – this technique relies on comparative assessment of expected demand drawing on Spatial Economics internal databases of occupied/vacant industrial land stocks across approximately twenty regional municipalities. This approach cross tabulates the industrial land stock with information on the current population and population growth. This technique can provide a useful check on estimates of future requirements based on population growth projections.
3. **Employment projection model** – this technique relies on projections of employment by industry sector (at the 2 digit ANZSIC level).

Such an employment side model integrates forecasts of floor-space and land requirements with estimates of future industry sector growth and employment by type. It is 'calibrated' by using information sourced from land use surveys and building footprints by industry type. This technique is most likely to be useful in larger centres and/or in locations where there is a clear focus on the growth of particular industry sectors.

4. **Population change model** – this is related to the employment projection model but it does not take into account the age structure and/or the working population profile of the population.
5. **Anecdotal demand** – this technique relies on information sourced via consultation with existing or potential industrial land users and industrial land developers.

Demand forecasts gathered using this technique can sometimes be less reliable than that derived from other techniques. However, it can be highly valuable in terms of confirming broad demand/supply issues and highlighting specific industry requirements that are often difficult to ascertain via quantitative research and analysis.



In the case of Golden Plains' such anecdotal demand evidence was sourced from the council's Economic Development Unit utilising their land demand analysis for the Bannockburn Industrial Estate.

Spatial Economics have developed two industrial demand scenarios utilising a combination of the above techniques and then applied to the population growth scenarios outlined in the Golden Plains Housing Needs Assessment, 2022. The demand scenarios are solely focussed on **local service** industrial land supply requirements.

They do not include provision for potential export orientated industrial land supply needs. The latter is often characterised by 'one off' approaches from potential investors and is inherently difficult to predict in smaller regional council areas. They can also involve requirements for larger sites or sites with specific transport or services requirements. In the case of Golden Plains such industrial land requirements will most likely be largely supplied by the Gheringhap Employment Precinct.

The industrial land requirement scenarios:

- cover the period from 2021 to 2051 in ten year tranches;
- have been undertaken for both the north and south regions of the municipality (please refer to the Golden Plains Housing Needs Assessment, 2022 for geographic definitions);
- do not seek to determine the location/siting of industrial land requirements, as this would largely be directed by the outcomes of the yet to be drafted Golden Plains Shire Housing Strategy; and
- assume that only 5 net developable hectares of existing zoned industrial land in Smythesdale is commercially feasible to be developed. Further assessment of this land stock is recommended to ascertain both the availability and viability of this land as a supply source.

5.2.1 Demand Scenarios

The two industrial demand scenarios are presented below:

Scenario One is based on the population forecasts sourced from the Golden Plains Housing Needs Assessment (policy based intervention scenario).

- Population growth is assumed to increase from 24,765 persons in 2021 to 60,547 persons in 2051, a 3% average annual increase.
- Scenario One assumes an average annual industrial land requirement from 2021 to 2051 of 1.7 net hectares per annum for the municipality.

This is further detailed in table 13 below.

Scenario Two is based on the population forecasts sourced from the Golden Plains Housing Needs Assessment (VIF2019 extended scenario).

- Population growth is assumed to increase from 24,765 persons in 2021 to 43,423 persons in 2051, a 1.9% average annual increase.
- Scenario Two assumes an average annual industrial land requirement from 2021 to 2051 of 0.9 net hectares per annum.

This is further detailed in table 14 below.

It is emphasised that the future industrial land supply requirement will be highly dependent on the outcomes of the yet to be drafted Golden Plains Housing Strategy. Scenario One will only be relevant if the Golden Plains Council and community make a strategic land use policy choice to



increase the housing choices available in the northern region of the Shire with a view to 'capturing' a greater share of regional population growth from both the Ballarat and Geelong markets .

Table 13: Average Annual industrial land demand (net hectares) – Scenario One

	2021 to 2031	2031 to 2041	2041 to 2051
Northern Region	0.19	0.82	0.83
Southern Region	0.85	1.07	1.35
Golden Plains Shire	1.04	1.89	2.18

Source: Spatial Economics Pty Ltd

Table 14: Average Annual industrial land demand (net hectares) – Scenario Two

	2021 to 2031	2031 to 2041	2041 to 2051
Northern Region	0.12	0.11	0.12
Southern Region	0.68	0.73	0.91
Golden Plains Shire	0.80	0.84	1.03

Source: Spatial Economics Pty Ltd

5.2.2 Industrial Land Requirements

Based on the above industrial land demand scenarios from 2021 to 2051, it is estimated that:

- a total of 80 net developable hectares of zoned industrial land is required for Scenario One; and
- a total of 56 net developable hectares of zoned industrial land is required for Scenario Two.

A net developable hectare is defined as the land area available for industrial development/use, excluding such items as road infrastructure, drainage reserves, local open space, easements etc

It is estimated that there is a current deficiency of zoned industrial land of approximately 29 net developable hectares across the municipality. Of which, there is an approximate deficit of eight hectares in the northern region and 21 hectares in the southern region.

The tables below summarise the zoned industrial land supply requirements measured in net developable hectares by region from 2021 to 2051.

Table 15: Total zoned industrial land supply requirement (net hectares) – Scenario One

	Current Deficit (2021) - ha	Total Land Requirement (ha)
Northern Region	8	27
Southern Region	21	54
Golden Plains Shire	29	80

Source: Spatial Economics Pty Ltd

Table 15: Total zoned industrial land supply requirement (net hectares) – Scenario Two

	Current Deficit (2021) - ha	Total Land Requirement (ha)
Northern Region	8	12
Southern Region	21	44
Golden Plains Shire	29	56

Source: Spatial Economics Pty Ltd



Zone Type

The industrial land demand forecasts were based on industrial land needs that service the local community/economy. Therefore, the use of predominantly Industrial 1 zoning would be appropriate (with the selective use of Industrial 3 zoning if buffers are required).

Lot Size Configuration

The industrial land demand forecasts were based on industrial land needs that service the local community/economy. These largely demand relatively small lots, certainly less than 0.5 hectares in size and often around the 1,000 to 2,000 sqm mark. This is a typical demand profile as evidenced in most regional centres/townships across Victoria. Actual lot size distribution/configuration will largely be driven by market demands/preferences.

Other Considerations

From our analysis it seems clear that ongoing planning for industrial land supply in Golden Plains Shire will need to provide for two distinct types/sources of demand.

The first is the local demand for, primarily smaller, industrial sites. Being largely driven by population growth this demand should be, relatively speaking, steady and predictable.

The most recent example of a development serving this market is the Bannockburn Industrial Estate. This estate comprises approximately 45 allotments and lot sizes are typically around 1,800 sqm. It was developed in early 2000's and has now been almost entirely built out.

Industrial land developments of this type in a regional setting such as Golden Plains typically take some years to be fully sold. Land development's serving this market therefore tend to require a 'patient' investor. As a result, they can have marginal returns and can easily be made unviable if land assembly results involves high costs and/or if there is the likelihood of uncertainty or delays in relation to planning approvals.

The second source of demand comes from outside the Shire and is typically for larger sites. This demand comes from users for whom a decision to invest in the Shire reflects an assessment of the comparative advantage of Golden Plains as opposed to other potential regional locations.

As previously noted this demand is innately harder to forecast. It is 'lumpy', may be characterised by very specific site and location requirements, and can often be driven by companies with minimal past involvement with Golden Plains Shire. In terms of achievement of Council's economic and employment objectives demand of this type is also potentially of very high impact. For this market not only is price and land suitability likely to be critical but so also is the ability of Council to provide clear advice regarding planning approval times and requirements and to take other necessary steps to facilitate development.

The existence of these two distinct types of demand has implications for Council in framing a housing strategy (industrial component). In particular it points to the need for Council to both plan for and facilitate developments to meet the reasonably predictable local demand and also to have clear strategies to enable it to respond quickly to the hard to predict but potentially very important demands from outside the Shire.

In terms of external/large industrial lot demand the Gheringhap Employment Precinct is a likely source and location to meet this demand. The potential location of Meredith as a location for value adding/processing of agricultural production could be further investigated. The key to meeting this type of demand is that Council ensure they are in a position to respond quickly & positively if such a larger industrial land user approaches them.



5.3 Ongoing Land Supply and Demand Monitoring

A key element of our recommended scenario-based approach to planning is putting in place a system to regularly monitor and respond to actual changes in development trends.

This is required to ensure that Council promptly becomes aware of, and is therefore able to respond effectively to, any changes in actual growth rates and/or market conditions.

Some larger regional councils (e.g. the City of Greater Geelong, Moorabool, Surf Coast and Greater Shepparton) have put in place quite sophisticated arrangements for monitoring and responding to growth trends. Such a sophisticated and costly process is not appropriate for a smaller shire such as Golden Plains.

Instead, we recommend a simpler approach involving the following key elements:

- monitoring at a municipal and ABS SA2 level Estimated Resident Population data released by the Australian Bureau of Statistics;
- monitoring the quantum, location and type of industrial planning approvals/ subdivisions from internal processes;
- monitoring at a municipal and ABS SA2 level industrial building approval data, particularly the composition of industrial building approval activity;
- monitoring industrial land 'consumption' and subdivision and update industrial land capacity estimates to reflect residual capacity; and
- holding regular (annual or biannual) development forums with the local industrial land users, owners and local developers with the purpose of gathering intelligence regarding any potential land development and supply issues.

Key Issues

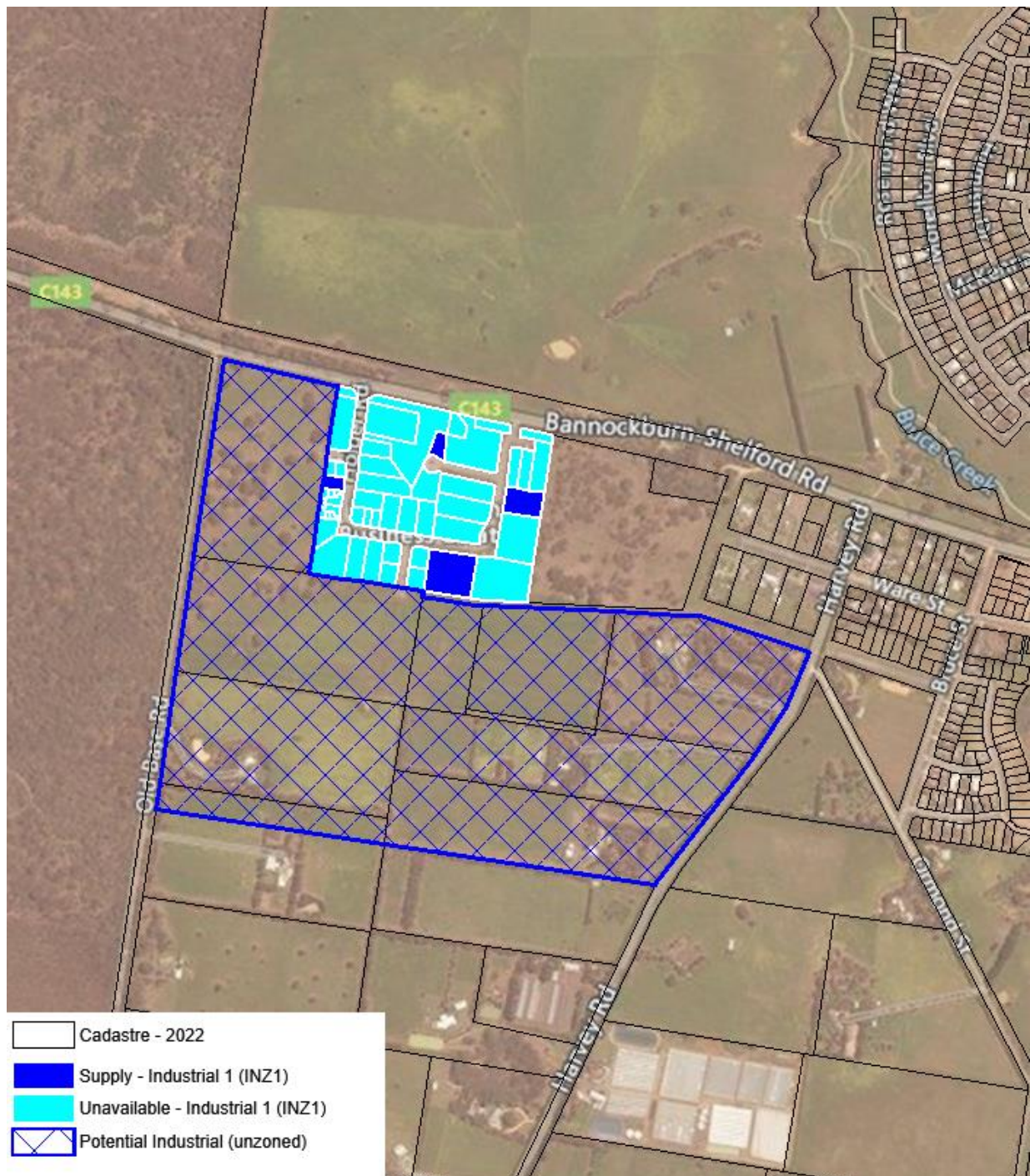
Spatial Economics consider there are currently insufficient zoned industrial broadhectare land stocks to meet current and future requirements.

With the eventual development of the Gheringhap Employment Precinct there will be less pressure for other precincts in Golden Plains to provide land for logistic (or logistic related manufacturing). This means that there will be less demand for larger lots in the other precincts and it is likely that the larger lots will be subdivided for smaller uses. However, the Gheringhap Employment Precinct requires significant up-front infrastructure investment to enable the site for freight and logistic development.

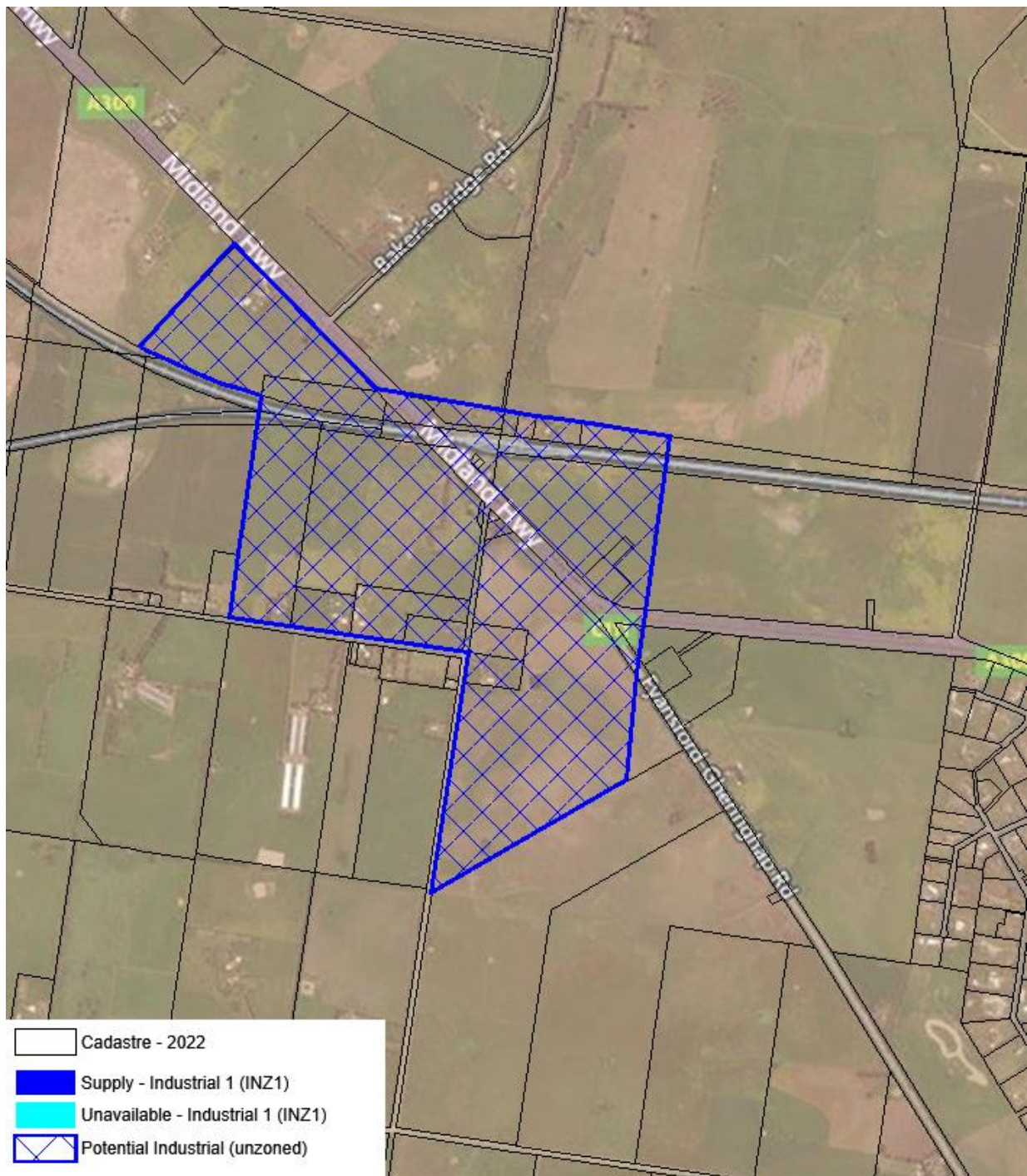
For example, the highly successful Ballarat West Employment Zone (BWEZ) required upfront infrastructure investment from both the State and Federal Governments to enable subsequent private sector investment and development. The BWEZ has been designed and constructed to enhance business productivity, with a freight hub, access for high productivity freight vehicles, secure top-quality infrastructure and strong access to road, rail and ports. Without similar upfront infrastructure investment, the land within the Gheringhap Employment Precinct will unlikely come to market due to the upfront cost prohibitive infrastructure requirements.



Map 2: Bannockburn Industrial Precinct



Map 3: Gheringhap Employment Precinct



Map 4: Smythesdale Industrial Precinct

