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Minta Farm Review

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lucid

/ˈluːsɪd/

adjective



1. expressed clearly; easy to understand

2. bright or luminous

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Table of Contents

Table of Contents.....	i
Executive Summary.....	1
1. Introduction.....	11
2. Minta Farm Precinct Structure Plan	13
2.1 Minta Farm Precinct Structure Plan	13
2.2 Minta Farm PSP – Employment Land Review.....	15
2.2.1 Overview and Summary of Analysis	15
2.2.2 Review of Analysis	16
3. Employment Precincts Benchmarking	19
4. Current Land Demand & Supply	22
4.1 Stakeholder Engagement	22
4.2 Commercial Office	23
4.3 Light Industrial.....	28
5. Scenario Modelling.....	32
6. Summary and Recommendations	35
6.1 Key Findings.....	35
6.2 Recommendations.....	36
References.....	37
Appendix A: Case Study Detailed Analysis.....	38

Executive Summary

Introduction

Lucid Economics has been engaged by the City of Casey to review the exhibited Minta Farm Precinct Structure Plan (PSP) in terms of the area's capacity to generate future employment, particularly across the commercial and office and innovation and technology sub-precincts.

While the majority of the Minta Farm precinct is currently proposed to be developed as residential land, 68.8 ha of land has been reserved for employment uses. The *Minta Farm PSP* (VPA, 2017a) highlighted employment outcomes across the precinct based on the future recommended land uses and job densities per land use. In total, the VPA has envisioned over 10,000 jobs being delivered within dedicated employment sub-precincts across the Minta Farm precinct. In addition to these jobs, employment would also be created at the local town centre, local convenience centre, mixed-use precinct, schools and other community infrastructure. Combined, the VPA has estimated a total of 11,258 jobs to be created in the precinct (VPA, 2017a). No timeframe has been provided by the VPA for this job growth to occur.

Table E.1 Recommended Land Use Composition, Minta Farm Employment Sub-Precincts

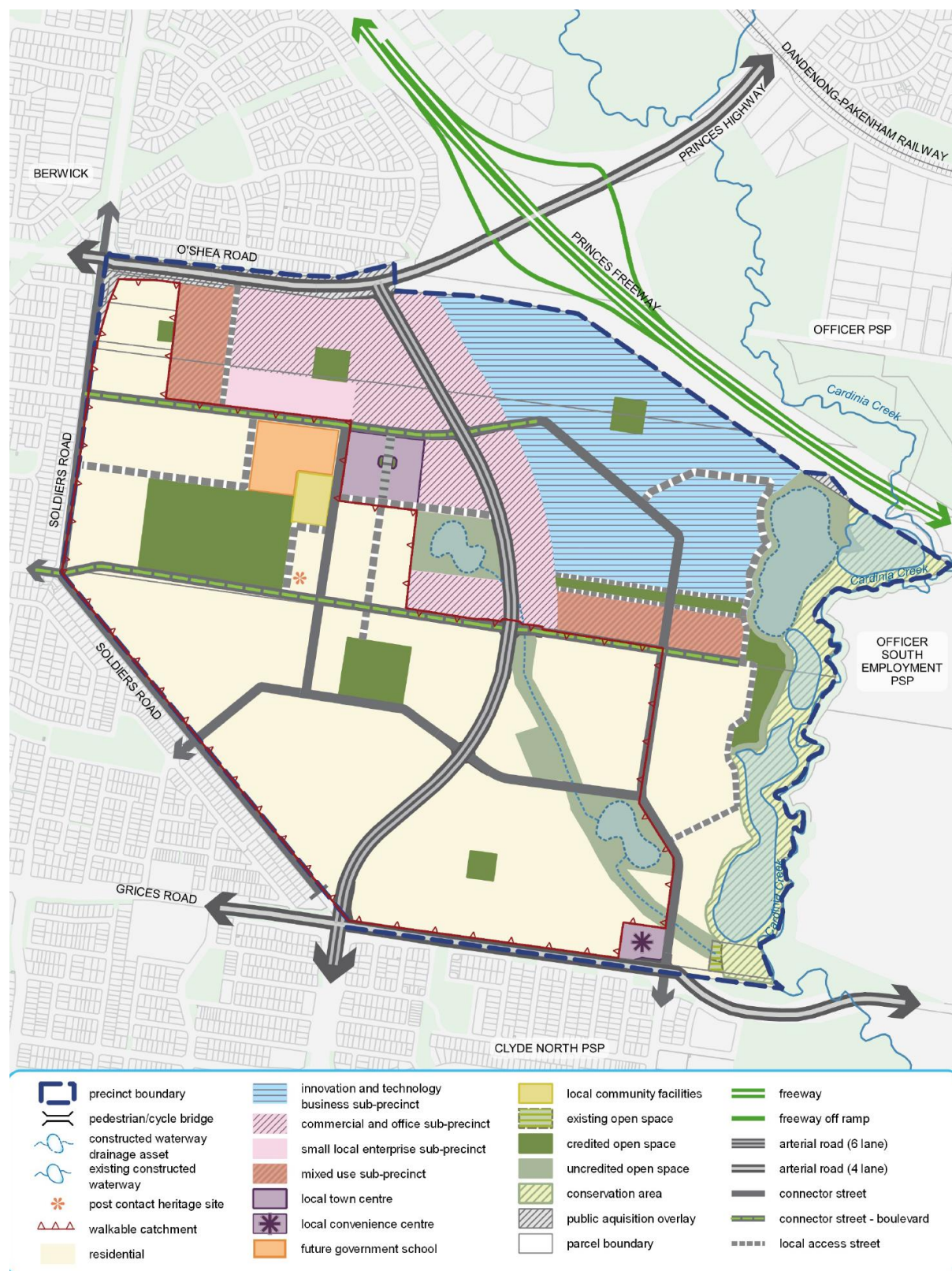
Land Use	Description (Plan 6 of Exhibited PSP)	Net Area (HA)	Jobs	Job Density (Jobs/HA)
Commercial and office	Commercial and office including research, education, retail and other supporting business services	26.15	7,322	280
Innovation and Technology	Business uses with a technology focus, including business incubators, light manufacturing as well as research and development	39.26	2,199	56
Small Local Enterprise	Local service businesses for example, gym or dance studio, private play centre, storage, automobile repairs, workshops and veterinary clinic	3.40	536	158
Total		68.80	10,057	146

Source: VPA (2017a)

The *Minta Farm PSP – Employment Land Review*, which is a supporting document and informs the *Minta Farm PSP*, does not have a timeline for the development of the area. The absence of a timeframe for future development (e.g. over the next 20 years or 30 years) makes it difficult to understand the market drivers to deliver the built form outcomes highlighted for the employment precinct.

While the planning designation and zoning provides a structure of what type of development can be built, it will be private sector development (driven by a return on investment, risk and numerous other market dynamics) that will determine what is delivered in the employment precinct (and when). Market drivers can and will influence the development of Minta Farm. As our research has shown, there is no market appetite for commercial office development in Minta Farm at the current time, however, it would be expected that the light industrial land (Innovation and Technology Precinct) would sell quickly once it was available to the market.

Figure E.1. Minta Farm Future Urban Structure



Source: VPA (2017b)

Employment Precinct Benchmarking

Lucid Economics undertook detailed employment analysis for some of the case study areas highlighted in the *Minta Farm PSP – Employment Land Review* as well as other similar business parks from the Sydney and Brisbane regions using the recently released 2016 Census employment data.

Table E.2 Case Study Analysis Summary

Precinct	Size (HA)	2016 Employment	Distance from CBD (km)	% Developed	Implied Employment Density (Jobs/HA)	Top Three Employment Industries
Dandenong LOGIS Business Park	154	1,518	29.2	65%	15	Manufacturing Wholesale Trade Other Services
Chifley Business Park	121	2,494	21.2	90%	23	Manufacturing Retail Trade Transport
Caribbean Business Park	188	5,119	24.4	80%	34	Wholesale Trade Manufacturing Retail Trade
Tally Ho	26	3,090	17.9	100%	119	Public Administration Professional Services Information, Media & Telecom
Narre Warren	50	1,848	37.8	70%	52	Retail Trade Public Administration Healthcare
Nor West	157	21,839	27.0	83%	169	Healthcare Manufacturing Professional Services
Macquarie Park	161	37,201	12.5	91%	253	Wholesale Trade Professional Services Information, Media & Telecom
Sydney Olympic Park	52	9,847	12.7	97%	197	Finance & Insurance Arts and Recreation Professional Services

Precinct	Size (HA)	2016 Employment	Distance from CBD (km)	% Developed	Implied Employment Density (Jobs/HA)	Top Three Employment Industries
Penrith CBD	88	10,562	49.0	80%	151	Public Administration Retail Trade Healthcare
Brisbane Technology Park	33	4,544	14.1	97%	142	Healthcare Finance and Insurance Accommodation and Food Services
Springfield Central	183	3,221	26.7	40%	44	Accommodation and Food Services Healthcare Education
<i>Average</i>	<i>101</i>	<i>9,208</i>	<i>24.8</i>	<i>83%</i>	<i>126</i>	
<i>Minta Farm</i>	<i>69</i>	<i>10,057</i>	<i>44.8</i>	<i>0%</i>	<i>146</i>	

Note: % developed estimated based on 2016/2017 aerial imagery when official government estimates not available.

Source: Lucid Economics; ABS (2017); VPA (2017a); NSW DPE (2017)

This benchmarking analysis yielded many interesting findings in relation to Minta Farm, including:

- **Distance from CBD:** Precincts closer to the CBD tend to have higher densities and a higher proportion of professional business services (i.e. white-collar employment). Given the distance of Minta Farm from the CBD, the job density is high, relative to other precincts examined.
- **Recommended Industry Mix:** There is a great diversity of industries within the precincts studied. Many have a specific focus including industrial activities (e.g. Dandenong Logis, Chifley, Caribbean) or professional business services (e.g. Tally Ho, Macquarie Park, Sydney Olympic Park), but all have a mix of activities. The proportion of land dedicated to commercial office uses in Minta Farm is high, relative to the other precincts, their distance from the CBD and existing employment structures.
- **Variety of Job Densities:** There is a range of employment densities across the precincts, ranging from 15 to 253. The job densities achieved relate directly to the mix of industries and proximity away from the CBD. Precincts closer to the CBD are able to attract a higher proportion of commercial office development, which creates the opportunity for higher densities. By contrast, industrial precincts have much lower densities. The Penrith CBD is an outlier in the analysis, given its size and distance from the Sydney CBD as well as the fact that it's a well-established regional centre, while the other precincts represent various business parks and/or employment areas. Macquarie Park is the largest (in terms of employment) and has the highest density. It is also the closest to a CBD. The job density for the commercial office component of Minta Farm is high relative to the case study areas, particularly given the distance from the CBD.
- **Land Sizes:** The precincts vary in their size, ranging from 26 ha to 188 ha. The size of the precinct has less of an impact on the employment capacity of the land than the distance from the CBD and the industry mix. The Minta Farm employment precinct (69 ha) is smaller than the average across the case study areas (101 ha).

Figure E.2. Minta Farm Location Map



Source: City of Casey

Current Land Demand

Commercial Office

Using sales and leasing information directly from landlords and developers, demand for commercial office space in the City of Casey was identified at 3,360 sqm in 2017. This level of demand includes offices leased in new developments as well as office units sold during the calendar year in projects currently under development. This level of demand was confirmed through stakeholder engagement.

It should also be noted that there was one property that finished construction during 2017 (66 Victor Crescent, Building 2, Narre Warren). Despite being marketed for over a year, the property was completed without any tenants leasing space and remains empty.

Additionally, there are other projects across the City of Casey that have been approved (development approval) that also contain office space (Table E.3). In total, there is existing and future supply of 44,834 sqm of commercial office space.

The recently completed *Berwick Health & Education Comprehensive Development Plan* (December 2017) has identified a future 98,582 sqm of commercial office space in the precinct and the *Casey Central Town Centre PSP* (November 2015) has earmarked 70,086 sqm of commercial office space, both of which would add to the existing future supply. Finally, there is also some existing space in existing, older buildings, which can accommodate some future demand.

Table E.3 Commercial Office Development, City of Casey (2017)

Project	SQM
New Existing Space (Available)	
66 Victor Crescent Bldg 1 (Narre Warren)	370
66 Victor Crescent Bldg 2 (Narre Warren)	5,637
Total Available	6,007
Under Construction	
55-75 Victor Crescent - Cube 1 (Narre Warren)	4,357
12 South Gippsland Hwy (Cranbourne)	492
Total Under Construction	4,849
Approved	
66 Victor Crescent Bldg 3 (Narre Warren)	4,487
66 Victor Crescent Bldg 4 (Narre Warren)	4,508
25 Verdun Drive (Narre Warren)	6,863
55-75 Victor Crescent - Cube2 (Narre Warren)	4,564
10 Lyall Street (Cranbourne)	1,256
145 Sladen St (Cranbourne)	300
Total Approved	21,978
Planned	
81 Victor Crescent (Narre Warren)	12,000
Total Potential Future Space	44,834

Note: SQM equal net leasable area (NLA). NLA sourced directly from marketing brochures or estimated based on gross floor area (GFA) provided in Council development approval and applying a ratio of 80% to convert GFA into NLA.

Source: Lucid Economics; City of Casey (2018); MAB (2018); CBRE (2018); Lettieri (2014)

Light Industrial

Engagement with local real estate professionals would indicate that there is strong appetite for light industrial land, with prices increasing from \$265 per sqm at the beginning of 2017 to \$300 per sqm (and above) currently. Stage 4 of Thompsons Base is almost sold out and the Cranbourne West Business Park (approximately 5.5 ha) sold very quickly this past year.

In order to estimate current demand for light industrial land, a very similar process to the Urban Development Program (UDP) was repeated looking at the calendar year 2017 (as opposed to the financial year like the UDP). Aerial imagery was examined to identify new industrial construction and to measure the area of land that the development occupied. Internet property sales listings (www.realcommercial.com.au) was used to help identify recently completed buildings as well as those currently under construction.

In 2017, it is estimated that 6.7 ha of land was consumed for light industrial uses in the City of Casey (Table E.4). This level of demand was confirmed through stakeholder engagement and compares favourably to the most recent UDP. Across the Southern Region, in 2016-17, 104.7 ha of industrial land was consumed with the majority of it in Greater Dandenong (Table E.5). Stakeholders confirmed the primacy of Dandenong for industrial development. There has been growing consumption of land in Cardinia. Both of these trends reflect sentiment from the consultation as well as represent the unique features of these areas and the specific part of industrial activity that they can cater for. Dandenong is well suited for larger industrial uses (which is partly responsible for the large consumption trends), while Cardinia is well suited for larger and heavier industrial users as well as growing demand across the South East region for this type of space. Light industrial demand, particularly for smaller lots, is more suited to the City of Casey (and adjoining areas such as Knox, part of the Eastern Region in the UDP).

Table E.4 Industrial Land Consumption, City of Casey (2017)

Land	Area (HA)
Thompsons Base	4.92
1445 S. Gippsland Hwy	0.50
Evans Road Precinct	1.32
Total	6.74

Source: Lucid Economics

Table E.5 Consumption of Industrial Land, Urban Development Program, Southern Region (HA)

	2012-13 to 2013-14	2013-14 to 2014-15	2014-15 to 2015-16	2015-16 to 2016-17
Bayside	0.2	0	-0.2	0
Boroondara	0	0	0.1	-0.1
Glen Eira	-0.3	0	0	0.3
Stonnington	0	0	0	0
Inner South East Region	-0.1	0	-0.1	0.2
Cardinia	8.3	6.1	10.3	15.1
Casey	3.0	-3.8	6.2	4.4
Frankston	7.9	2.9	21.4	10.8
Greater Dandenong	48.0	37.2	75.0	56.3
Kingston	2.9	5.5	13.3	13.5
Mornington Peninsula	4.0	10.2	3.7	4.7
Southern Region	74.0	58.2	130.0	104.7
Southern SSIP	52.7	39.8	76.4	58.5

Source: Dept. of Environment, Land, Water and Planning (2017)

Scenario Modelling

Based on current levels of demand for both commercial office and light industrial land, two key scenarios were developed, including: There are two main scenarios developed including:

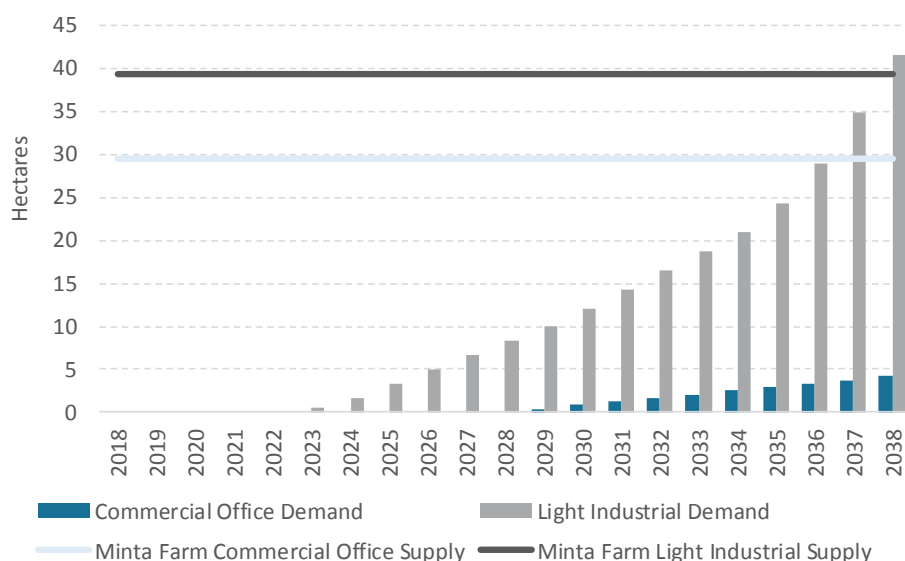
- **Current commercial and office demand:** Current level of demand, estimated at 3,360 sqm per year, was modelled against the new existing commercial office space in the City of Casey as well as the space currently under construction, approved and proposed in order to reflect the time required to absorb this space. Based on consultation, it has been assumed that commercial office demand does not materialise for Minta Farm until after the identified commercial office space in Narre Warren is absorbed. In order to transition commercial office demand (in sqm) into an annual demand for land at Minta Farm, the application of a floor space efficiency of 80%, average of two storeys, and a site coverage of 50% were applied¹. The result is an estimated average annual consumption of 0.42 ha of net developable commercial office land. As explained earlier, commercial office development does not take place evenly across years but instead in large, 'bulky' increments. However, for demonstration purposes this average annual figure of land consumption can be used as the demand will average out over the future time frames. This scenario does not consider any commercial office development taking place in the Berwick Health and Education Precinct or the Casey Central Town Centre. Inclusion of these projects would likely extend the start of commercial office development in Minta Farm.
- **Current light industrial consumption:** Current level of consumption, estimated at 6.7 ha per year, was modelled against the known future supply of light industrial land across the various existing developments in the City of Casey, in order to show the time required to consume this land. As per consultation, it has been assumed that light industrial land in Minta Farm sells quickly after being offered to the market (assumed to be two years from now). Demand is split across the existing and future anticipated light industrial precincts until land in these precincts is completely consumed. At such a time, additional consumption is added to the remaining precincts.

As highlighted in the figure below (Figure E.3), by 2038 all light industrial land within the Minta Farm precinct will be consumed. By contrast, only 14% of the commercial office land within the Minta Farm precinct will be consumed by 2038. At these rates, there is 20 years' worth of light industrial land and 81 years' worth of commercial office land.

In this context, it is important to note that the area dedicated to commercial and office use in Narre Warren is approximately 5 ha, only 19% of what is allocated for commercial and office uses in Minta Farm. According to stakeholders, it has taken approximately 10 years for Narre Warren to reach its current utilisation and could take between 10 and 20 additional years to fill its allocation of land for commercial office purposes.

¹ These assumptions were used in the *Minta Farm PSP Employment Precinct Land Review* to convert the land into commercial office built form.

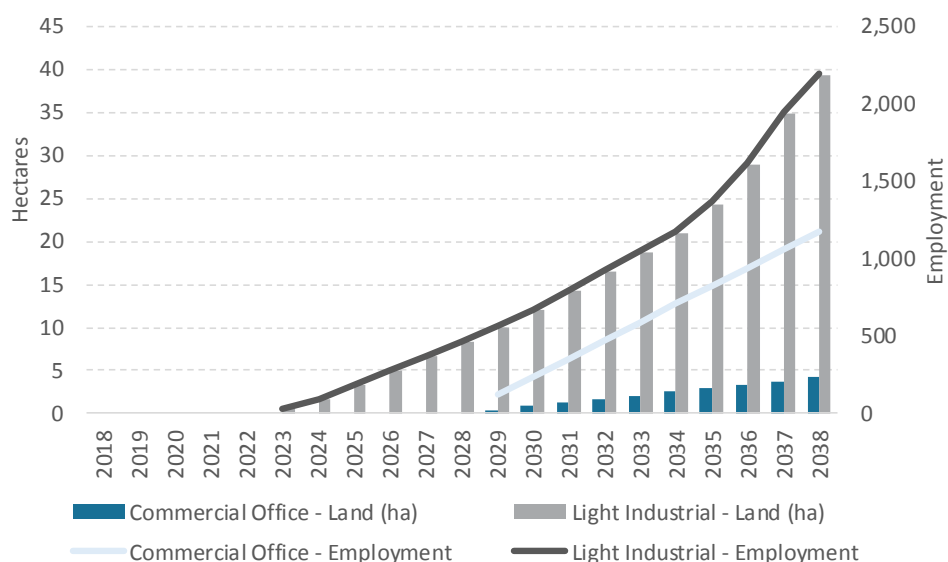
Figure E.3. Future Demand and Supply, Minta Farm (HA)



Source: Lucid Economics

The following figure (Figure E.4) highlights the employment outcomes for each demand scenario (using the suggested employment densities in the *Minta Farm PSP*). As highlighted, at current levels of demand, light industrial lands in Minta Farm have the potential to generate 2,199 jobs by 2038 and commercial office lands can deliver 1,176 jobs by the same timeframe. Given the existing and future supply of light industrial land in Cranbourne West and Clayton North, Minta Farm is not expected to deliver jobs until 2023. Given the existing and future supply of commercial office space at Narre Warren, the commercial lands in Minta Farm are not expected to generate jobs until 2029.

Figure E.4. Future Land Consumption and Employment Outcomes, Minta Farm



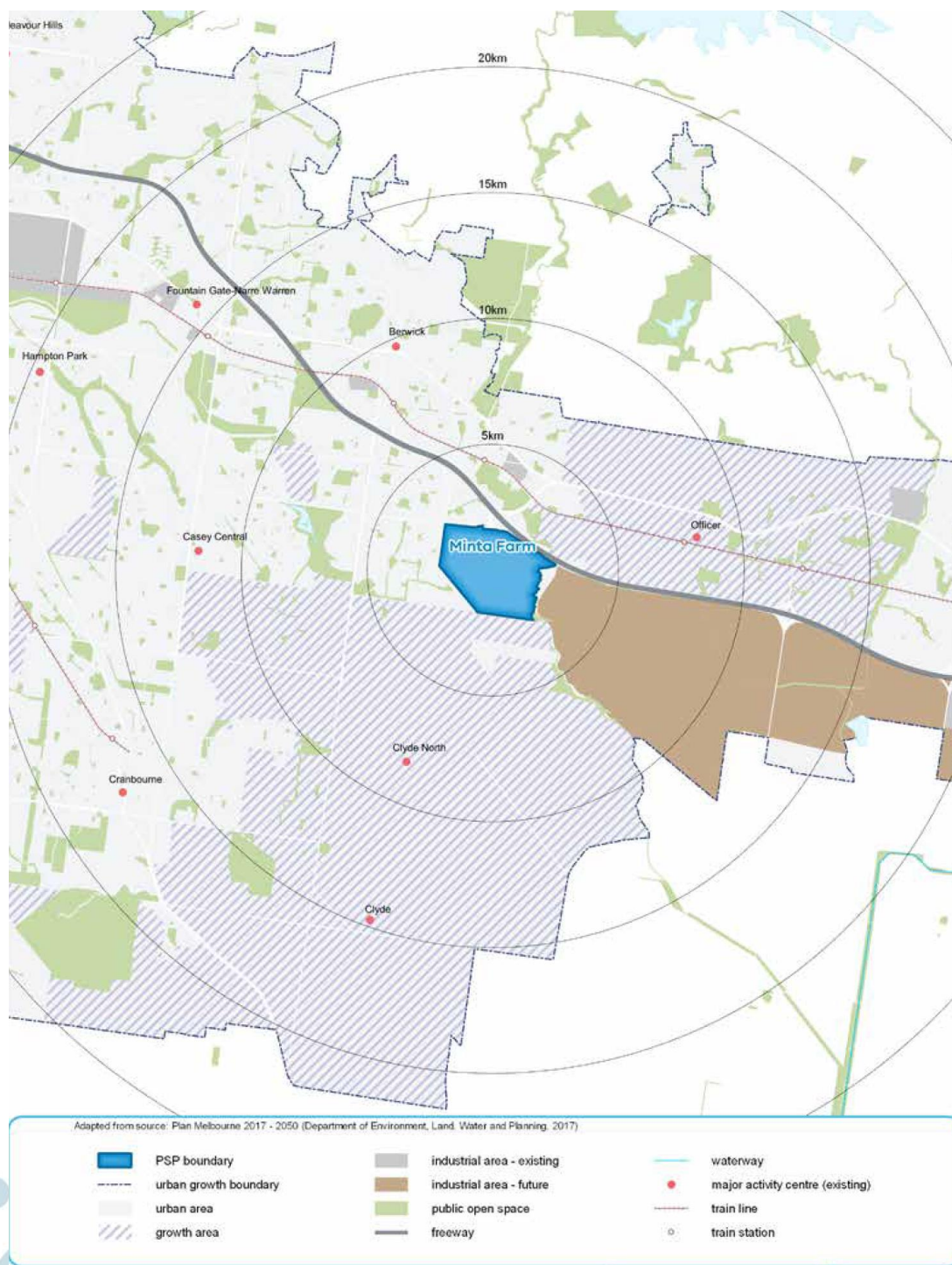
Source: Lucid Economics

1. Introduction

Lucid Economics has been engaged by the City of Casey to review the Minta Farm Precinct Structure Plan (PSP) in terms of the area's capacity to generate future employment.

The Minta Farm PSP provides a framework for the future development of 285 hectares of land in the City of Casey, located to the west along the Princess Freeway and bordered by O'Shea Road, Soldiers Road, Grices Road and Cardinia Creek.

Figure 1.1. Minta Farm Locational Context



Source: VPA (2017a)

Recently, the Victorian Planning Authority (VPA) completed a review of the employment precinct land for the Minta Park PSP as well as the draft Minta Park PSP. The PSP highlighted the potential to create over 11,000 jobs across the precinct, with a majority of employment generated through the innovation and technology and commercial and office sub-precincts (VPA, 2017a). The City of Casey is seeking a review of the employment generating capacity of the Minta Farm area, based on the exhibited PSP, particularly across the two key sub-precincts.

This review includes:

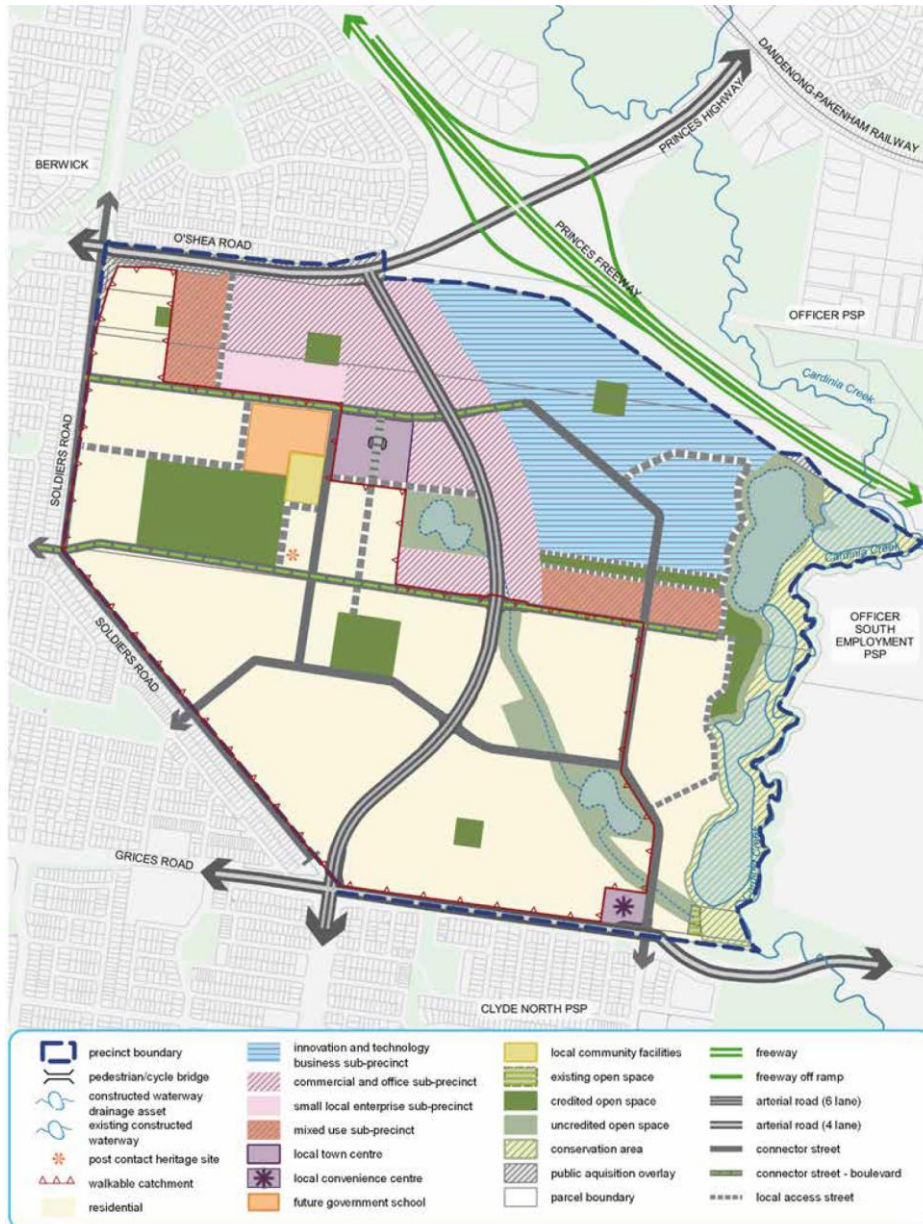
- Review of the *Minta Farm PSP* (VPA, 2017a)
- Review of the *Minta Farm PSP Employment Precinct Land Review* (VPA, 2017b)
- Review of the *Berwick Health & Education Comprehensive Development Plan* (VPA, 2017c)
- Review of the *Casey Central Town Centre Precinct Structure Plan* (VAP, 2015)
- Review of the *Urban Development Program Metropolitan Melbourne Industrial 2017* (Dept. of Environment, Land, Water and Planning, 2017)
- Review and benchmarking of other similar employment precincts
- Future employment modelling

2. Minta Farm Precinct Structure Plan

2.1 Minta Farm Precinct Structure Plan

The analysis has informed the future urban structure as highlighted by Plan 3 of the exhibited PSP (Figure 2.1), which includes a variety of employment uses across various sub-precincts.

Figure 2.1. Minta Farm Future Urban Structure



Source: VPA (2017a)

While the majority of the Minta Farm precinct is currently proposed to be developed as residential land, 68.8 ha of land has been reserved for various employment uses (Table 2.1). The *Minta Farm PSP – Employment Land Review* highlighted employment outcomes across the precinct based on the future recommended land uses and job densities per land use. In total, the VPA has envisioned over 10,000 jobs being delivered within dedicated employment sub-precincts across the Minta Farm precinct (VPA, 2017a). In addition to these jobs, the *Minta Farm PSP* also envisions employment being created in other sub-precincts as well (Table 2.2). Combined, the VPA expects the Minta Farm PSP to deliver a total of 11,258 jobs across the entire precinct.

Table 2.1 Recommended Land Use Composition, Minta Farm Employment Sub-Precincts

Land Use	Description (Plan 6 of Exhibited PSP)	Net Area (HA)	Jobs	Job Density (Jobs/HA)
Commercial and office	Commercial and office including research, education, retail and other supporting business services	26.15	7,322	280
Innovation and Technology	Business uses with a technology focus, including business incubators, light manufacturing as well as research and development	39.26	2,199	56
Small Local Enterprise	Local service businesses for example, gym or dance studio, private play centre, storage, automobile repairs, workshops and veterinary clinic	3.40	536	158
Total		68.80	10,057	146

Source: VPA (2017a)

Table 2.2 Additional Employment (Outside of Designated Employment Precinct)

Land Use	Jobs
Council kindergarten	10
Community centre	10
Government primary school	40
Private child care facility	15
Local town centre	314
Local convenience centre	87
Mixed use	582
Home-based business	143
Total	1,201

Source: VPA (2017a)

2.2 Minta Farm PSP – Employment Land Review

2.2.1 Overview and Summary of Analysis

The *Minta Farm PSP – Employment Land Review* (VPA, 2017b) was conducted by the Victorian Planning Authority (VPA) to provide further detailed analysis and planning for the Minta Farm employment precinct (as part of the overall precinct examined under the Minta Farm PSP).

The analysis contained in the report considers:

- Physical Context
- Strategic and Policy Context
- Site Context
- Employment analysis (including case studies)

The *Minta Farm PSP – Employment Land Review* makes a number of findings regarding employment uses in the Minta Farm precinct, including:

- The north-east part of the precinct is not suitable for residential uses given the proximity to the Princess Freeway and other transport infrastructure.
- The South East Growth Corridor Plan nominates the Minta Farm PSP to be a mixed use area, which specifically excludes heavier industrial uses, which are better suited for industrial land further south and east of the Minta Farm precinct.
- The Minta Farm PSP area should encourage and allow a mix of uses that provides complementary synergies (i.e. business elements should leverage local amenity, local residential development should leverage business elements) in order to create a community where people could live and work in great proximity.
- The Minta Farm PSP area should provide a critical mass of population between 8,000-10,000 to support local retail and amenity development of a 'town centre'.
- There is a large undersupply of local employment opportunities in the Casey-Cardinia growth corridor.
- There is considerable, dedicated employment land across the Casey-Cardinia growth corridor and acknowledgement that demand for industrial land has been stronger in the north and west due to access to existing ports and other transport infrastructure.
- There is acknowledgement that the manufacturing sector is changing. Current trends demonstrate two emerging industrial typologies; one for large lot industrial development to support large logistics operations and one for a wide variety of smaller local and subregional level needs.
- A proposition that Minta Farm can act as a catalyst for the State Significant Industrial Precincts (SSIP) through the development of office floorspace and white collar jobs within Minta Farm.
- Case study analysis of the following areas that was used to inform the land use composition and employment densities used for the Minta Farm PSP employment precinct, including:
 - University Hill
 - Essendon Fields
 - Dandenong Logis
 - M1 Industry Park
 - Chifley business Park
 - Caribbean Business Park
 - Tally-Ho Business Park
 - Meridian business Park

2.2.2 Review of Analysis

While not suitable for residential, the north-east part of Minta Farm PSP area provides visibility from the Princess Freeway as well as direct access to the Freeway with the future planned intersection with O'Shea Road, which are advantages for business, particularly light industrial end users. The exclusion of heavier industrial uses would seem appropriate, given the significant amounts of industrial land in Officer and Pakenham as well as the inclusion of residential land within the Minta Farm PSP. Our consultation with local real estate professionals would further confirm that heavier industrial users would be more attracted to industrial lands further south.

Historically, it is true that industrial land across the Casey-Cardinia Growth Corridor has not been as attractive to users and developers as lands closer to Melbourne, particularly around Dandenong South National Employment Cluster. However, the market is finally moving further south and numerous dynamics within the market are now making lands in the Casey-Cardinia Growth Corridor more attractive, most notably the preferences of business owners (and their employees) to work closer to where they live. At the same time, most of the land in the Casey-Cardinia Growth Corridor has been unserved by infrastructure, and thus not as 'development ready' as lands in Dandenong South National Employment Cluster.

The changing trends and dynamics of the manufacturing sector (and broader industrial activities as well) are critically important for future planning. The notion of a 'manufacturing company' or even an 'industrial company' are changing rapidly and will continue to change and evolve. Of particular importance for the Minta Farm PSP is the evolution of small businesses engaged in a wide variety of activities. For example, through online trading/marketing and access to lower cost products offshore, many small businesses currently have a requirement for warehouse space, coupled with either marketing, design or engineering space (in one location). These businesses could be in industries such as home improvement/renovation, engineering or simply wholesalers. Many of these small businesses use the superannuation accounts of the business owner(s)/operator(s) to purchase facilities for their business. Consultation with local real estate professionals shows that these owner/operators are important to the light industrial market in the City of Casey and will have potentially strong interest in Minta Farm.

The proposition that Minta Farm could act as a 'potential catalyst for the SSIP' is fairly unlikely for most businesses. While Minta Farm does have geographic proximity to the SSIP, it is unlikely that very many businesses would see value in separating their management function from the manufacturing or production facilities. If this separation was an option, for example, if the manufacturing plant was part of a large, multinational company, then it is likely the corporate functions would remain in Melbourne or Sydney (or located to a more centralised CBD location). For SMEs, the corporate function would likely be small and the business would likely opt to house these staff members in more affordable premises to reduce costs and improve margins. At the same time, while Minta Farm does provide proximity to the SSIP, multiple vehicle movements would still be required to access the manufacturing premises in the SSIP, particularly for some management staff that would spend a great deal of time engaging with managers/workers in the 'factory'. These movements would likely be seen as a hinderance and consume valuable time.

Consultation with real estate professionals and developers found that the potential markets for Minta Farm (i.e. commercial office and light industrial) function very differently to the heavier industrial market and as such, there are very few synergies between Minta Farm and the SSIP.

The case study analysis contained in the *Minta Farm PSP – Employment Land Review* is interesting and further analysis on these areas has been conducted (refer Section 3). While the analysis and comparison of Minta Farm to these other areas is interesting in terms of employment densities and the ultimate built form/development of Minta Farm, it is difficult to compare many of these areas effectively with the Minta Farm area today or in the short-term for a number of reasons:

- **Distance from the CBD:** Minta Farm is 45km from the Melbourne CBD. All of the other areas considered are much closer. In terms of distance from the Melbourne CBD, Melton, Sunbury and Craigieburn are similar to Minta Farm, however, due to traffic, they are often easier to access. It would be difficult to imagine the same type of development with a focus on commercial office space in Melton, Sunbury or Craigieburn.
- **Stage of Development:** Many of the precincts considered are fully developed and others are still developing (and have required a number of years to reach the current stage of development). As such, comparisons of these areas to Minta Farm (raw land) can be difficult. Simply because a certain development type or job density has been achieved in the case study areas is not necessarily a benchmark for what will be delivered in Minta Farm. Naturally, comparisons with existing developments can provide some guidance and help to establish a range of future potential outcomes, but they should not be mistaken for given development outcomes for Minta Farm in the future.
- **Type of Precinct:** The precincts considered are diverse in their nature, with some functioning more as an industrial precinct and others as an office precinct. The nature of these precincts will often determine the nature of their employment, densities, land sizes and built form outcomes. As such, it is difficult to compare these areas directly to Minta Farm as none of them have all of the elements that are meant for the Minta Farm employment precinct.

Additionally, there are two other limitations to highlight from the review of the *Minta Farm PSP – Employment Land Review*:

- **Absence of Development Timeframe:** The *Minta Farm PSP – Employment Land Review* (nor other PSP planning documents) has not established a timeline for the development of Minta Farm. The absence of a timeframe for future development (e.g. over the next 20 years or 30 years) makes it difficult to understand the market drivers to deliver the built outcomes highlighted for the employment precinct.
- **Market Drivers:** The *Minta Farm PSP – Employment Land Review* fails to consider market drivers in its analysis of the future potential employment capability of Minta Farm. While the planning designation and land use provides a structure of what type of development can be built, it will be private sector development (driven by a return on investment, risk and numerous other market dynamics) that will determine what is delivered in the employment precinct (and when). Market drivers can and will influence the development of Minta Farm. As our consultation and research has shown, there is no market appetite for commercial office development in Minta Farm at the current time, however, there would be considerable interest in light industrial development for the Minta Farm area in the current market.

Market drivers also relate to the timeframe that development of the employment precinct could occur (which is explored further in Section 4).

2016 Census Employment Data

The Australian Bureau of Statistics (ABS) did not release detailed employment data from the 2016 Census until late October 2017 and then subsequently announced that there were issues with some of the data released, which were not rectified until December 2017.

The VPA did not have the benefit of using the 2016 employment data in the development of the *Minta Farm PSP – Employment Land Review* and instead had to rely on 2011 Census data. Analysis and comparison of employment data from 2011 and 2016 shows that many trends continued, including the growing jobs deficient locally.

3. Employment Precincts Benchmarking

Lucid Economics undertook detailed employment analysis for some of the case study areas highlighted in the *Minta Farm PSP – Employment Land Review* as well as other similar business parks from the Sydney and Brisbane regions using the recently released 2016 Census employment data and examining total employment within the precinct, the structure of employment (by industry) across the precinct as well as job growth (by industry) between 2011 and 2016.

This analysis yielded many interesting findings in relation to Minta Farm, including:

- **Distance from CBD:** Precincts closer to the CBD tend to have higher densities and a higher proportion of professional business services (i.e. white-collar employment). Given the distance of Minta Farm from the CBD, its identified job density is high, relative to other precincts examined.
- **Recommended Industry Mix:** There is a great diversity of industries within the precincts studied (Figure 3.2 and Figure 3.3). Many have a specific focus including industrial activities (e.g. Dandenong LOGIS Business Park, Chifley, Caribbean) or professional business services (e.g. Tally Ho, Macquarie Park, Sydney Olympic Park), but all have a mix of activities. The proportion of land dedicated to commercial office uses in Minta Farm is high, relative to the other precincts and their distance from the CBD.
- **Variety of Job Densities:** There is a range of employment densities across the precincts, ranging from 15 to 253. The job densities achieved relate directly to the mix of industries and proximity away from the CBD. Precincts closer to the CBD are able to attract a higher proportion of commercial office development, which creates the opportunity for higher densities. By contrast, industrial precincts have much lower densities. The Penrith CBD is an outlier in the analysis, given its size and distance from the Sydney CBD as well as the fact that it's a well-established regional centre, while the other precincts represent various business parks and/or employment areas. Macquarie Park is the largest (in terms of employment) and has the highest density. It is also the closest to a CBD. The job density for the commercial office component of Minta Farm is high relative to the case study areas, particularly given the distance from the CBD.
- **Land Sizes:** The precincts vary in their size, ranging from 26 ha to 188 ha. The size of the precinct has less of an impact on the employment capacity of the land than the distance from the CBD and the industry mix. The Minta Farm employment precinct (69 ha) is smaller than the average across the case study areas (101 ha).

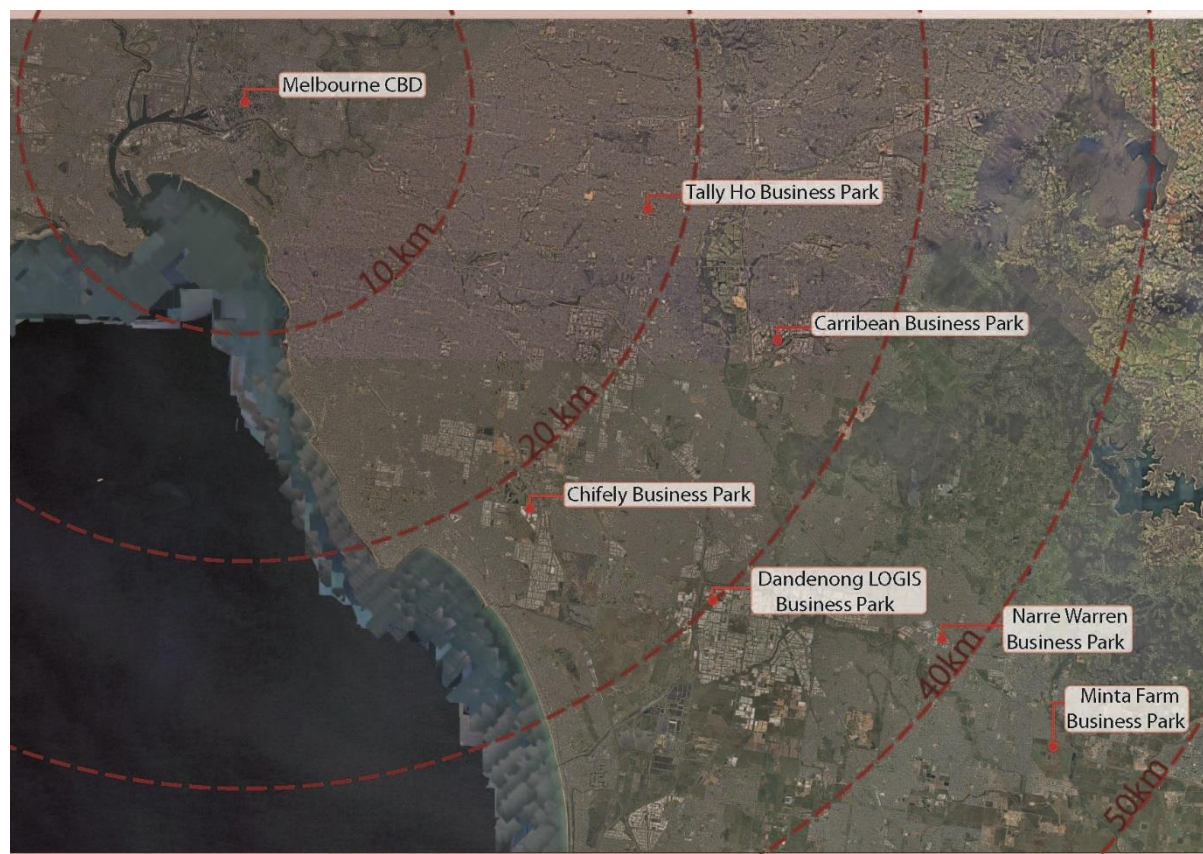
Table 3.1 Case Study Analysis Summary

Precinct	Size (HA)	2016 Employment	Distance from CBD (km)	% Developed	Implied Employment Density (Jobs/HA)
Dandenong LOGIS Business Park	154	1,518	29.2	65%	15
Chifley Business Park	121	2,494	21.2	90%	23
Caribbean Business Park	188	5,119	24.4	80%	34
Tally Ho Business Park	26	3,090	17.9	100%	119
Narre Warren Office Precinct	50	1,848	37.8	70%	52
Norwest Business Park	157	21,839	27.0	83%	169
Macquarie Park	161	37,201	12.5	91%	253
Sydney Olympic Park	52	9,847	12.7	97%	197
Penrith CBD	88	10,562	49.0	80%	151
Brisbane Technology Park	33	4,544	14.1	97%	142
Springfield Central	183	3,221	26.7	40%	44
Average	101	9,208	24.8	83%	126
Minta Farm	69	10,057	44.8	0%	146

Note: % developed estimated based on 2016/2017 aerial imagery when official government estimates not available.

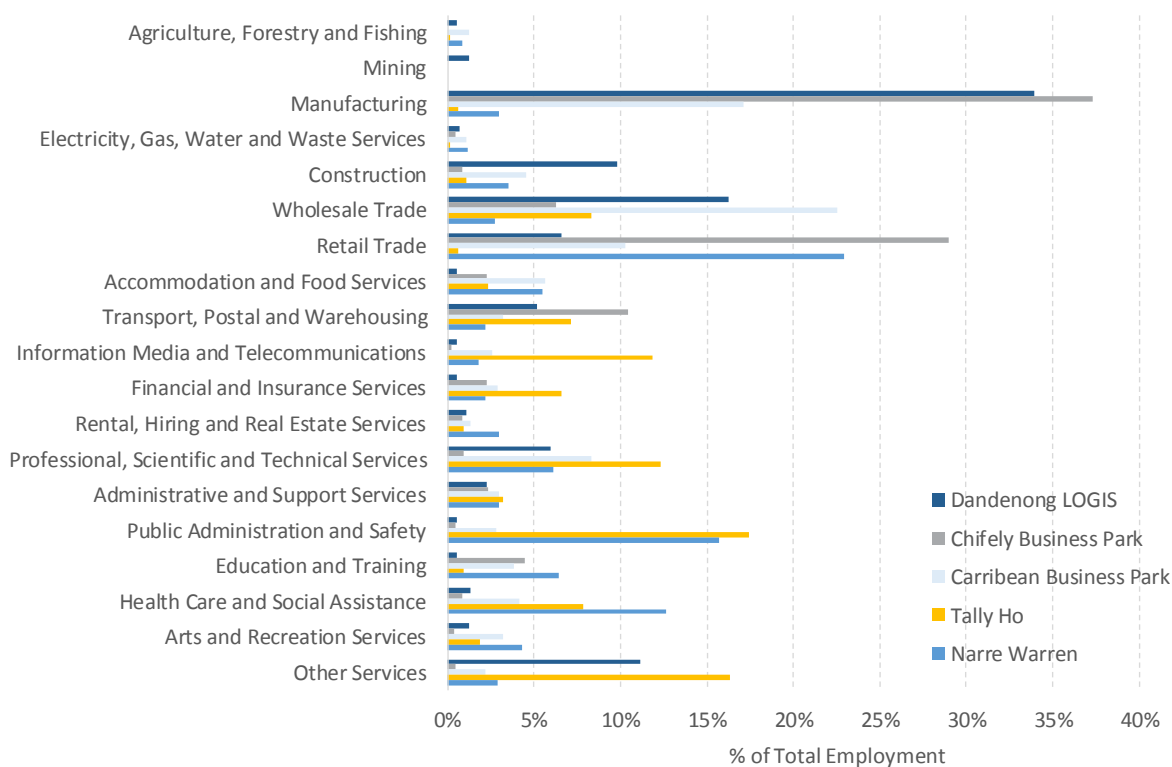
Source: Lucid Economics; ABS (2017); VPA (2017a); NSW DPE (2017)

Figure 3.1. Minta Farm Location Map



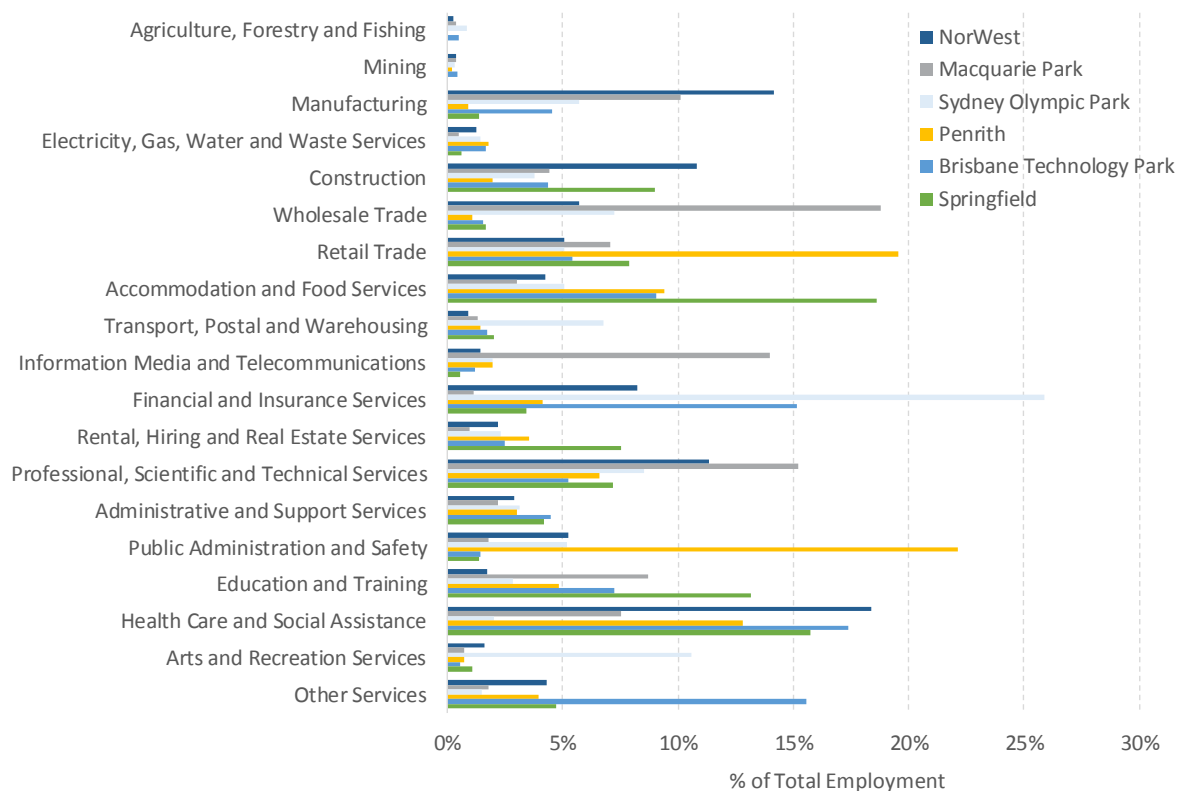
Source: City of Casey

Figure 3.2. Employment Mix by Industry, Victorian Case Studies



Source: Lucid Economics; ABS (2017)

Figure 3.3. Employment Mix by Industry, Interstate Case Studies



Source: Lucid Economics; ABS (2017)

4. Current Land Demand & Supply

The *Minta Farm PSP* has identified a number of future employment outcomes based on the current structure of the precinct, including 7,322 commercial office jobs, 2,199 innovation and technology jobs as well as 536 small local enterprise jobs. These jobs would take place in commercial office and light industrial style developments. The analysis and supporting documentation in the Minta Farm PSP does not include a timeframe for the development of the precinct and the creation of these jobs.

Lucid Economics undertook consultation with local real estate agents and developers to better understand the current trends and levels of demand for commercial office and light industrial development. Analysis of existing property transactions, development approvals, land take-up as well as analysis of aerial photography was also conducted to better understand current demand and consumption for both commercial office space as well as light industrial land.

4.1 Stakeholder Engagement

The following stakeholders were consulted as part of this project:

- MAB (2 representatives)
- Pellicano
- Waterman
- Lettieri Group
- Wilmac Properties
- Facey
- Cameron

The following sections provide a summary of the consultation.

Commercial Office Demand

Demand for commercial office space in the City of Casey stems from two groups; owner/occupiers and small business/start-ups. All of these groups have a similar drive to work close to where they live and as such, seek commercial office space within the City of Casey. The industry mix is varied and includes a number of professional business services including lending/mortgage, finance, insurance, personnel staffing/recruitment, legal, accounting, business consulting, IT as well as government and community service organisations. Generally speaking, these businesses are looking for office suites between 50 sqm and 300 sqm, with most demand settling between 80 sqm and 200 sqm.

Narre Warren and Berwick are the two main commercial office centres for the City of Casey. There would be stronger demand for Berwick over Narre Warren, but most of the recent developments have taken place in Narre Warren. Sentiment amongst the real estate agents and developers regarding current office demand was mixed. Some reported the commercial office market as good with demand continuing in line with expectations. Others reported that demand was poor, particularly in Narre Warren, due to its lack of public transport and amenity relative to other locations in the South East of Melbourne, such as Dandenong.

Overall, consultation indicated that commercial office demand in the City of Casey would be dominated by local residents who wish to work close to where they live. Many of these small business owners would also be driven to purchase an office suite locally using their own superannuation accounts, while others would prefer a lease, particularly a start-up business. The Waterman Business Centre in Narre Warren specifically caters to this market niche.

Relative to other areas in the South East, the City of Casey had some disadvantages for commercial office development, which included a lack of public transport, lack of amenity directly adjacent to business premises and the distance from other commercial centres, including the Melbourne CBD. By contrast, its central locational advantage for commercial office development is its proximity to the residence of business owners and workers.

Light Industrial Demand

There was a strong sentiment from all stakeholders that there is considerable demand for light industrial properties in the region. Similar to the commercial office market, one of the central drivers is the desire of local residents to work close to home. The market is dominated by small business across a diverse range of industries including many of the trades and businesses supporting residential construction in the region such as electricians, plumbing contractors, HVAC providers, kitchen/bathroom businesses, etc. The market also would include a range of wholesale and retail style businesses catering to both the public as well as building contractors. Other non-traditional users were also identified, such as personal storage and 'man caves'.

Sales and land take-up has been strong over the last year. Many of the existing industrial subdivisions in the City of Casey have sold out completely now, such as Thompsons Base. Other more recent subdivisions, such as Evans Road and Gwen Road, have sold well with the majority of lots taken up. Prices for light industrial land were reported to have increased substantially during 2017, from \$265 per sqm to \$300 per sqm (and above).

Consultation confirmed that larger lot industrial development and heavy industrial development was not a good fit for the City of Casey and would likely be drawn to other areas. Stakeholders also indicated that there is now a shortage of small industrial lots (800 sqm to 2,000 sqm), serviced and ready for development. Small industrial units around 500 sqm are very popular at the moment.

4.2 Commercial Office

Commercial office demand and land consumption for commercial office uses is not as symmetric as residential or industrial land demand and consumption. Many commercial office developments will require pre-sales of around 50% of the overall area before construction of the development can take place. Equally, marketing and office leasing often takes place well before the construction of the development is finished (as well as after it is completed). For typical commercial office developments, individual suites are not provided to the market in line with demand, but rather are all added at once, when the office building construction is complete. A typical construction time frame for a commercial office development would be two years, so demand can exist for the office product prior to, during and after the land is consumed. Equally, land can be consumed, and a development delivered with surplus space (i.e. exceeding demand).

Given the asymmetric delivery of new commercial office space and the consumption of land, it is informative to convert existing sales and leasing activity of new space into annual increments in order to better identify levels of current demand that can be understood in terms of land consumption over time. Given the nature of commercial office development, demand will be expressed in square metres and represent the total amount of commercial office space sold and/or leased in the subject year (2017). As existing commercial office space already exists, and its land was consumed at the time of construction, only new space recently delivered or under development has been considered, as these properties are the active consumers of land identified for commercial office use. It is recognised that this approach will exclude existing vacant commercial office space in the market, so it will be slightly more aggressive than the current market, but a good overall indicator for future commercial office land consumption.

Using sales and leasing information directly from landlords and developers, demand for commercial office space in the City of Casey in 2017 was identified at 3,360 sqm. This level of demand includes offices leased in new developments as well as office units sold during the calendar year in projects currently under development. Due to confidentiality requirements, this level of demand cannot be disaggregated.

It should also be noted that there was one property that finished construction during 2017 (66 Victor Crescent, Building 2, Narre Warren). Despite being marketed for well over a year, the property was completed without any tenants leasing space. In this instance, the land has been consumed but there has been a lack of demand to fill the space.

Commercial Office Market

The City of Casey does not exist in a vacuum and as consultation identified, there is considerable competition for commercial office market demand from other, larger centres closer to the Melbourne CBD such as Dandenong, Mulgrave, Caribbean Business Park and others in the South East region.

Consultation revealed some larger tenancies interested in the broader South East region being attracted to locations such as Dandenong and Caribbean Business Park. New commercial office developments have also been delivered in Mulgrave and Caribbean Business Park as well as other locations in the South East region. The accessibility through public transport as well as the localised amenity in Dandenong were considerable features for many of its new tenants. Caribbean Business Park provides easy access and a central location adjacent to the Eastlink Freeway, which have been its main appealing features.

While much of the demand for commercial office space within the City of Casey would be local, the area would receive demand from and compete with other parts of the region. While the purpose of this assessment was to consider localised demand within the City of Casey, the broader context of the regional commercial office market will also impact local conditions into the future.

In terms of supply of new commercial office product within the City of Casey, 66 Victor Crescent, Building 2, provided 5,637 sqm of commercial office space to the market. At the same time, there was 370 sqm of space still available in the recently delivered 66 Victor Crescent, Building 1 (Table 4.1). Cube 1 (55-75 Victor Crescent) is currently under construction and will deliver 4,357 sqm of space and there is a small development under construction in Cranbourne to deliver 429 sqm.

There are additional projects across the City of Casey that have been approved (development approval) that also contain office space (Table 4.1). Combined, there is an additional 4,849 sqm of commercial office space currently under construction and an estimated 21,978 sqm of space that has received a development approval. There is an additional development site located in Narre Warren at the intersection of Victor Crescent and Verdun Drive (approximately 10,000 sqm in size), which could add another 12,000 sqm to 15,000 sqm of commercial office space to the precinct. Consultation with the City of Casey would indicate that the proposed development could be 12,000 sqm.

In addition to this potential future supply of commercial office space, recent plans from the VPA make provisions for additional commercial office development in the City of Casey. The recently completed *Berwick Health & Education Comprehensive Development Plan* (December 2017) has identified a future provision for 98,582 sqm of commercial office space in the identified Corporate Centre precinct. The *Casey Central Town Centre Precinct Structure Plan* (May 2016) envisions a further 70,086 sqm of commercial office space.

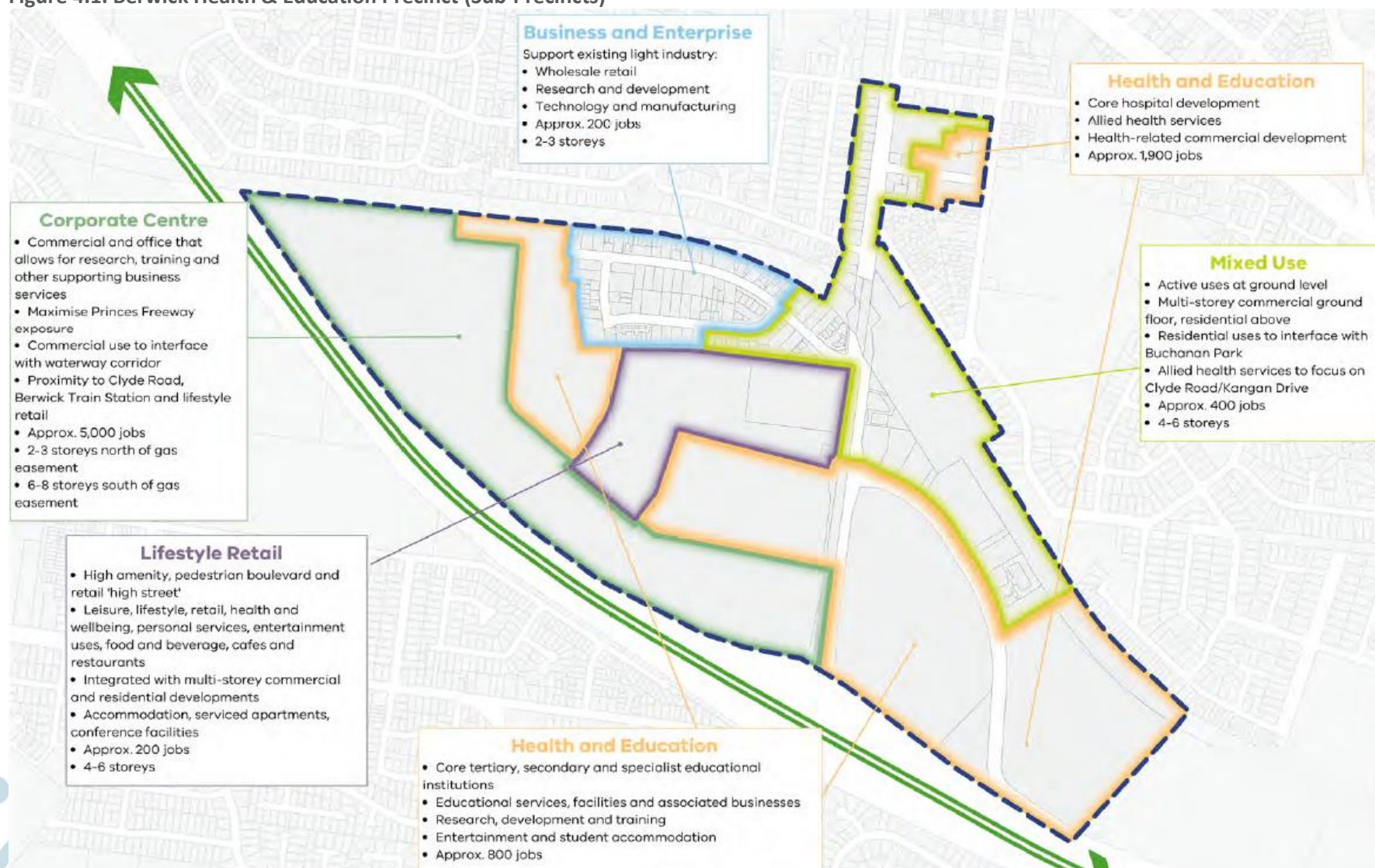
Table 4.1 Commercial Office Development, City of Casey (2017)

Project	SQM
New Existing Space (Available)	
66 Victor Crescent Bldg 1 (Narre Warren)	370
66 Victor Crescent Bldg 2 (Narre Warren)	5,637
Total Available	6,007
Under Construction	
55-75 Victor Crescent - Cube 1 (Narre Warren)	4,357
12 South Gippsland Hwy (Cranbourne)	492
Total Under Construction	4,849
Approved	
66 Victor Crescent Bldg 3 (Narre Warren)	4,487
66 Victor Crescent Bldg 4 (Narre Warren)	4,508
25 Verdun Drive (Narre Warren)	6,863
55-75 Victor Crescent - Cube2 (Narre Warren)	4,564
10 Lyall Street (Cranbourne)	1,256
145 Sladen St (Cranbourne)	300
Total Approved	21,978
Proposed	
81 Victor Crescent (Narre Warren)	12,000
Total Potential Future Space	44,834

Note: SQM equal net leasable area (NLA). NLA sourced directly from marketing brochures or estimated based on gross floor area (GFA) provided in Council development approval and applying a ratio of 80% to convert GFA into NLA.

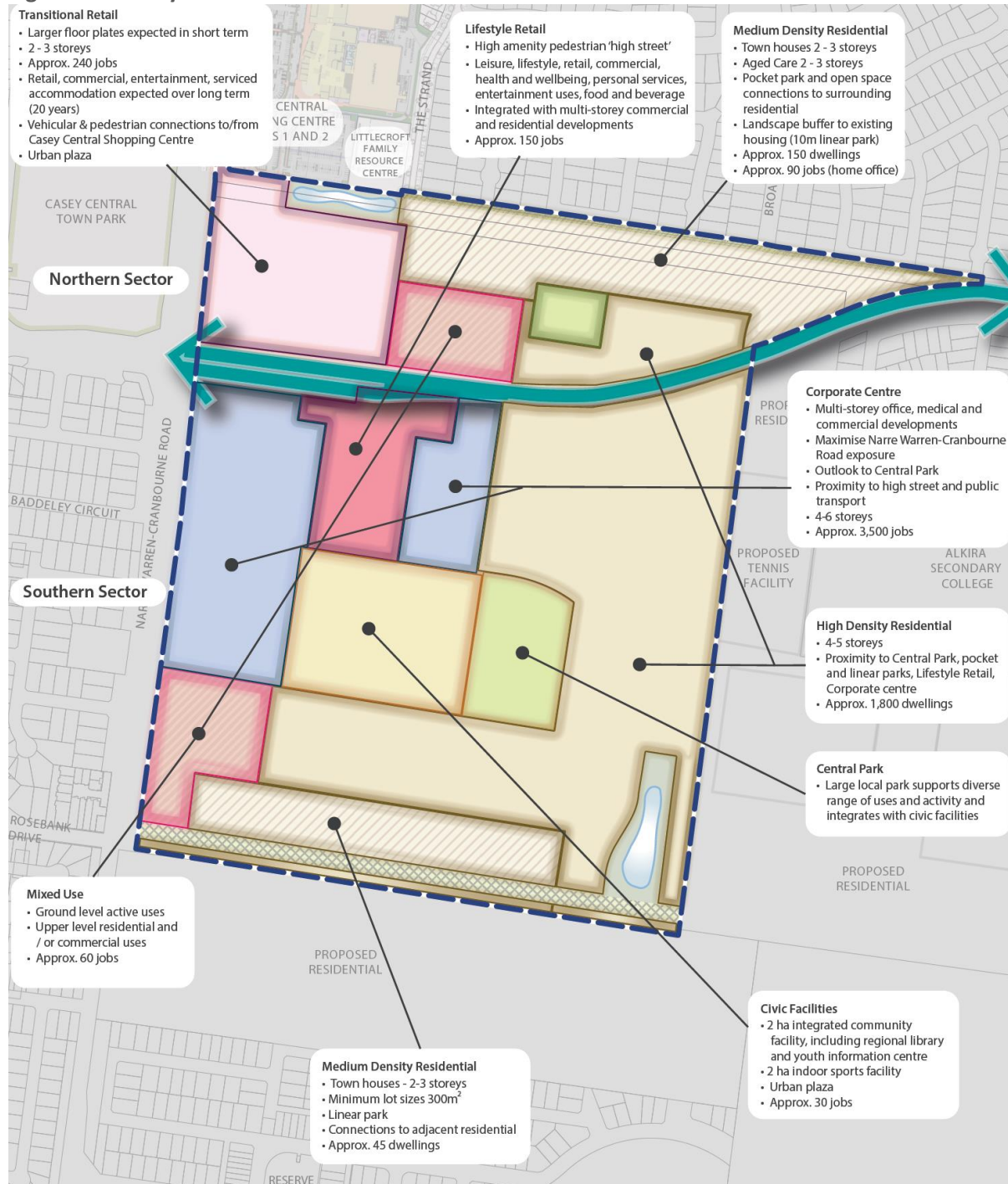
Source: Lucid Economics; City of Casey (2018); MAB (2018); CBRE (2018); Lettieri (2014)

Figure 4.1. Berwick Health & Education Precinct (Sub-Precincts)



Source: VPA (2017c)

Figure 4.2. Casey Central Town Centre Urban Structure



Source: VPA (2015)

Implications for Minta Farm

Engagement with real estate professionals was mixed in regard to commercial office development at Minta Farm. Some felt that the precinct is simply too far away from the Melbourne CBD and lacked any immediate amenity or large demand driver. Others felt that commercial office development similar to what has taken place in Narre Warren may be possible but that it would not take place for many years to come (at least 10 to 15 years, with some estimates extending to 30 years).

At the current annual rate of demand (3,360 sqm per year), it would be a minimum of 13 years for the market to absorb the new existing space as well as the office space currently under construction, approved and proposed. These developments would likely fill before demand would extend to Minta Farm, given the added distance away from the Melbourne CBD, other centres and lack of a significant demand driver. This analysis does not include any of the existing commercial office space in older properties in the City of Casey, some of which is very attractive, nor does it include any of the potential future commercial office space provided for in the *Berwick Health & Education Comprehensive Development Plan* (December 2017) or the *Casey Central Town Centre Precinct Structure Plan* (May 2016). These inclusions would likely increase the period required for the market to absorb space.

Given this long lead time, it is likely that demand for commercial office space in Minta Farm would not materialise for the next 10-15 years (or longer). Across this period, there could be a general economic slowdown or other shocks that would slow demand as well as other potential developments local to the South East region.

The mixed use and retail amenity that is planned for Minta Farm would support future commercial office demand, but the market will simply need time to materialise. If the Berwick Health & Education Precinct and/or Casey Central Town Centre develops as envisioned, then Minta Farm may require additional time to develop the envisioned commercial office components.

4.3 Light Industrial

Light Industrial development is more closely aligned to market demand than commercial office development. While similar lead times exist for construction of new space, the space is usually associated with a single end tenant in mind (or a few), whereas the commercial office development would have multiple tenants over a number of stories. Given the lower development densities for industrial facilities, the overall process is more closely aligned to market demand.

Engagement with local real estate professionals would indicate that there is strong appetite for light industrial land, with prices increasing from \$265 per sqm at the beginning of 2017 to \$300 per sqm (and above) at the end of the year. Stage 4 of Thompsons Base has almost sold out and the Cranbourne West Business Park sold very quickly this past year.

Industrial Property Market

Similar to the commercial office market described above, industrial property trends in the City of Casey would be influenced by the broader region as well as state and national economic conditions.

Consultation revealed that larger industrial lots geared towards the transport and logistics industry would be focused around Dandenong. Equally, heavier industrial activities would also be better suited for the Officer and Pakenham precincts. In terms of smaller lot, light industrial space, areas in the City of Casey would also compete with some areas in adjoining municipalities. Each of the areas across the region would have its own unique competitive advantages and appeal to the market in their own ways.

Stakeholders revealed that much of the demand for light industrial land in the City of Casey would be stemming from local business owners seeking to either maintain or access a new location close to where they live. Naturally, there would be demand from and competition with the broader region and various external economic circumstances will continue to impact the market in the future.

In order to estimate current demand for light industrial land within the City of Casey, the same definition of industrial land consumption used in the Urban Development Program has been utilised, namely, 'Consumption occurs when land changes from vacant to having some form of use on it, such as a building, storage area, carpark, etc. (pg 11)' (Department of Environment, Land, Water and Planning). It has been assumed that land remains 'vacant' during construction and is then considered 'consumed' once construction is finished.

Essentially, a very similar process compared to how the Department undertakes for the Urban Development Program (UDP) was repeated looking at the calendar year 2017 (as opposed to the financial year like the UDP) in order to provide a more up to date assessment and capture the current sentiment in the market. Aerial imagery was examined to identify new industrial construction and to measure the area of land that the develop occupied. Internet property sales listings (www.realcommercial.com.au) was used to help identify recently completed buildings as well as those currently under construction.

In 2017, it is estimated that 6.7 ha of land was consumed for light industrial uses in the City of Casey (Table 4.2). Additionally, there is another 2.1 ha of light industrial land currently under construction, which will likely finish in 2018. It should be noted that stakeholders highlighted the high rate of sales in 2017 for smaller industrial lots, which would indicate that consumption of light industrial land will likely increase in the coming years and some stakeholders even identified a current lack of small, serviced, light industrial lots, highlighting the high level of demand for this product currently in the market. Given the pace of recent sales, it is likely that consumption of light industrial land could double over the next few years within the City of Casey.

Table 4.2 Light Industrial Land Consumption, City of Casey (2017)

Land	Area (sqm)	Area (HA)
Thompsons Base	49,215	4.92
1445 S. Gippsland Hwy	4,953	0.50
Evans Road Precinct	13,192	1.32
Total	67,360	6.74

Source: Lucid Economics

Regional Context

The City of Casey is part of the Southern Region in terms of the *Urban Development Program*. In 2016-17, it shows that the City of Casey consumed 4.4 ha of industrial land, which is considerably smaller than the Southern region at 104.7 ha (Table 4.3). As the table highlights, the majority of industrial land consumption in the Southern region takes place in Greater Dandenong. This fact was represented in the consultation as stakeholders highlighted the primacy of Dandenong for industrial development. Equally, there has been growing consumption of land in Cardinia. Both of these trends reflect sentiment from the consultation as well as represent the unique features of these areas and the specific part of industrial activity that they can cater for. Dandenong is well suited for larger industrial uses (which is partly responsible for the large consumption trends), while Cardinia is well suited for larger and heavier industrial users as well as growing demand across the South East region for this type of space. Light industrial demand, particularly for smaller lots, is more suited to the City of Casey (and adjoining areas such as Knox, part of the Eastern Region in the UDP).

Table 4.3 Consumption of Industrial Land, Urban Development Program, Southern Region (HA)

	2012-13 to 2013-14	2013-14 to 2014-15	2014-15 to 2015-16	2015-16 to 2016-17
Bayside	0.2	0	-0.2	0
Boroondara	0	0	0.1	-0.1
Glen Eira	-0.3	0	0	0.3
Stonnington	0	0	0	0
Inner South East Region	-0.1	0	-0.1	0.2
Cardinia	8.3	6.1	10.3	15.1
Casey	3.0	-3.8	6.2	4.4
Frankston	7.9	2.9	21.4	10.8
Greater Dandenong	48.0	37.2	75.0	56.3
Kingston	2.9	5.5	13.3	13.5
Mornington Peninsula	4.0	10.2	3.7	4.7
Southern Region	74.0	58.2	130.0	104.7
Southern SSIP	52.7	39.8	76.4	58.5

Source: Dept. of Environment, Land, Water and Planning (2017)

In terms of supply (and future consumption) of light industrial land, Cranbourne West is the major area of activity within the City of Casey and has seen the highest levels of sales. The Thompsons Base project has almost sold out and the Cranbourne West Business Park has limited number of lots left for purchase. The Evans Road precinct continues to sell well with major 'super lots' currently on the market for future stages of the precinct. MAB's new Element Park (28 ha) off of Thompsons Road in Clyde North has already sold various lots and the Summit Business Park (approximately 15 ha), which is the employment section of the Meridian estate and directly east of MAB's Element Park, will also likely be developed over the short to medium-term.

While the recent experience of strong land sales is encouraging and likely foreshadows a considerable increase in the consumption of light industrial land, consumption only occurs after the industrial unit (or units) is constructed on the land. As such there is still considerable light industrial land available for future consumption across the City of Casey (Table 4.4).

Table 4.4 Available Light Industrial Land, City of Casey (2017)

Development	Land Available for Future Consumption (HA)
Thompsons Base	11.0
Evans Road Precinct	36.4
Cranbourne West Business Park	9.8
Element Park	28.0
Summit	14.7
Total	99.9

Source: Lucid Economics

Implications for Minta Farm

Research, analysis and consultation have indicated the current potential of a shortage of serviced, available land for small lot, light industrial development in the current market. The level of industrial land consumption in the City of Casey in 2017 has increased from previous periods, and the reported rate of land sales would indicate that consumption is likely to increase over the short-term. Many stakeholders indicated that there would be strong interest in light industrial development in Minta Farm today, if the land was available.

Based on current levels of consumption, demand and supply, it is likely that any light industrial land within Minta Farm would be well received by the market in the short to medium term.

5. Scenario Modelling

Scenario modelling of future demand and consumption was conducted to better understand potential future employment outcomes relevant to the Minta Farm precinct. The analysis was conducted considering that the demand/consumption for commercial office space and light industrial development experienced in 2017 continued at the same rate into the future. While this situation is unlikely to happen, the modelling will show the relative timeframes for development (and employment generation) based on the current level of demand.

This approach was favoured against a more traditional approach of basing future demand on either population growth or economic growth, as this type of modelling has been done before and neither projected population growth nor modelled economic growth are necessarily a strong proxy for commercial office demand or light industrial demand. The current approach represents an accurate reflection of the current market.

There are two main scenarios developed including:

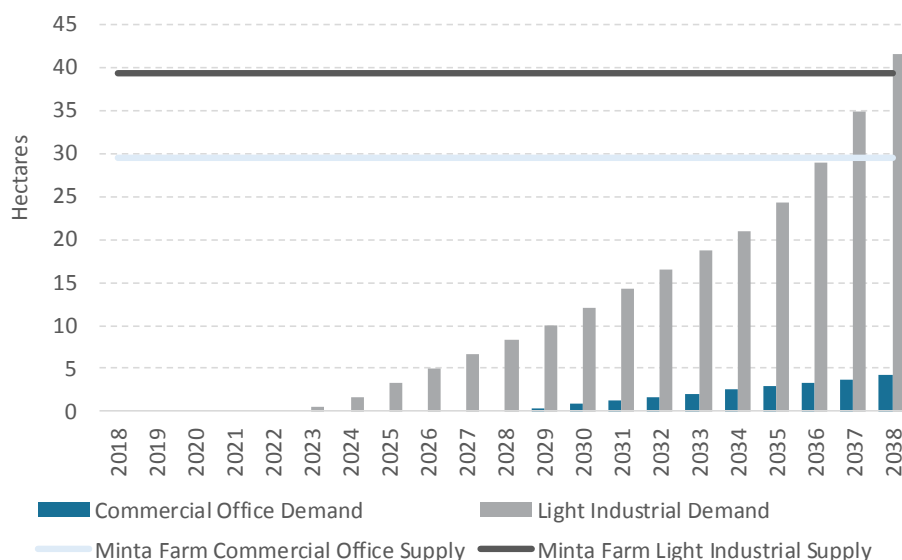
- **Current commercial and office demand:** Current level of demand, estimated at 3,360 sqm per year, was modelled against the new existing commercial office space in the City of Casey as well as the space currently under construction, approved and proposed in order to reflect the time required to absorb this space. Based on consultation, it has been assumed that commercial office demand does not materialise for Minta Farm until after the identified commercial office space in Narre Warren is absorbed. In order to transition commercial office demand (in sqm) into an annual demand for land at Minta Farm, the application of a floor space efficiency of 80%, average of two storeys, and a site coverage of 50% were applied². The result is an estimated average annual consumption of 0.42 ha of net developable commercial office land. As explained earlier, commercial office development does not take place evenly across years but instead in large, 'bulky' increments. However, for demonstration purposes this average annual figure of land consumption can be used as the demand will average out over the future time frames. This scenario does not consider any commercial office development taking place in the Berwick Health and Education Precinct or the Casey Central Town Centre. Inclusion of these projects would likely extend the start of commercial office development in Minta Farm.
- **Current light industrial consumption:** Current level of consumption, estimated at 6.7 ha per year, was modelled against the known future supply of light industrial land across the various existing developments in the City of Casey, in order to show the time required to consume this land. As per consultation, it has been assumed that light industrial land in Minta Farm sells quickly after being offered to the market (assumed to be two years from now). Demand is split across the existing and future anticipated light industrial precincts until land in these precincts is completely consumed. At such a time, additional consumption is added to the remaining precincts.

As highlighted in the figure below (Figure 5.1), by 2038 all light industrial land within the Minta Farm precinct will be consumed. By contrast, only 14% of the commercial office land within the Minta Farm precinct will be consumed by 2038. At these rates, there is 20 years' worth of light industrial land and 81 years' worth of commercial office land.

² These assumptions were used in the Minta Farm PSP to convert the land into commercial office built form.

In this context, it is important to note that the area dedicated to commercial and office use in Narre Warren is approximately 5 ha, only 19% of what is allocated for commercial and office uses in Minta Farm. According to stakeholders, it has taken approximately 10 years for Narre Warren to reach its current utilisation and could take between 10 and 20 additional years to fill its allocation of land for commercial office purposes.

Figure 5.1. Future Demand and Supply, Minta Farm (HA)



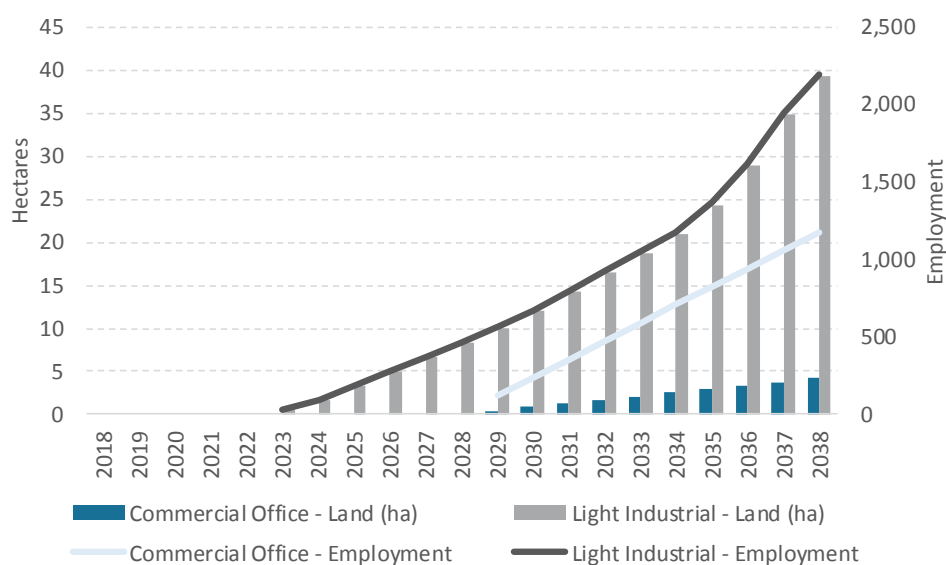
Source: Lucid Economics

The following figure (Figure 5.2) highlights the employment outcomes for each demand scenario (using the suggested employment densities in the *Minta Farm PSP*). As highlighted, at current levels of demand, light industrial lands in Minta Farm have the potential to generate 2,199 jobs by 2038 and commercial office lands can deliver 1,176 jobs by the same timeframe. Given the existing and future supply of light industrial land in Cranbourne West and Clayton North, Minta Farm is not expected to deliver jobs until 2023. Given the existing and future supply of commercial office space at Narre Warren, the commercial lands in Minta Farm are not expected to generate jobs until 2029.

Projections and the Future

Projecting beyond 10 and 15 years for land demand can often be problematic as a number of key variables may change into the future. Relying on projections that expand past 20 years can be problematic and caution should be used.

Figure 5.2. Future Demand and Employment Outcomes



Source: Lucid Economics

As highlighted in Section 3, the job density of 280 jobs per ha would seem high relative to the case studies. If a lower density was used, then the employment generation capability of the Minta Farm precinct for office development would decrease further. Similarly, the assumed two-storey development over the site may be too low. Increasing the average building height would create greater densities but also consume less land over time (due to the denser development). Increasing the building heights would further extend the life of commercial office land in Minta Farm.

6. Summary and Recommendations

6.1 Key Findings

The research, consultation and analysis conducted for this project shows that the existing concept for Minta Farm would represent a rather aggressive aspiration for a mixed use precinct, particularly with the land allocated for commercial and office uses. Other specific key findings include:

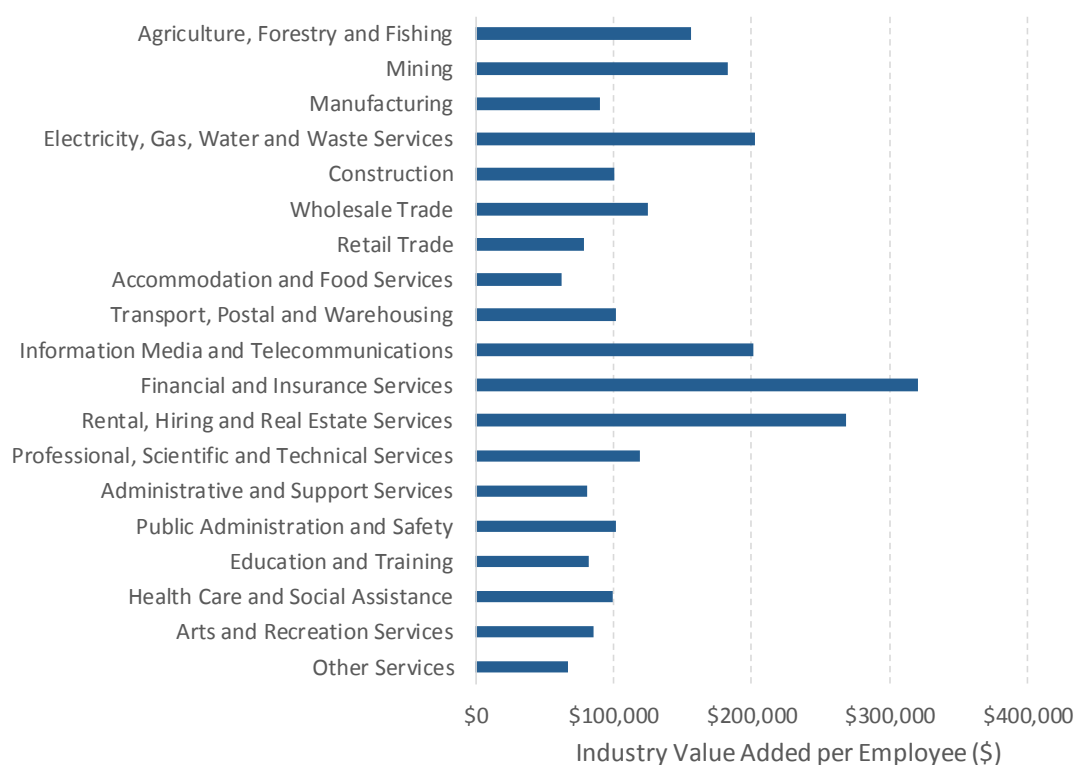
- Based on the case study analysis:
 - Precincts closer to a CBD tend to have higher densities and a higher proportion of professional business services (i.e. white-collar employment).
 - The proportion of land dedicated to commercial office uses in Minta Farm is high, relative to the other precincts and their distance from a CBD.
 - The job density for the commercial office component of Minta Farm is high relative to the case study areas, particularly given the distance from the CBD.
- Consultation with real estate professionals and developers revealed:
 - Commercial office demand in the City of Casey is dominated by local businesses, employees and residents who wish to work close to where they live.
 - Existing commercial office precincts (such as Narre Warren) have disadvantages in terms of access to public transport and amenity directly in the precinct.
 - Commercial office development in Minta Farm may be possible in the future, but it would not take place for many years (at least 10 to 15 years, or potentially longer).
 - Strong demand and interest in light industrial property within the City of Casey currently and a potential shortage of serviced, small light industrial lots available for purchase in the market currently.
- At the current rate of demand for commercial office space in the City of Casey (3,360 sqm per year), it would be a minimum of 13 years for the market to absorb the new existing space as well as the office space currently under construction, approved and proposed.
- Recent planning documents for the Berwick Health and Education precinct as well as the Casey Central Town Centre have made provisions for an additional 168,668 sqm of commercial office space, which would compete with Minta Farm and potentially extend the time period required for the market to absorb space.
- In 2017, an estimated 6.7 ha of land was consumed for light industrial uses in the City of Casey.
- Based on current levels of consumption, demand and supply, it is likely that any light industrial land within the Minta Farm precinct would be well received by the market in the short to medium term.
- Future demand and consumption of commercial office and light industrial land (based on 2017 levels) identified:
 - By 2038, all light industrial land within the Minta Farm precinct would be consumed, which equates to 20 years' worth of light industrial land.
 - By 2038, 14% of the commercial office land within the Minta Farm precinct would be consumed, which translates to 81 years' worth of commercial office demand.
 - Light industrial land within the Minta Farm precinct can generate 2,199 jobs by 2038 (using 56 jobs per hectare as per PSP).
 - Commercial office land within the Minta Farm precinct can generate 1,176 jobs by 2038 (using 280 jobs per hectare as per PSP). At a lower density, the employment outcomes would be less.
 - Light industrial land in Minta Farm would not generate employment until 2023, while the commercial office land in Minta Farm would not generate employment until 2029.

6.2 Recommendations

Based on the research, consultation and analysis conducted for this project, the following recommendations are made:

- The City of Casey and the VPA should consider the current market dynamics and demand for commercial office and light industrial uses relative to the current and future supply of land (in Minta Farm) and other precincts, such as Narre Warren, when planning for Minta Farm.
- The City of Casey and the VPA should decide whether the urban structure and eventual development of Minta Farm (in its current form) in the long-term is more valuable than generating more local jobs in the short to medium term.
- The City of Casey should also consider the economic value of employment in addition to the number of future potential jobs. Retail, accommodation and food services do not make the same level of economic contribution as other sectors such as finance and insurance, professional business services (and others).

Figure 6.1. Industry Value Added per Employee, by Industry, City of Casey (2015-16)



Source: Lucid Economics; ID (2018)

- The City of Casey and the VPA need to continue to encourage the development of employment precincts to cater for future population growth and the likely scenario that future residents will wish to work close to where they live.

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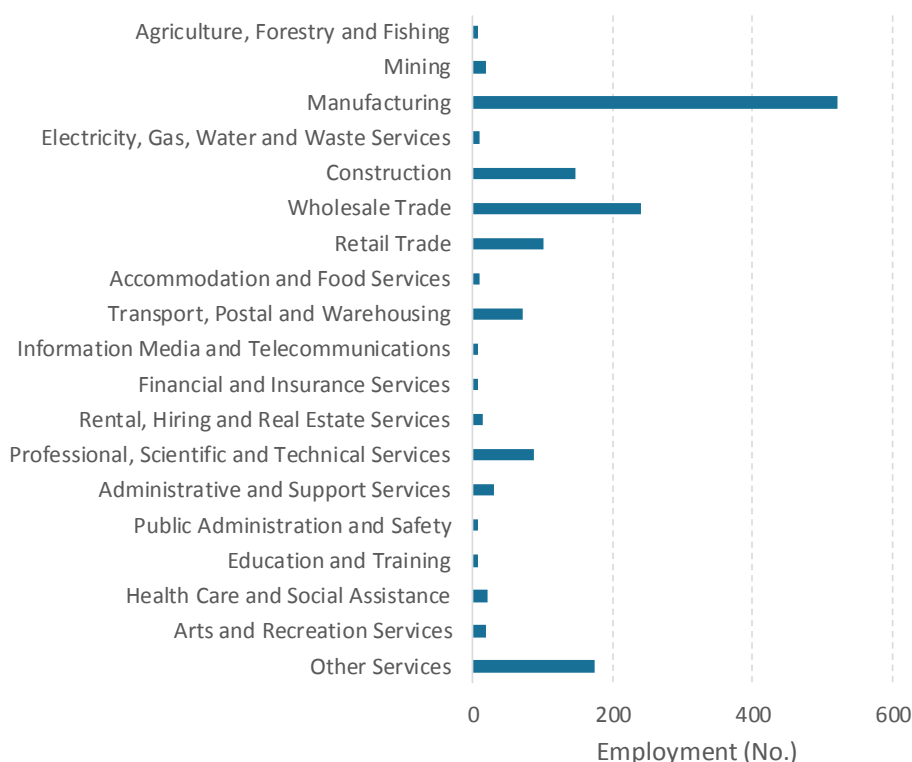
Appendix A: Case Study Detailed Analysis

The following analysis provides a detailed assessment of each of the case study areas. The analysis considers employment by industry (by place of work) at the destination zone level for the various employment precincts. Most of destination zones aligned to the boundaries of the employment precinct, which would be the major driver for people to travel to the precinct. However, on occasion, the employment precinct would contain a number of destination zones, which were combined to form an understanding of the whole area. In certain instances, the destination zone was larger than the employment precinct but aerial analysis of the built form in the destination zone would show that most employment in the destination zone would be based in the employment precinct.

Dandenong LOGIS Park

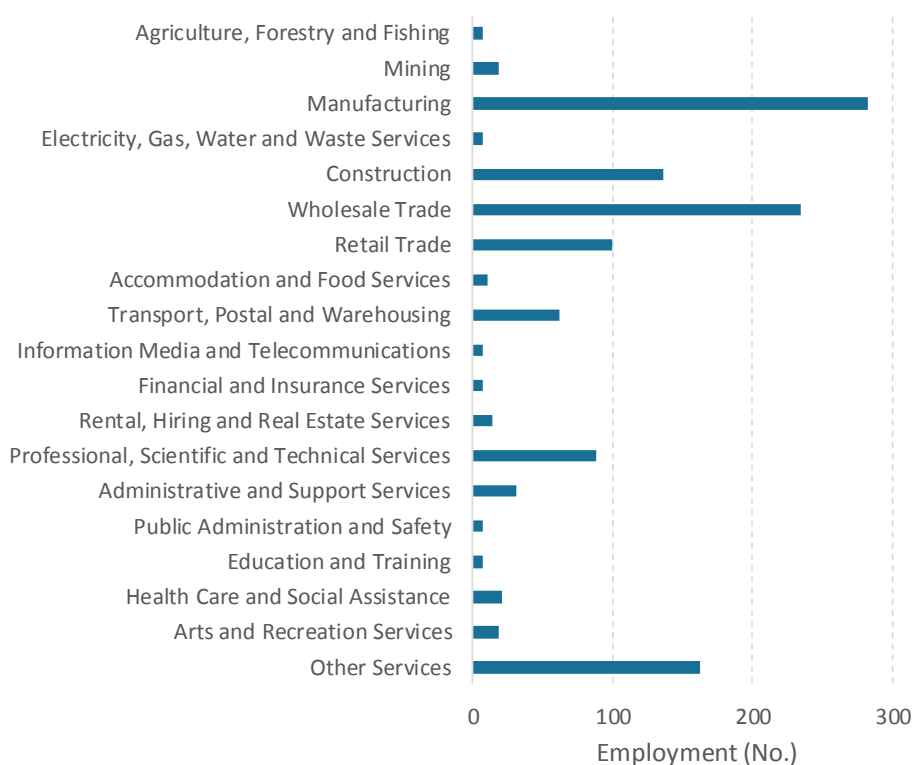
Dandenong LOGIS park is a modern business precinct totalling 154 ha that is located at the intersection of Eastlink Freeway and Greens Road. Its direct access to Eastlink and its central location with the South East of Melbourne has made it a very popular location for industrial businesses. The park has a strong focus on industrial activities, with key employing sectors including manufacturing, wholesale trade and transport. The park's rapid growth is evidenced in employment more than quadrupling from 2011 to 2016, adding over 1,200 jobs, almost half of which were in industrial activities such as manufacturing, wholesale trade and transport.

Figure A.1. Employment by Industry, Dandenong LOGIS Business Park (2016)



Source: Lucid Economics; ABS (2017)

Figure A.2. Change in Employment by Industry, Dandenong LOGIS Business Park (2011-2016)



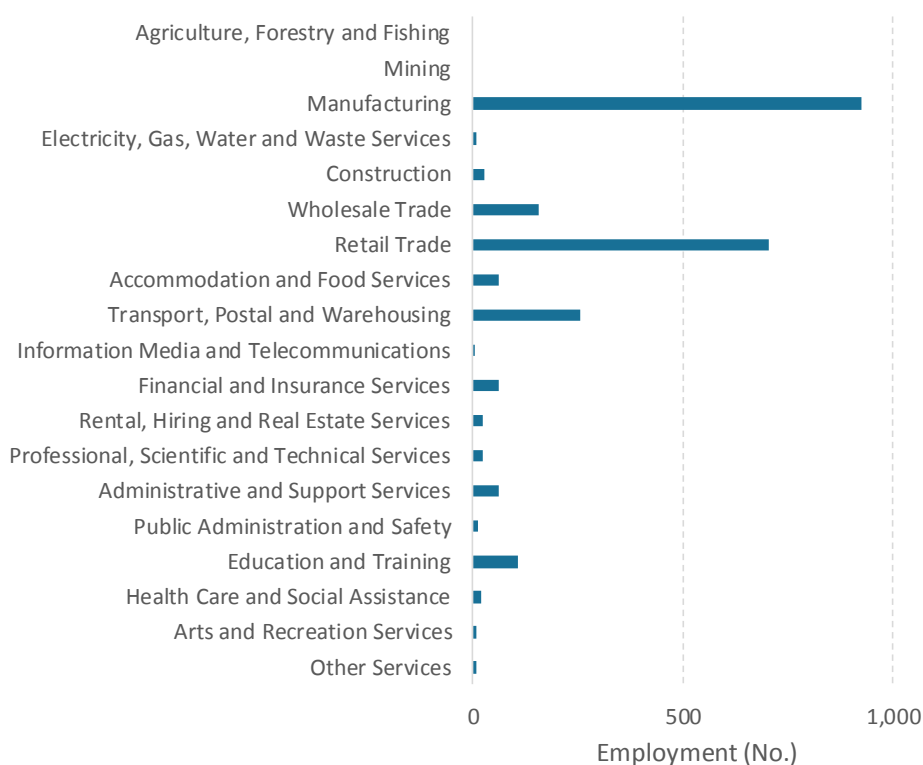
Source: Lucid Economics; ABS (2017); ABS (2012)

Chifley Business Park

The Chifley Business Park is located at the Moorabbin Airport, principally at the north-east corner of the site, extending down Boundary Road to the southern boundary of the site. The core business park is approximately 65 ha in size and includes Coca-Cola Amatil, Visy and Costco as tenants.

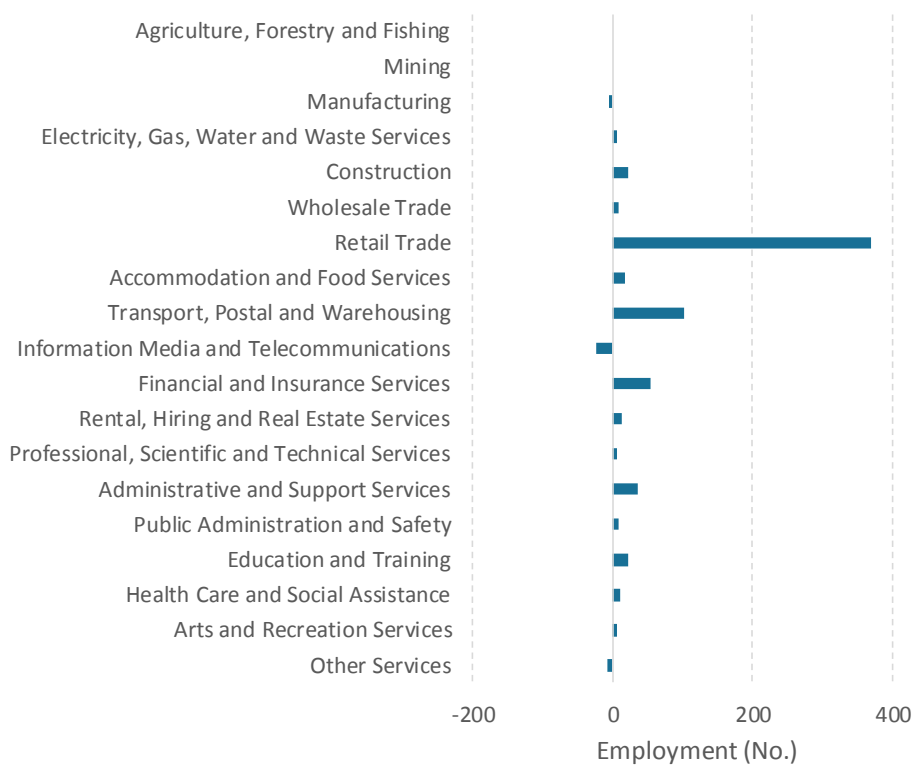
Key employing sectors include manufacturing and retail, which combined contribute 65% of total employment. Between 2011 and 2016, the precinct experienced 35% growth in employment, well over half of which was in the retail sector. The location of Costco (and other retailers) to the precinct would have driven this growth.

Figure A.3. Employment by Industry, Chifley Business Park (2016)



Source: Lucid Economics; ABS (2017)

Figure A.4. Change in Employment by Industry, Chifley Business Park (2011-2016)



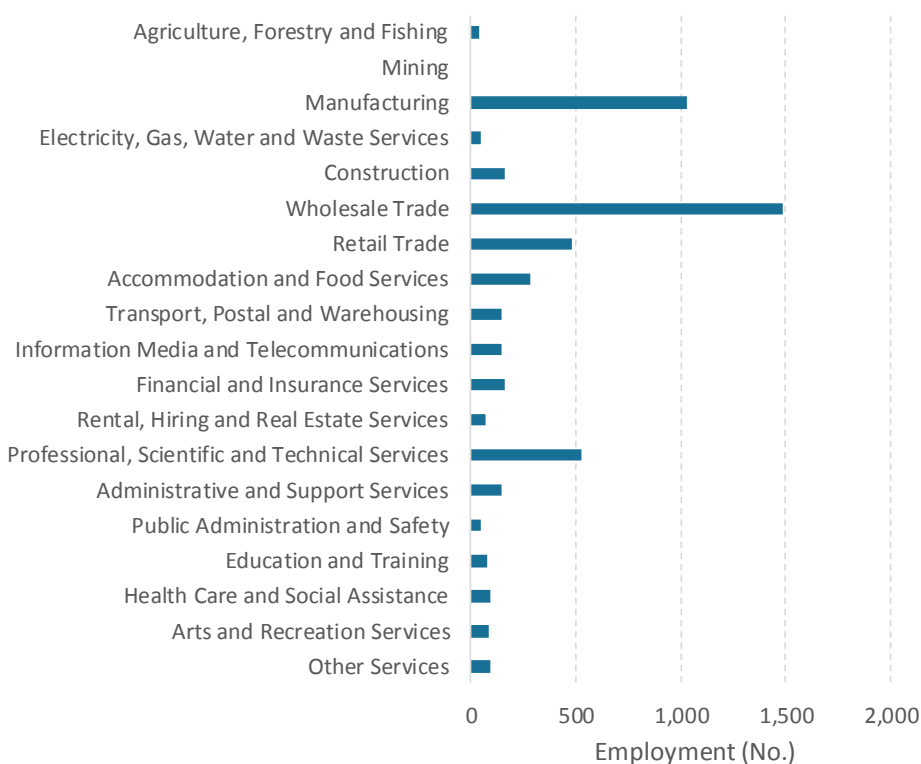
Source: Lucid Economics; ABS (2017); ABS (2012)

Caribbean Business Park

The Caribbean Business Park occupies 185 ha at the intersection of Eastlink Freeway and Ferntree Gully Road. Key tenants include Mondelez International (Cadbury, Natural Confectionary Company), Kaercher, OzPack, Cummins, CSR and other advanced manufacturing companies.

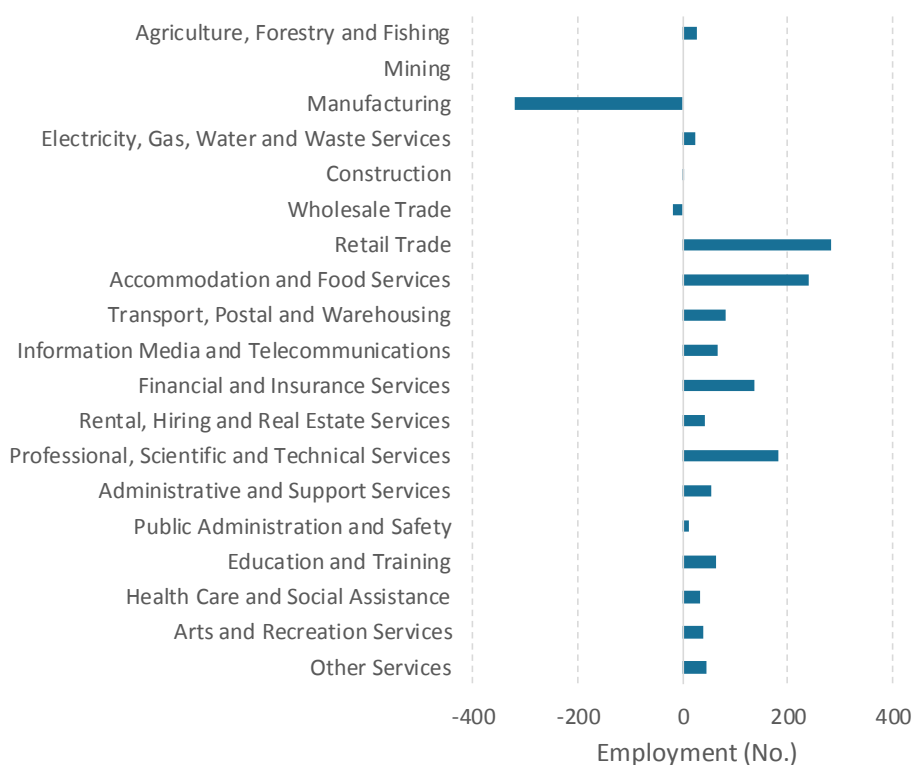
The precinct provided just over 5,000 jobs in 2016 with half of them being in industrial activities such as manufacturing, wholesale trade and transport. Between 2011 and 2016, the precinct added just under 1,000 jobs (or 24% growth). Most of the growth occurred in retail, accommodation and food services (accounting for over half of employment growth) as well as finance and professional business services, which combined represented over 80% of all job growth. This growth represents the on-going evolution of the park, particularly the more recent developments in the southern portion of the precinct. During the same period, manufacturing employment in the precinct declined by 321 jobs.

Figure A.5. Employment by Industry, Caribbean Business Park (2016)



Source: Lucid Economics; ABS (2017)

Figure A.6. Change in Employment by Industry, Caribbean Business Park (2011-2016)

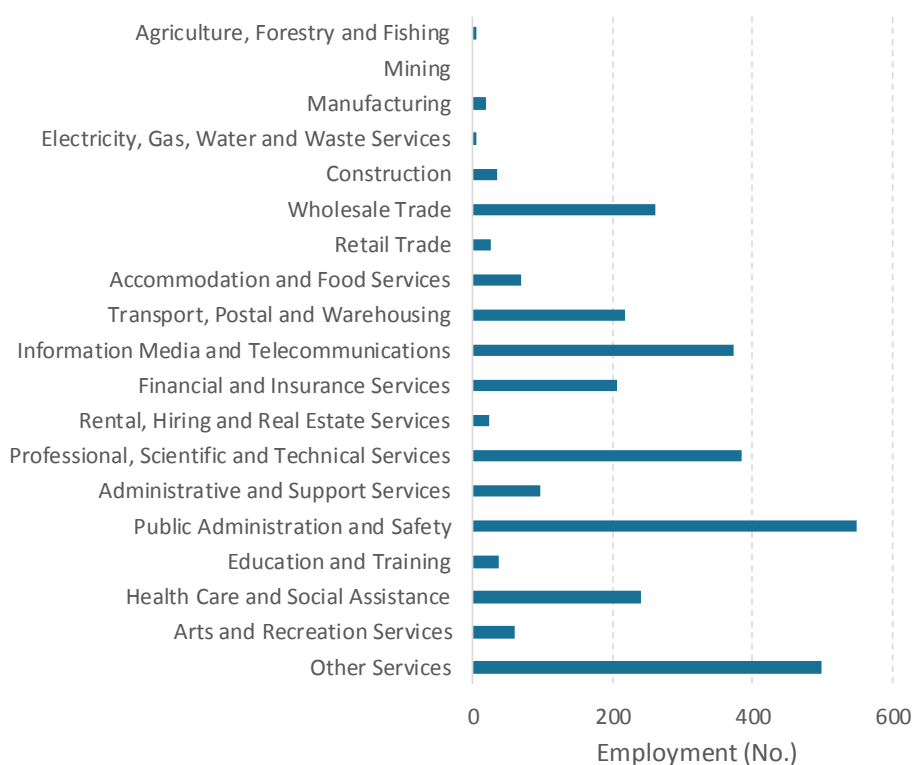


Source: Lucid Economics; ABS (2017); ABS (2012)

Tally Ho Business Park

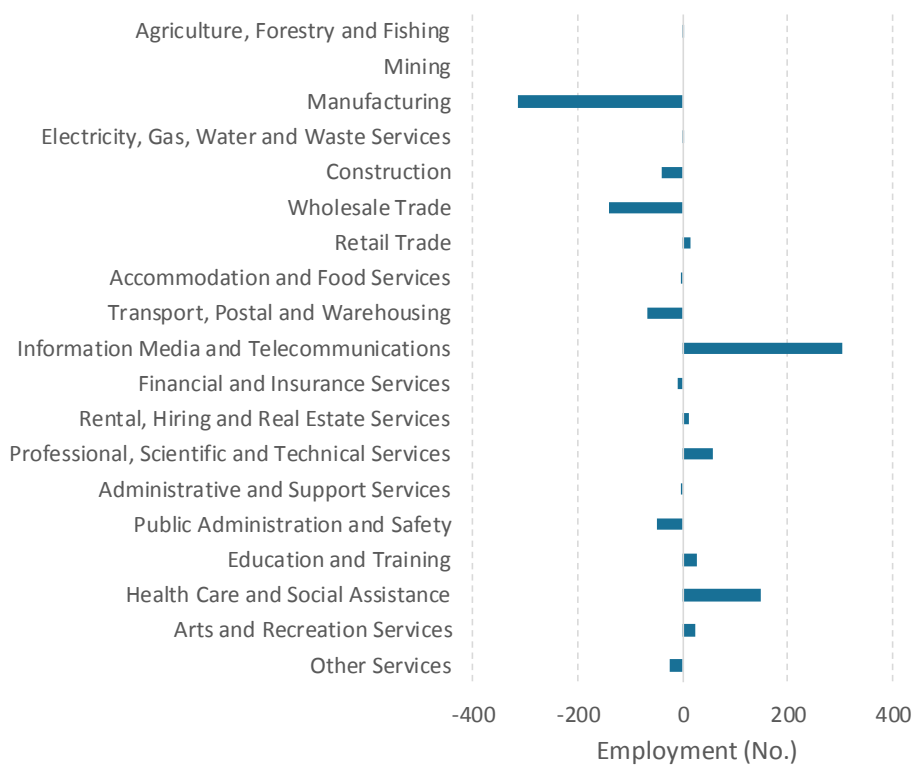
The Tally Ho Business Park is located at the intersection of Springvale Road and the Burwood Highway. The business park occupies an estimated 26 ha and has key tenants such as World Vision, Motorola, Zimmer Biomet and other high technology companies. Key employment sectors include professional business services, ICT, public administration and other services. Between 2011 and 2016, employment growth was focused in ICT (represented by information, media and telecommunications) as well as in healthcare. Combined these sectors provided over 450 new jobs in the precinct, however, at the same time, there was an equal loss in jobs from manufacturing and wholesale trade. Overall employment in the precinct decreased by 2% during the period.

Figure A.7. Employment by Industry, Tally Ho Business Park (2016)



Source: Lucid Economics; ABS (2017)

Figure A.8. Change in Employment by Industry, Tally Ho Business Park (2011-2016)

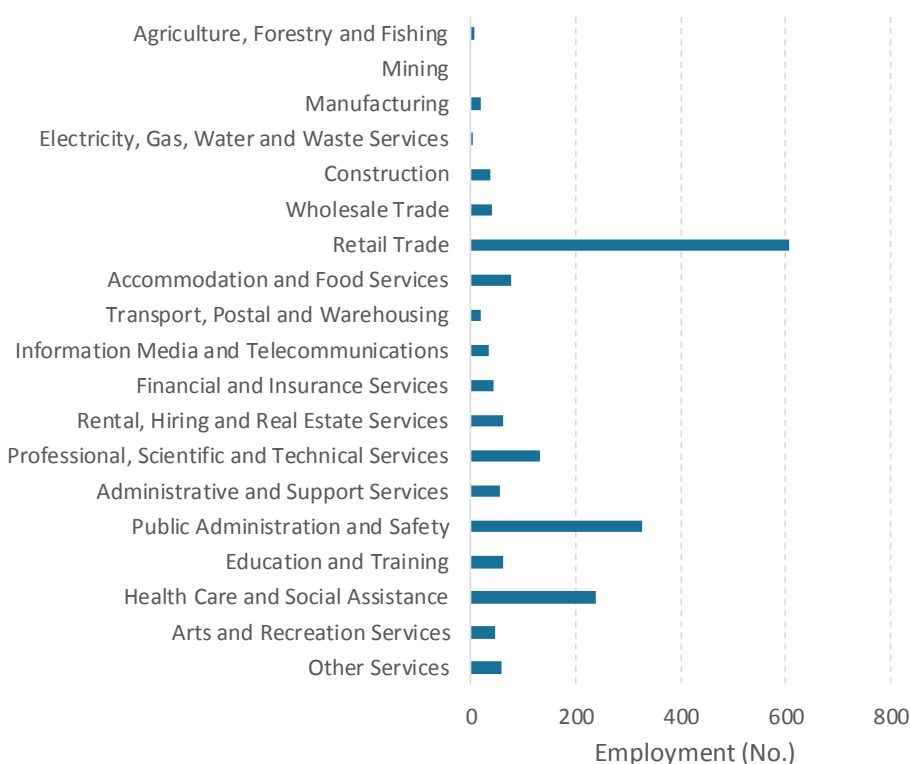


Source: Lucid Economics; ABS (2017); ABS (2012)

Narre Warren Office Precinct

The Narre Warren Office Precinct is located adjacent to the Monash Freeway between the Princes Highway and Narre Warren North Road. The precinct is located to the east of the Fountain Gate Shopping Centre. The total precinct is approximately 50 ha and includes numerous bulky goods retail businesses in addition to the office precinct. Including large car dealerships, Bunnings and other bulky goods retailers, it is not surprising that retail is the largest employment sector.

Figure A.9. Employment by Industry, Narre Warren Office Precinct (2016)



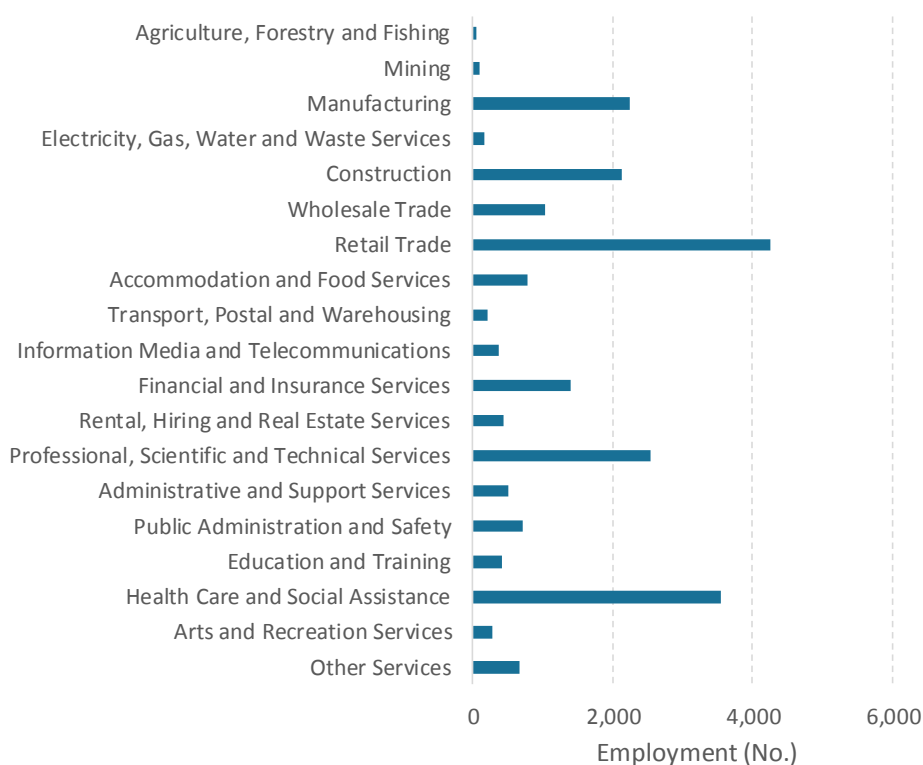
Source: Lucid Economics; ABS (2017)

Due to changes in the boundary of the destination zone between 2011 and 2016, comparisons and employment growth are not possible to identify.

Norwest Business Park

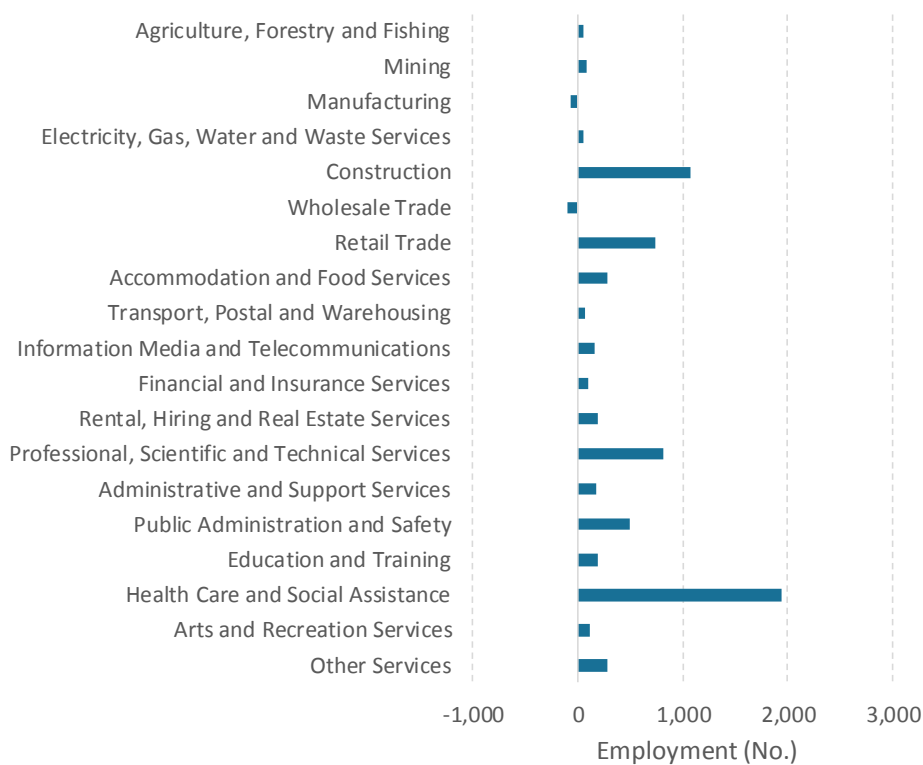
Norwest Business Park is located in the Hills Shire, approximately 27km outside the Sydney CBD. The precinct includes the Norwest Marketown shopping centre, Norwest Private Hospital as well as a number of corporate offices and a range of retail and accommodation options. Overall, the business park measures 157 ha and houses over 20,000 workers. Between 2011 and 2016 employment in the precinct increased 44% and included high growth sectors of construction and healthcare. Professional business services also provided a gain of over 800 jobs during the period.

Figure A.10. Employment by Industry, Norwest Business Park (2016)



Source: Lucid Economics; ABS (2017)

Figure A.11. Change in Employment by Industry, Norwest Business Park (2011-2016)

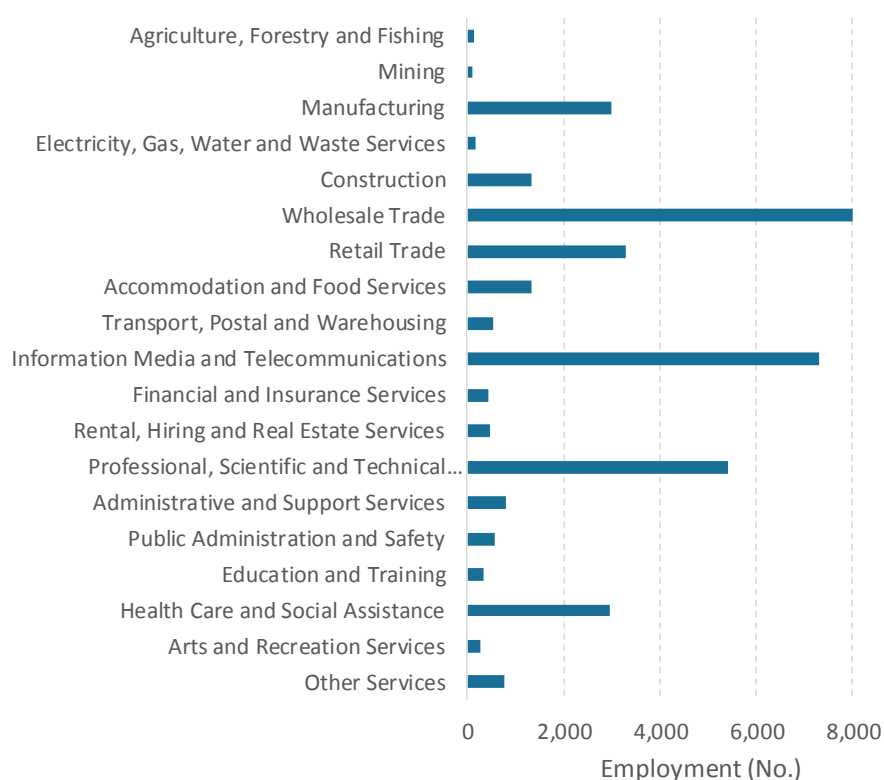


Source: Lucid Economics; ABS (2017); ABS (2012)

Macquarie Park

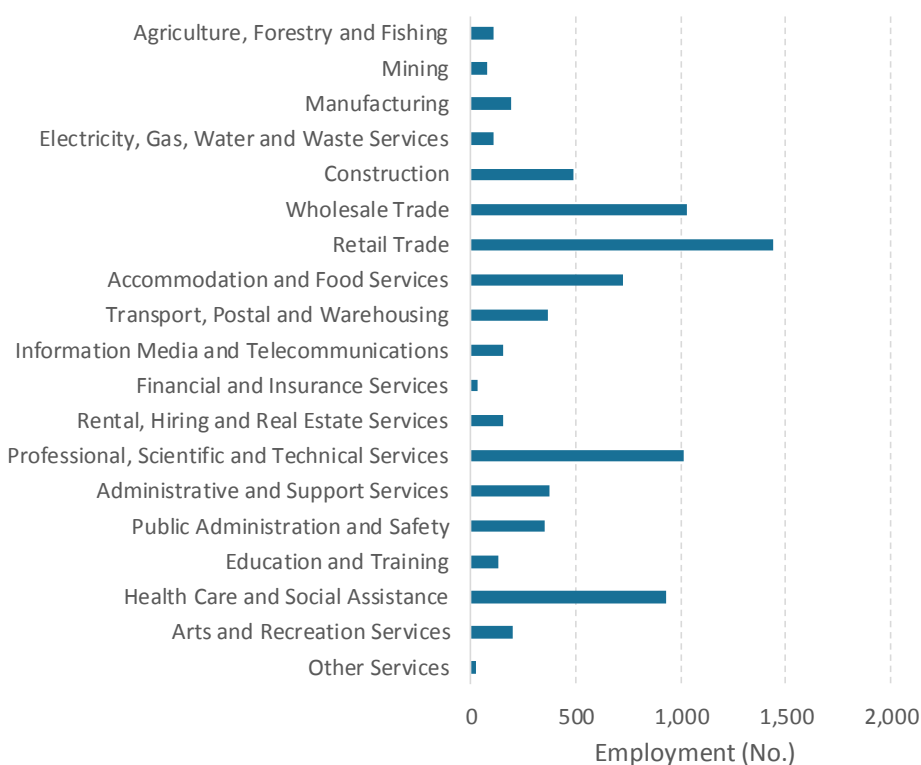
Macquarie Park has become Sydney's second largest business district outside of the Sydney CBD, which is just 12km south-west of the park. Macquarie Park is positioned just south of the Macquarie University campus and includes the Macquarie Park Shopping Centre as well as major corporate tenants including Novartis, Smith & Nephew, Schneider Electric, Optus, Johnson & Johnson, Aristocrat and numerous others. In 2016, employment in the park was over 37,000 and included a range of important sectors including wholesale trade, ICT and professional business services. Given the park's diversity, it is not surprising that many of its key sectors contributed to employment growth between 2011 and 2016.

Figure A.12. Employment by Industry, Macquarie Park (2016)



Source: Lucid Economics; ABS (2017)

Figure A.13. Change in Employment by Industry, Macquarie Park (2011-2016)

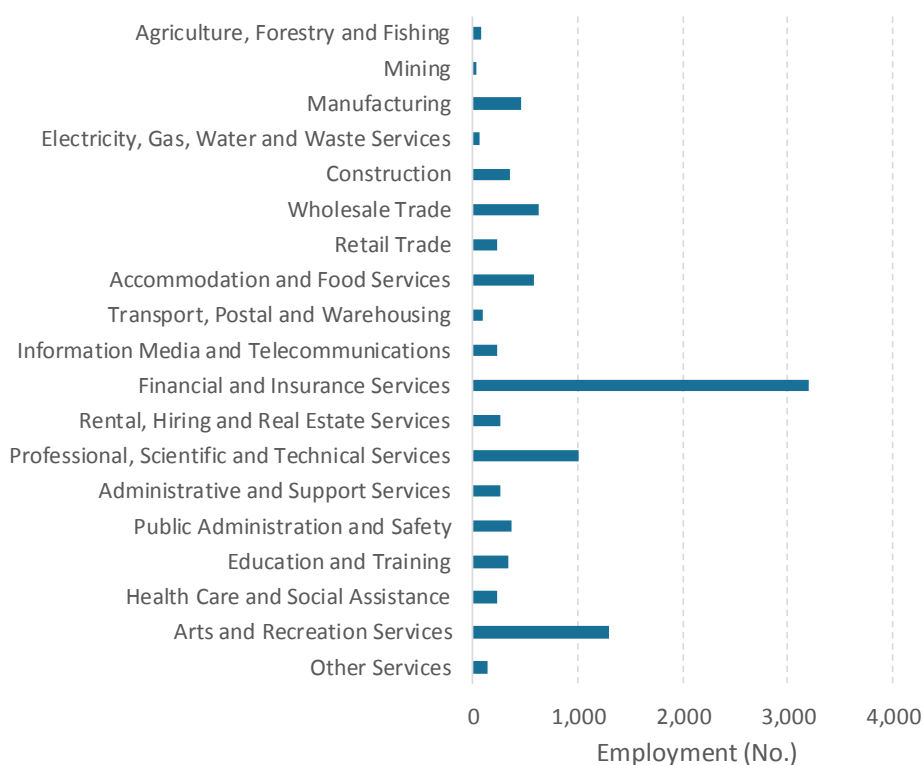


Source: Lucid Economics; ABS (2017); ABS (2012)

Sydney Olympic Park

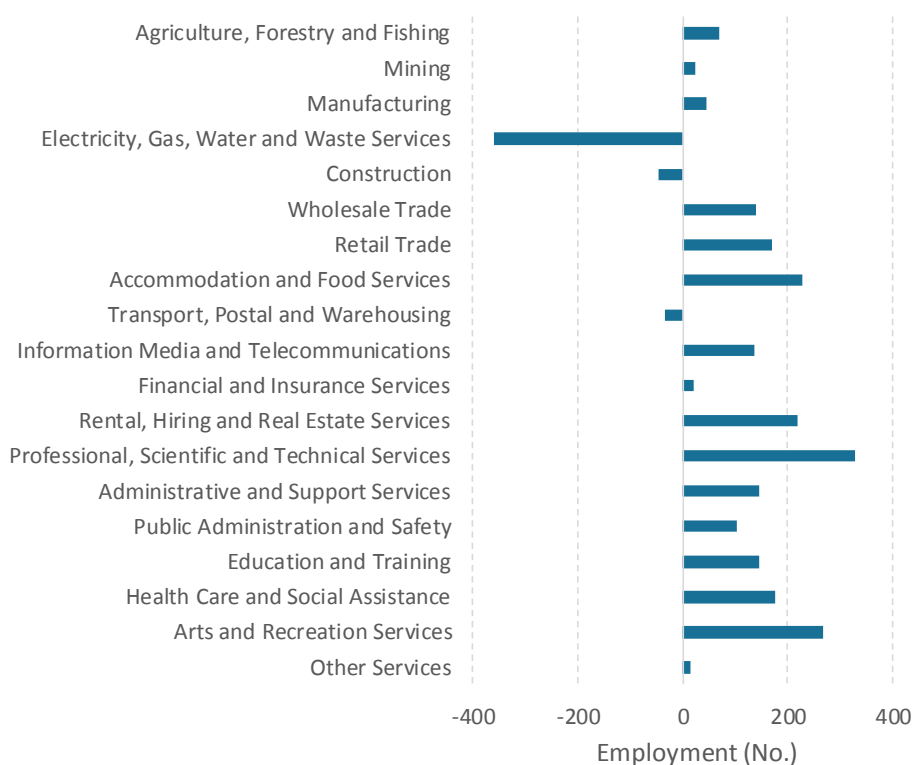
Sydney Olympic Park was the epicentre of the 2000 Olympic games and now hosts ANZ Stadium, the GWS Giants (AFL) and the Sydney Thunder (BBL) as well as the Sydney Showgrounds. Recently, the park has become an important and growing business centre, adding 1,800 jobs between 2011 and 2016. Key corporate tenants include Lion, Samsung and other high-tech companies as well as a range of educational providers.

Figure A.14. Employment by Industry, Sydney Olympic Park (2016)



Source: Lucid Economics; ABS (2017)

Figure A.15. Change in Employment by Industry, Sydney Olympic Park (2011-2016)



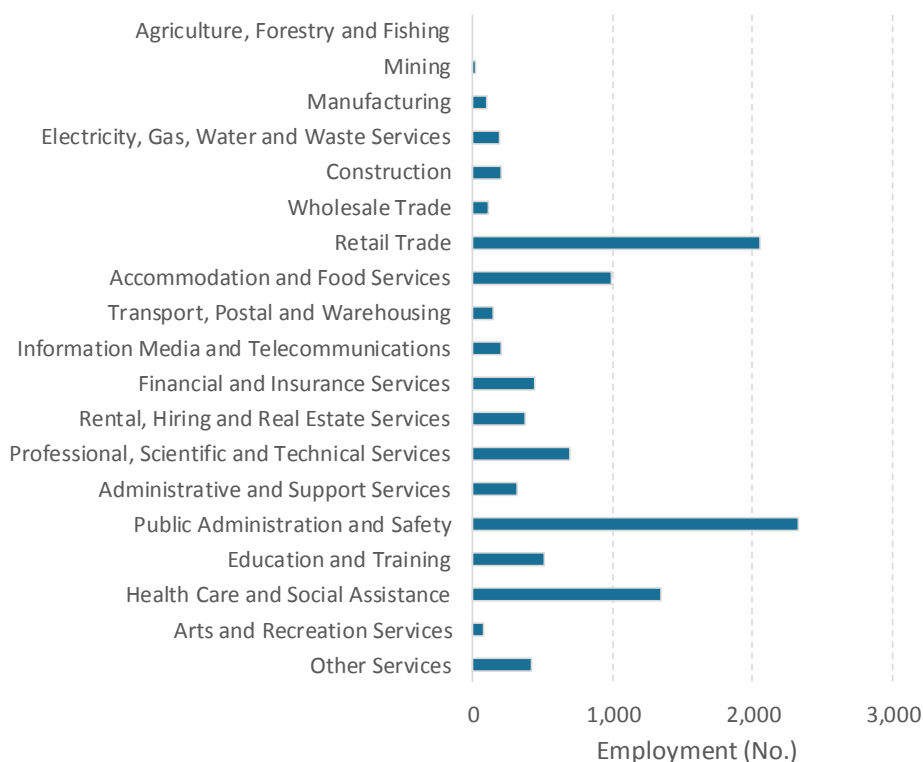
Source: Lucid Economics; ABS (2017); ABS (2012)

Penrith CBD

The Penrith CBD is located 49km outside of the Sydney CBD (representing 4km further outside the CBD than the proposed Minta Farm precinct). Penrith is an important strategic centre for Western Sydney, offering a range of services traditional of a regional CBD. Penrith is anchored by the Westfield Penrith shopping centre and various government agencies, including the ATO.

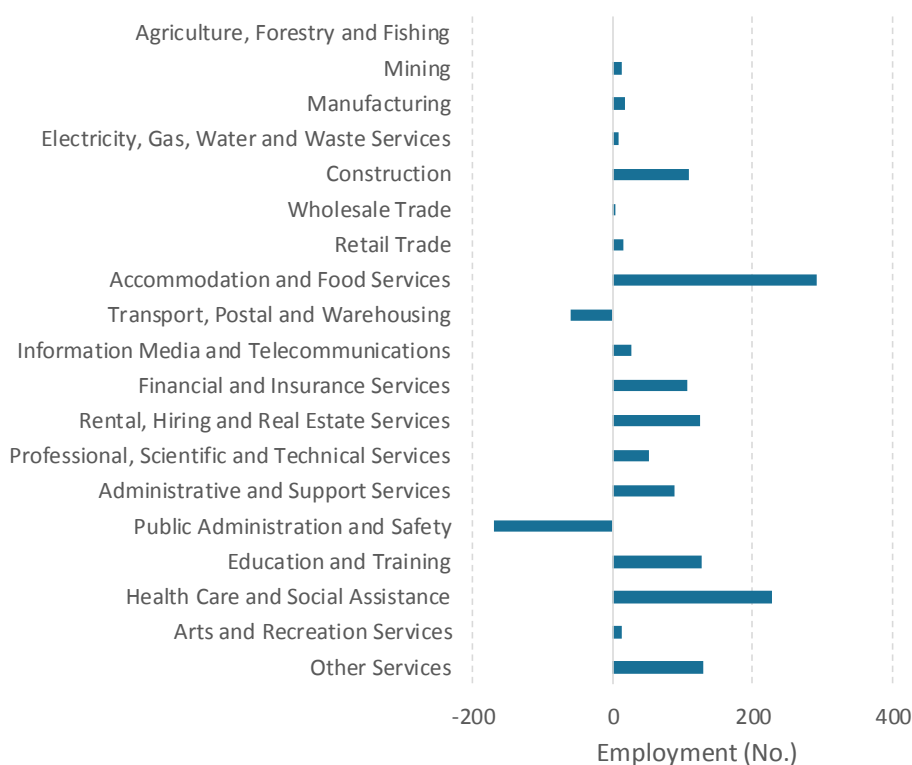
Key growth sectors between 2011 and 2016 including accommodation and food services, healthcare and education.

Figure A.16. Employment by Industry, Penrith CBD (2016)



Source: Lucid Economics; ABS (2017)

Figure A.17. Change in Employment by Industry, Penrith CBD (2011-2016)



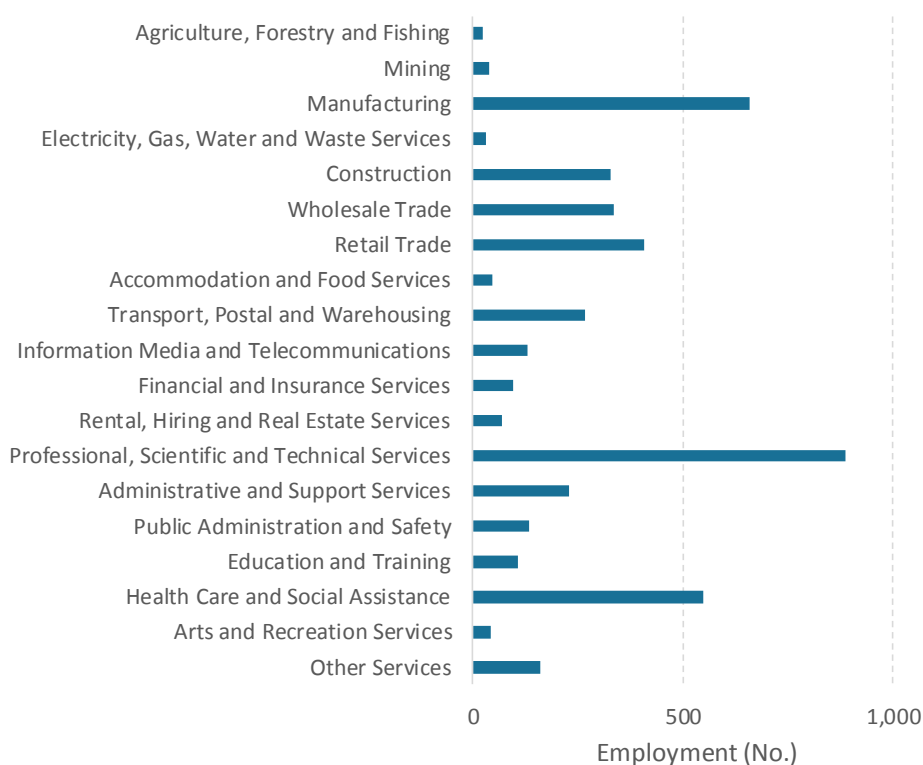
Source: Lucid Economics; ABS (2017); ABS (2012)

Brisbane Technology Park

The Brisbane Technology Park is Queensland's premier technology precinct spread across 33 ha, located at the intersection of the Pacific Motorway and the Gateway Motorway. It is just 14km from the Brisbane CBD and provides easy access to the CBD, airport and port, via the motorway connections. In 2016, there were over 4,500 employees located in the precinct with key employment sectors including manufacturing, professional services and healthcare.

Key tenants in the park include Woolworths regional head office, Cook Medical, Freedom Aged Care (Aveo), ASSA ABLOY, L3 Communications and other technology companies.

Figure A.18. Employment by Industry, Brisbane Technology Park (2016)



Source: Lucid Economics; ABS (2017)

Due to changes in the boundary of the destination zone between 2011 and 2016, comparisons and employment growth are not possible to identify.

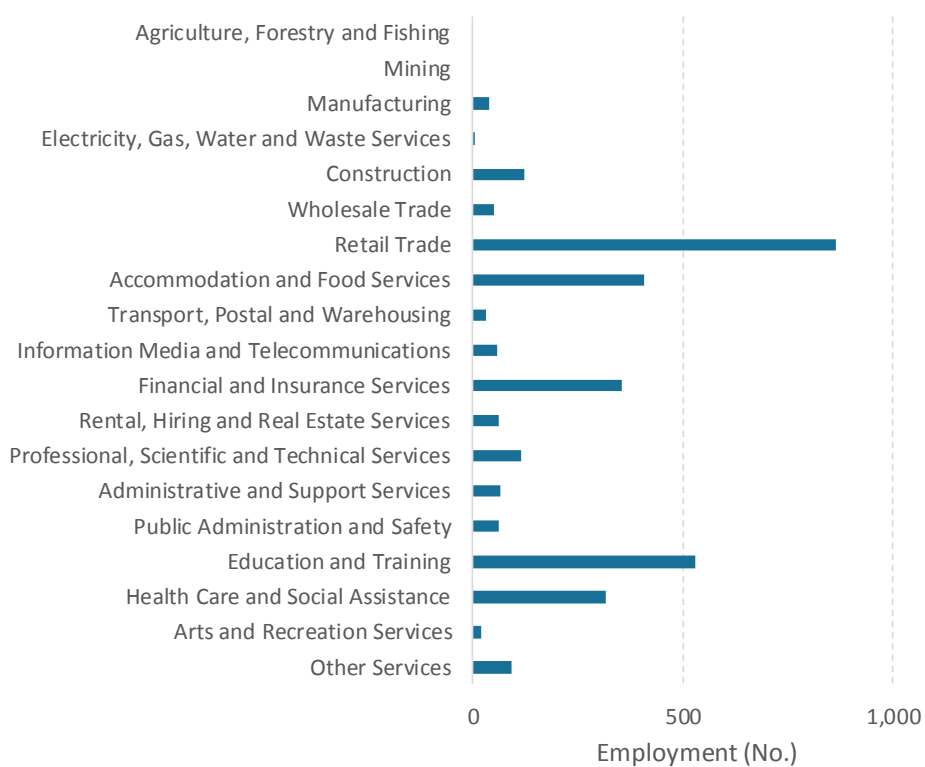
Springfield Central

Springfield Central is part of a new masterplanned city, Greater Springfield that spans across six suburbs located approximately 27km from the CBD of Brisbane. This central precinct includes the Mater Private Hospital, University of Southern Queensland, three schools, the Orion Springfield shopping centre, Polaris Data Centre and various sites for future development. Given the development to date, it is not surprising that retail, education and healthcare were the key employment sectors in 2016 together with finance, accommodation and food services.

The land was originally purchased in 1992 and in 2016 Springfield Central had over 3,000 jobs.

Due to changes in the boundary of the destination zone between 2011 and 2016, comparisons and employment growth are not possible to identify.

Figure A.19. Employment by Industry, Springfield Central (2016)



Source: Lucid Economics; ABS (2017)



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