# Industrial Land Strategy Review

## Frankston City Industrial Precincts

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Frankston City Council

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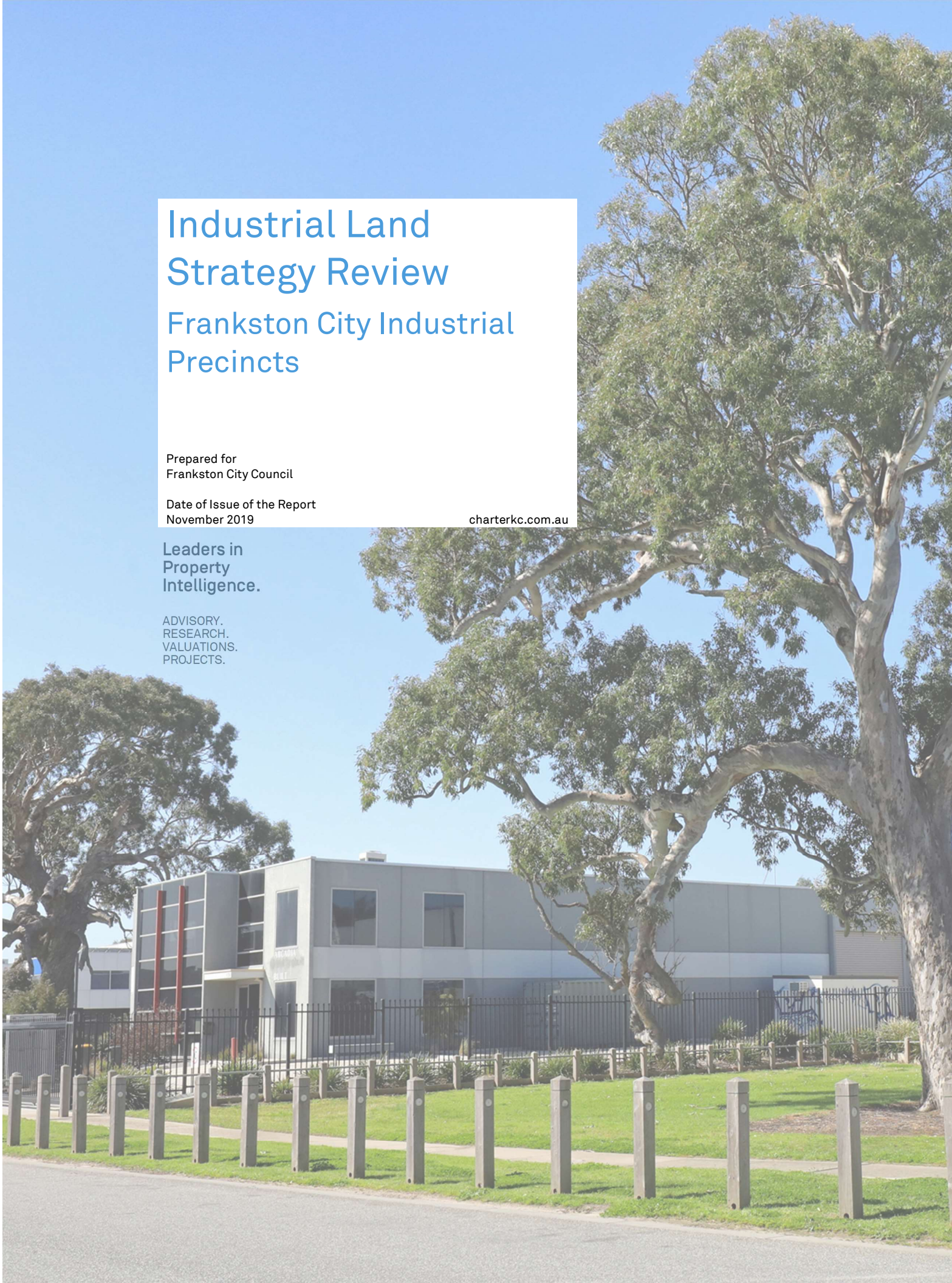

# Industrial Land Strategy Review

## Frankston City Industrial Precincts

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## Instructions.

| | Instructing Party | |
|---|---|---|
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# 1. Executive Summary

A successful industrial sector is essential to a resilient and diverse economy. In the context of ongoing technological, economic and social pressures, the industrial sector needs to be supported by effective policy and strategy to ensure it can adapt to the changing requirements of business whilst also retaining its integrity in the face of competing priorities for land use.

Frankston's (C) industrial precincts are a critical source of economic activity and employment within Melbourne's south east. At 2016, the precincts employed approximately 9,200 people in a range of industries. Since 2016, with the further development of the Carrum Downs precinct, employment within industrial areas is likely to have increased significantly.

There are four core industrial precincts within Frankston (C), the contemporary Langwarrin and Carrum Downs precincts and the older Seaford and Seaford North precincts. In 2018 Council surveyed businesses within its industrial precincts and identified high levels of industry commitment to Frankston (C) as a preferred location for business, with numerous businesses planning to expand and grow.[1]

This report complements the 2018 survey by investigating the 2019 land use status of the municipality's industrial precincts, focusing on land supply, physical form, connectivity and urban design. Key insights arising from this report are as follows:

**Land available for industrial expansion**

- Council's industrial areas are nearing full build out.
- There is now less than 20ha of land available to support future industrial expansion which equates to less than 2 years land supply to support the growth and expansion of business.
- A search for land to support the development of new industrial precincts identified 5 sites within the Urban Growth Boundary. Each of these sites are likely to be subject to various development constraints.
- Under current circumstances, the scope to expand industrial activity in Frankston(C) is very limited.

**Presentation and design of industrial precincts**

- The development of new industrial facilities in Carrum Downs has resulted in a highly attractive contemporary industrial environment that encompasses well landscaped and attractive streetscapes.
- In contrast, the Seaford industrial precinct and pockets of Seaford North include aged industrial properties that present poorly and adversely impact streetscapes.
- There is a growing need to renew the municipality's older industrial areas to boost their attractiveness as important economic assets.
- The study reviewed industrial built form and identified the presentation and organisation of front setbacks as critical area of importance. Within contemporary sites, front setbacks are typically well maintained and highly planned and in turn contribute positively to the amenity of the street environment. In contrast, older areas often include properties which adversely impact on streetscapes and amenity via poorly kept landscaping and signage and disordered storage and waste management. Guidance is needed to support the improvement and renewal of these properties.
- The interaction between industrial built form and surrounding areas was also reviewed. The study found that mature canopy trees are most effective in screening industrial uses from surrounding areas and that the provision of buffer distances without accompanying landscaping was ineffective in screening industrial form from residential and recreational areas.
- The study identified a number of dedicated pedestrian pathways that link industrial areas to surrounding non-industrial areas which, due to a lack of lighting and high levels of vegetation on the ground plane, may be hazardous to pedestrians, particularly at night.

**Public transport and cycling connectivity**

- The Seaford industrial precinct is the only precinct with direct access to fixed rail public transport and is therefore the municipality's most accessible precinct via public transport. For all other Precincts public transport access is via bus.
- Private vehicle travel remains the most efficient and convenient travel mode for industrial workers.
- Bus service frequencies and routes do not currently provide convenient access to the municipality's precincts. Approximately 40-50% of workers live within 15 kilometres of the municipality's industrial precincts in locations that are either directly east or south of industrial areas. For these workers public transport access typically involves 50+ minute travel times via multiple public transport services.
- There is a growing on and off road cycling network emerging throughout the municipality. There is, however, a lack of east west connectivity particularly from Cranbourne. The completion and expansion of council's bicycle network and the incorporation of bicycle paths through industrial areas will aid worker connectivity.

[1] Industrial Precincts Needs Analysis Report, September 2018

### The Frankston Industrial Strategy August 2009 Review

- *The Frankston Industrial Strategy August 2009* strategy is now largely redundant.
- The 2009 strategy largely focused on guiding the development of Carrum Downs which in 2009 was a rapidly developing greenfield location which in 2019 is essentially complete.
- Since 2009, the rise of e-commerce, the attractiveness of industrial land for non-traditional industrial uses and the displacement of inner city industrial and warehousing uses has resulted in increasing demand for new, well located industrial space throughout Melbourne. The 2009 strategy does not address the range and intensity of industrial uses that have emerged within contemporary industrial precincts, nor does it address the way in which industrial areas might grow and renew in an environment with very limited land supply.
- Council must now seek to actively facilitate the renewal of aged and redundant industrial stock in order to both help existing enterprises expand and to also stimulate new business activity. The 2009 strategy does not provide a strategic vision nor practical guidance to do so.
- The 2009 strategy includes urban design guidance for Carrum Downs which details specific boulevard style treatments for key routes including Lathams Road. The need to ensure the streetscapes and amenity of major routes achieves the highest standards remains a relevant aspiration.
- The site specific urban design guidance within the 2009 strategy needs to be expanded and updated, particularly so that it can guide the renewal of older areas.

### Recommended actions

The report proposes a number of actions to facilitate the growth, urban improvement and accessibility of the municipality's industrial precincts. Key recommendations include:

1. Review the land use zoning of the Frankston East industrial precinct.
2. Develop a strategic vision and program of actions to facilitate the renewal of aged industrial stock and ageing precincts.
3. Develop urban design guidelines that encompass directions for the management of front setbacks, the improvement of streetscapes, the management of waste and storage.
4. Implement the 2009 urban design vision for Lathams Road as a high amenity gateway with extensive landscaping and high quality cycling and pedestrian infrastructure.
5. Engage with Public Transport Victoria and the Department of Transport to advocate for a review of bus service frequencies and routes for buses that service industrial precincts, the provision of new bus stops in the northern portion of Carrum Downs, more direct public transport connectivity from and to Cranbourne and other suburbs east of the municipality.
6. Develop a shared cycle route through Lathams Road that connects with the Peninsula Link Trail.
7. Develop east west cycling connectivity that supports accessibility from Cranbourne.
8. Investigate the prevalence and impact of non-traditional industrial uses in industrial locations.
9. Address issues of disorderly industrial sites via local law enforcement.
10. Ensure that vegetation at the ground plane at pedestrian access points into and from industrial precincts is maintained to avoid safety risks.

# 2. Report Purpose.

## 2.1 Report Purpose

The strategic management of industrial land is essential to the functioning of major settlements and to the growth of sustainable economies. Industrial land supports a range of commercial activities and urban services that in urban areas cannot typically be performed in other nearby locations. As such, prolonged neglect of industrial land can ultimately risk the prosperity and viability of communities.

Industrial precincts within Frankston City Council constitute an important source of employment for the municipality and surrounding region. In acknowledgement of this, Council have identified the need to protect and develop these areas to ensure their viability and productivity continues for future generations.

In the interest of renewing ageing industrial uses and identifying future opportunities, Council have commissioned Charter Keck Cramer to help establish an evidence base to support a review of the *Frankston Industrial Strategy 2009.*

In doing so this study will:

- Assess land supply within Frankston's(C) industrial precincts.
- Investigate the land available to industrial businesses looking to expand in the Frankston municipality.
- Investigate opportunities for industrial expansion in areas surrounding industrial precincts.
- Investigate the potential need for Urban Design Guidelines to manage the built form of industrial areas.
- Review and evaluate public transport access to a municipality's precinct.

With the above complete, the work will then seek to evaluate the currency of the findings of the 2009 strategy as well as associated actions. New and updated policy settings and recommendations will also be considered.

A successfully managed industrial sector is essential to a resilient and diverse economy. In the context of ongoing technological, economic and social pressures, the industrial sector needs to be supported by effective policy and strategy to ensure it can adapt to the changing nature of business whilst also retaining its integrity in the face of competing priorities for land use.

# 3. Industrial Land in Melbourne's South East

## 3.1 Study Area and Core Precincts

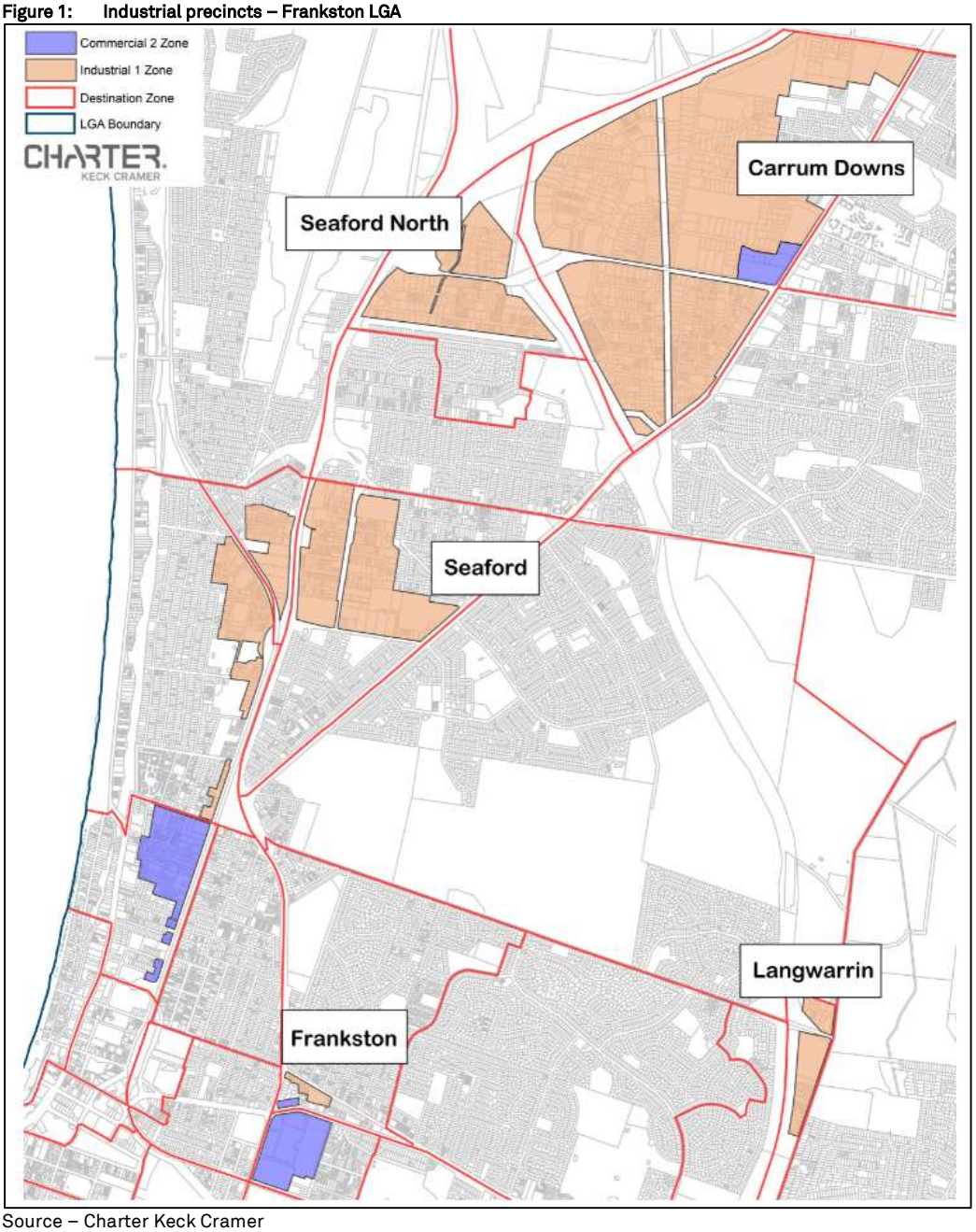
There are four industrial precincts within the Frankston City Council which encompass approximately 416 ha of industrial land all of which are currently zoned Industrial 1.

The Carrum Downs precinct is the largest and newest precinct encompassing 262 ha of land. The Seaford and the Seaford North precincts represent older eras of industrial development and incorporate 94 ha and 47 ha of industrial land respectively.

The Langwarrin precinct in the south of the municipality incorporates 12 ha of land. There is also a small pocket of industrial land located in Frankston East (2 ha).

In total these precincts comprise the core study area.

**Figure 1: Industrial precincts – Frankston LGA**




Source – Charter Keck Cramer

It should be noted that in the recent past commercial land in the Overton/ Wells Road area was rezoned from industrial to Commercial 2 land via Amendment C124 to the Frankston Planning Scheme. As is discussed below, based on its size and land uses the Frankston East precinct might be considered for a similar change in land use regulation.

**Lot size**

The overall subdivision pattern and associated composition of lots differs by precinct. In general, the Seaford precinct comprises of a denser subdivision pattern with over 70% of lots below 1,000 sqm. As such, the precinct is primarily comprised of small warehouses and factoryettes that support a high number of small and medium sized businesses.

Seaford North and Carrum Downs have a higher proportion of 1,000 sqm to 5,000 sqm lots which is reflected in both the larger format industrial built form that is prevalent in these areas and the high number of larger enterprises that operate from these areas. There are, nonetheless, still significant numbers of smaller lots within these precincts particularly in Carrum Downs.

Overall, a diversity of subdivision and lot sizes has enabled a variety of local and regionally focused businesses of different scales to establish within Frankston(C).

**Figure 2: Lot size profile industrial precincts – Frankston LGA**

| Size (sqm) | <1,000 | 1,001-2,000 | 2,001-5,000 | 5,001-10,000 | 10,000+ | Total |
|---|---|---|---|---|---|---|
| Seaford | 596 | 105 | 67 | 14 | 13 | 795 |
| Seaford North | 185 | 81 | 87 | 6 | 2 | 361 |
| Carrum Downs | 713 | 340 | 273 | 46 | 30 | 1,402 |
| Frankston | 19 | 6 | - | - | 1 | 26 |
| Langwarrin | 30 | 13 | 9 | 2 | 1 | 55 |

Source – Charter Keck Cramer

The Frankston East precinct is the smallest industrial precinct within the municipality. The precinct primarily supports automotive sales and repairs. Given its limited size and close proximity to residential areas, the precinct is seen as unsuitable as a location for new industrial uses or development. The precinct currently functions as a local service centre, as such it is recommended that the current land use zoning of the Precinct should be reviewed both to reflect its current usage and its limited capacity to support industrial uses.

## 3.2 Melbourne South Eastern Industrial Uses

Frankston's (C) industrial precincts are part of the broader industrial markets of Melbourne' south east.

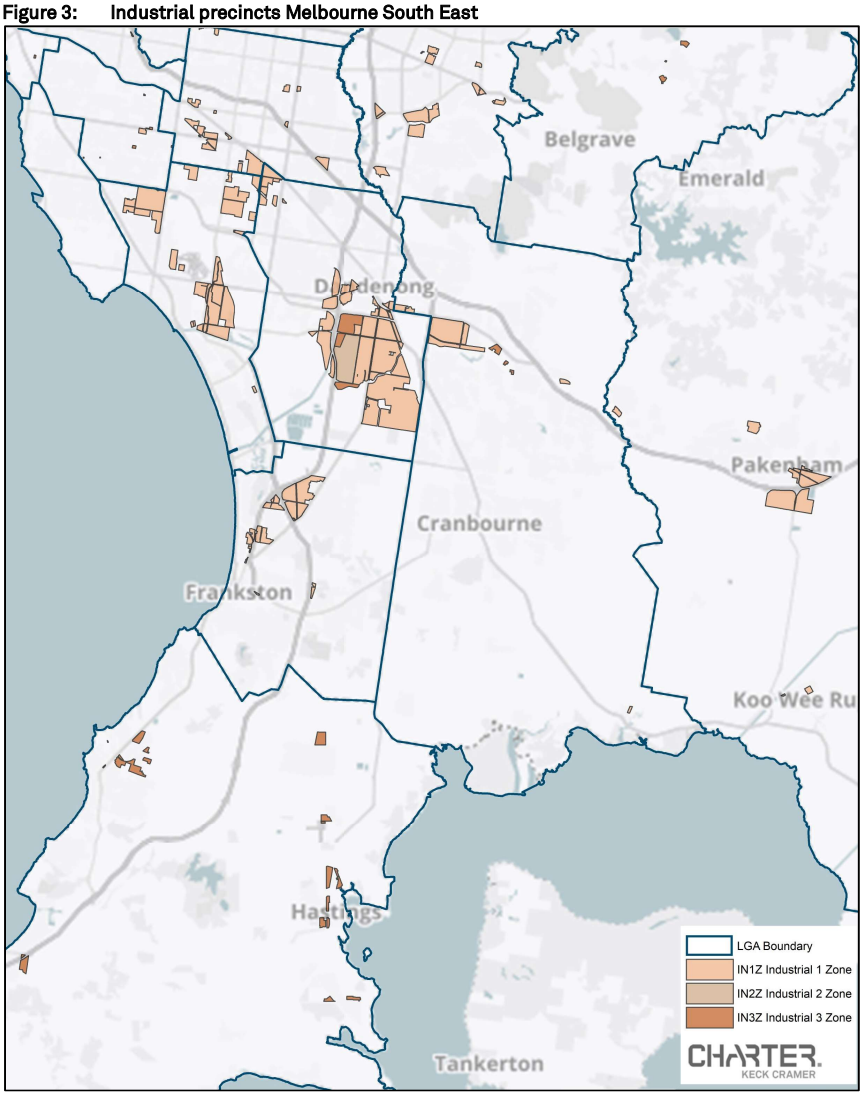
Dandenong South is the largest and arguably the leading area for industrial activity in the south east (2,900 ha). The precinct is home to major plastics, food, packaging and machinery manufacturers and related industries which support a diversity of economic activity along with significant employment opportunities within the region. In state planning policy Dandenong South is identified as a State Significant Industrial Precinct (SSIP).

Relative to other industrial precincts in Melbourne, the southern region supports a high proportion of manufacturing businesses (in 2017 a third of businesses in the Southern SSIP were manufacturing businesses). In contrast, transport and warehousing uses, while still a major use in the south, are more prevalent in Melbourne's north and west where major air and road transport infrastructure continues to attract major logistics enterprises. In 2017, there was over 8.5 million square metres of built space in the southern SSIP with the majority of buildings between 1,000 and 5,000 sqm (between 2015 and 2017 the precinct added over 700,000 sqm of built space).

The south east also incorporates major industrial precincts in Braeside and Moorabbin (1,300 ha) and in the Clayton /Mulgrave area (710 ha).

Further south there is also significant new industrial land in Officer and Pakenham of 650 ha of which 360 ha is currently vacant. There is also zoned but primarily undeveloped land in Hastings that to date has been subject to very limited demand. With Bay West Melbourne's recommended future port, Hastings is unlikely to become a major industrial and transport area.

**Figure 3: Industrial precincts Melbourne South East**




Source – Charter Keck Cramer

### 3.3 Constrained land supply across the south

Frankston's industrial markets need to be understood in the context of an increasingly constrained industrial land markets across Melbourne and, in particular, within Melbourne's south east.

Population growth, the rise of ecommerce, the land needs of urban service enterprises (such as plumbers, electricians, local civil engineers) as well as the displacement of inner area warehousing by apartment development is facilitating substantial demand for industrial land across Melbourne. As part of this, industrial areas are also drawing in non-traditional industrial uses including entertainment complexes, indoor recreation facilities, child care centres and labour hire firms as well as professional services.

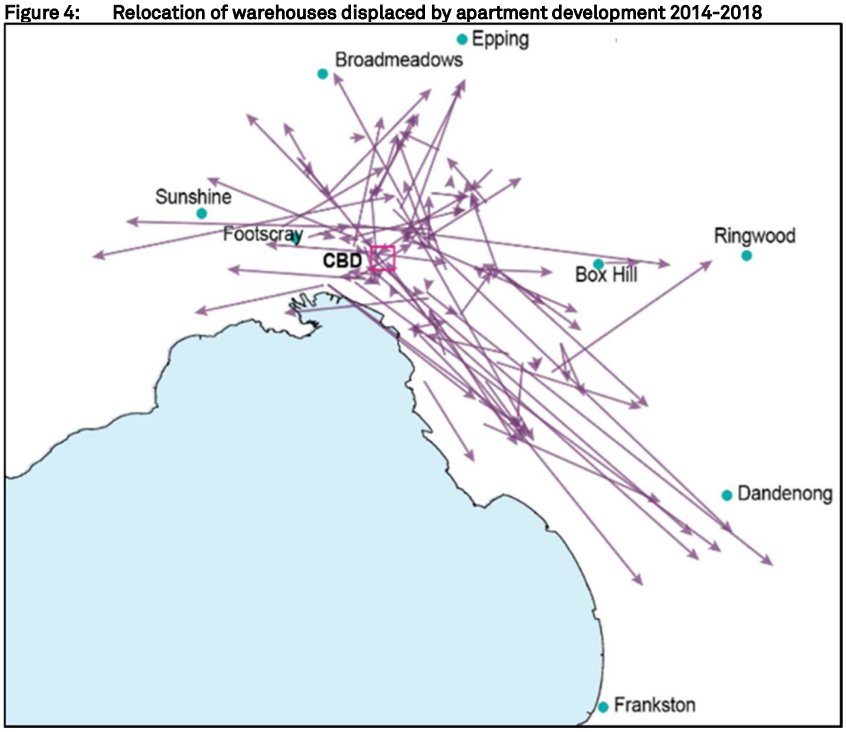
In Melbourne's south ongoing demand for industrial space is reflected in ongoing increases in the annual consumption of vacant industrial land as well as increases in the price of both vacant land and built space. Within the Southern SSIP, between 2010 and 2017, industrial land consumption increased from 20 Ha per annum to nearly 50 Ha per annum. In the near future, government analysis identifies land supply constraints emerging within the Southern SSIP which, on current trends, is likely to see nearly all available vacant land consumed by 2030.

While growth areas to the west and north of Melbourne provide for the contiguous expansion of established industrial precincts via the Precinct Structure Planning process, the current operation of the Urban Growth Boundary prohibits the contiguous expansion of established industrial precincts in the south.

As of 2017, State government data identifies 605 ha of vacant industrial land in South Dandenong, 105 ha in Kingston (C), 9 ha in Monash (C) and 30 ha in Frankston (C). In comparison, Melbourne's north and west have over 1,300 ha and 2,500 ha of vacant industrial land respectively. The overall outlook for industrial land supply in Melbourne's south is constrained, particularly in the established areas of the region.

Limited vacancy and increased demand has been reflected in the price of industrial space throughout the south with the price per square metre for built industrial space appreciating substantially over the past 3 years (in some locations the price has doubled). Similarly, the price of vacant land, where available, has also appreciated substantially.

**Figure 4: Relocation of warehouses displaced by apartment development 2014-2018**



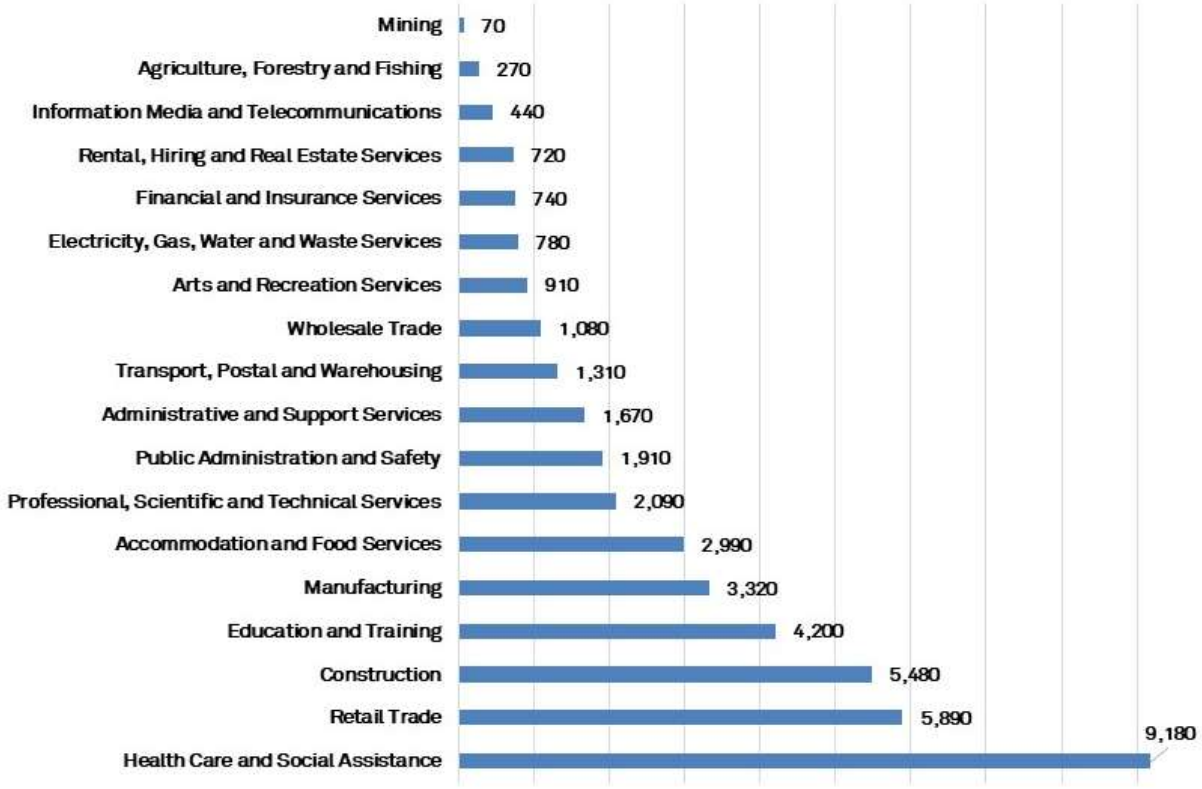

Source – Department of Environment, Land, Water and Planning, Research Matters

# 4. Employment and Industrial Precincts

## 4.1 Municipal employment

In 2018 there were an estimated 44,934 jobs located in Frankston (C). As can be seen below, major industries for local employment include health care and social assistance, retail trade and construction.

**Figure 5: Employment by Industry – Frankston LGA**




Source – REMPLAN 2018

The last five years has seen employment within the region grow. This is reflected both in the region's declining unemployment rate and its increasing workforce participation. As at April 2019, unemployment in the south eastern region (which includes the Mornington Peninsula) was estimated at 4.8% which represents a significant change in the five years since April 2014 when unemployment in the region was estimated at 6.6%. Notably, this change occurred in conjunction with an increase in workforce participation by the region's residents (workforce participation in April 2014 was estimated at 62.7% which increased to 65.4% by 2019).

Frankston's (C) unemployment rate has, in the past five years, mirrored the overall improvement in employment in the region, falling from 8.3% in 2015 to 5.2% at December 2018 (Victoria's rate of unemployment at December 2018 was at 4.2%)[2]. This improvement aligns with the increasing education and skill level of the municipality's residents – the 2016 census identifies an ongoing increase in residents with post-secondary qualifications and higher education attainment.

[2] REMPLAN Economy Profile

## 4.2 Industrial Precincts Employment

At 2018 Frankston's (C) industrial precincts supported approximately 13,060 jobs representing 29% of jobs in the municipality and an important source of employment throughout the region.

Carrum Downs and Seaford are major industrial employment areas with manufacturing, construction and retail trades the leading industries in these locations.

According to 2018 estimates there were approximately 8,200 jobs in Carrum Downs Industrial Precinct, over 3,060 jobs in the Seaford Industrial Precinct and over 1,300 jobs in the North Seaford industrial precinct. These estimates suggest employment within these locations has continued to expand since the 2016 Census with employment in Carrum Downs expanding from 6,900 jobs in 2016 to 8,200 jobs in 2018.

**Figure 6: Employment by industry – Frankston (C) industrial precincts**

| Industry | Carrum Downs | Seaford | North Seaford | Langwarrin |
|---|---|---|---|---|
| Manufacturing | 2,124 | 389 | 320 | 21 |
| Construction | 2,089 | 665 | 368 | 92 |
| Retail Trade | 575 | 276 | 44 | 116 |
| Wholesale Trade | 545 | 131 | 95 | 0 |
| Transport, Postal and Warehousing | 442 | 393 | 64 | 22 |
| Professional, Scientific and Technical Services | 282 | 162 | 32 | 20 |
| Administrative and Support Services | 268 | 106 | 74 | 10 |
| Public Administration and Safety | 154 | 92 | 0 | 0 |
| Rental, Hiring and Real Estate Services | 154 | 26 | 0 | 7 |
| Accommodation and Food Services | 92 | 57 | 6 | 94 |
| Arts and Recreation Services | 108 | 10 | 40 | 0 |
| Financial and Insurance Services | 75 | 52 | 0 | 7 |
| Electricity, Gas, Water and Waste Services | 90 | 25 | 24 | 0 |

Source –ABS and REMPLAN 2018

In terms of both employment and economic output, manufacturing and construction are fundamental to Frankston's (C) economy. By economic output, manufacturing and construction were estimated in 2018 to have contributed over $4.5 billion to the municipality's economic output, thereby making up a third of the municipality's economic output (in comparison health care and social assistance represented $1.1 billion in economic output). [3]

According to REMPLAN analysis there were 90 manufacturing businesses in Frankston (C) in 2018 with a turnover of more than $2 million (from a total of 640 manufacturing businesses). Additionally, there were an estimated 188 construction businesses with a turnover of over $2 million (from a total of 2,800 construction businesses). These businesses were estimated to have paid over $617 million in wages in 2018.

[3] REMPLAN Economic Profile, https://app.remplan.com.au/frankston/economy/industries/gross-regional-product?state=LMxVc8!lx4KSPK7HGDopnSNvoVmcyuxHNpRIrH6H7LA

### 4.3 Industry sentiment within industrial precincts

In 2018, Frankston City Council in conjunction with Sagacity Research conducted the *2018 Industrial Precincts Survey*, with the aim of identifying opportunities to engage and assist businesses within industrial precincts. The survey comprised 44 questions and was administered via email and telephone. A total of 308 businesses were surveyed within Frankston City Council.

The survey reports high levels of satisfaction with the municipality as a location for business with 80% of businesses rating the location as either "good" or "very good." Proximity to home, affordability, proximity to major roads and the perception of the municipality as a desirable location for industry were identified as favourable attributes.

The survey identified a positive business outlook with 61% of businesses expecting their turnover to increase in the next financial year. Moreover, 48% reported plans to expand their businesses, of which 85% plan to expand in the next three years. The kind of expansion businesses reported to be looking to undertake included plans to increase market share, grow the number of employees, develop new products and enter new markets. For 22% of respondents, however, business growth included "site relocation."

Of those surveyed, 58% of businesses experienced difficulties obtaining a skilled workforce, particularly in the manufacturing sector where 70% reported having such difficulties. By far the most significant reason respondents gave for this problem (81% of respondents) was due to the "lack of suitable skills or qualifications" amongst potential employees. The report concluded that Frankston's industrial precincts needed to facilitate links between local education institutions and businesses.

When asked if internal transport, public transport or car parking impacted on their business, 56% of respondents reported no issues, 35% of respondents reported issues with car parking, 13% reported issues with public transport and 4% reported issues with internal transport. Businesses also raised concerns about truck activity.

Increasingly businesses in industrial areas interact directly with customers. In this context 75% of businesses reported face to face engagement with their customers. As such, the report concluded that there are opportunities for Council to assess the demand and use of travel infrastructure to ensure it is not an impediment on interactions with customers for local businesses.

As part of this study, Charter has undertaken further industry consultation with commercial real estate agents that work within the municipality and region. The consultation confirmed high levels of demand for industrial space in the region but also the impact of limited supply on both the capacity for new tenants to enter the area and for existing tenants to expand.

**Key insights:**

- There is significant demand for industrial space in Melbourne. However, land supply to support new industrial uses is increasingly constrained.
- A variety of trends have converged to drive an increase in demand for industrial space including warehouse displacement in inner areas, e-commerce, and the attractiveness of industrial land for non-traditional industrial uses such as recreation and childcare.
- The regions employment base is growing which is supported by increased workforce participation
- The Carrum Downs and Seaford industrial precincts are important sources of employment and economic activity in the region and within the municipality.
- There are a diversity of economic uses within the municipality's industrial areas.

# 5. Industrial Land Supply, Demand and Long Term Capacity

This section investigates industrial land supply including recent consumption of vacant industrial land and the corresponding availability of land to support economic growth and the aspiration of local enterprises to expand.

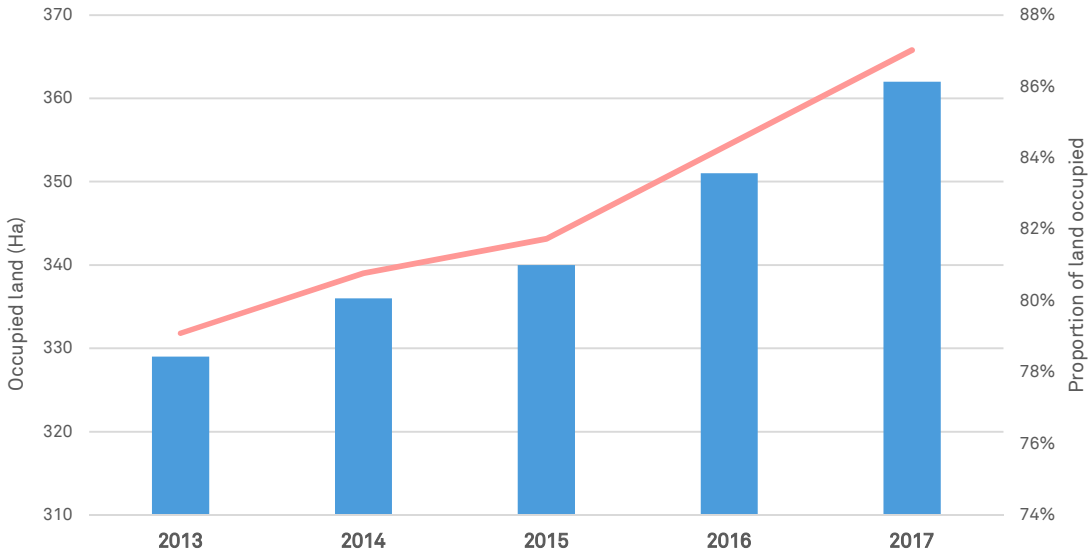
The section also provides a land consumption projection which identifies the likely period in which land supply constraints may begin to limit further industrial expansion. As part of this, the work then reviews options for industrial expansion that do not require changes to the Urban Growth Boundary.

## 5.1 Industrial Land Consumption

The State Government's Urban Development Program (UDP) tracks the consumption of industrial land across Melbourne and includes data for the Frankston City Council.

According to the UDP, annual industrial consumption within Frankston (C) has, since 2013, averaged approximately 9 hectares per annum albeit that consumption has fluctuated significantly over this period (from 3 ha in 2013 to 21 ha in 2015). The continued take up of industrial land has seen the build out of over 85% of Frankston's industrial capacity. As discussed previously, at June 2017 the UDP identified 30 ha of vacant industrial land within the municipality. The data therefore suggests that Frankston's industrial precincts are nearing full capacity.

**Figure 7: Consumption of industrial land Frankston (C)**




Source – Department of Environment, Land, Water and Planning Urban Development Program, Charter Keck Cramer

## 5.2 Vacant Land Analysis

Charter has assessed each of the industrial precincts to identify both vacant and potentially underutilised land.

### Methodology

Within this study potentially vacant land that can support future industrial land uses is defined as land that is within an industrial zone, that does not currently include any structures and has not been identified as a recreation reserve by Council.

Charter has assessed satellite imagery from April 2019 to identify sites within industrial precincts that meet these criteria. The results of the assessment were further tested and validated via consultation and site visits. As part of this, Charter also identified potentially underutilised sites which are defined as sites with significant unused space that do not currently support any commercial activity.

### Land assessment results

In total the study identifies 15 ha of vacant land and a further 5 ha of what might be considered underutilised land. This encompasses 49 vacant lots ranging in size from 500 – 80,000 sqm. The majority of both vacant and underutilised land is in Carrum Downs. As can be seen below, most of the identified capacity is not of a sufficient size to support the needs of major enterprises as most lots are between 1000 to 2000 sqms.

The analysis identified only a limited number (7) of larger lots. In addition, there is very limited potential for lot amalgamation (only one cluster of vacant lots was identified).

The composition of vacant lots is detailed below and then discussed precinct by precinct. The analysis of the Seaford and Seaford North precincts suggests that these are the most constrained vacant land markets with over 95% of industrial land in Seaford and 97% of land Seaford North already occupied.

**Figure 8: Vacant land supply by lot size**

| Precinct Name | Size Cohort (sqm.) | | | | | | Land area (ha) |
|---|---|---|---|---|---|---|---|
| | 0-1,000 | 1,000-2,000 | 2,000-5,000 | 5,000-10,000 | 10,000+ | TOTAL | |
| Carrum Downs | 3 | 17 | 3 | 3 | 2 | 28 | 8.95 |
| Seaford North | 0 | 6 | 2 | 0 | 0 | 8 | 1.22 |
| Langwarrin | 0 | 0 | 1 | 0 | 0 | 1 | 0.34 |
| Seaford | 4 | 4 | 2 | 1 | 1 | 12 | 4.34 |
| TOTAL | 7 | 27 | 8 | 4 | 3 | 49 | 14.84 |

Source – Charter Keck Cramer

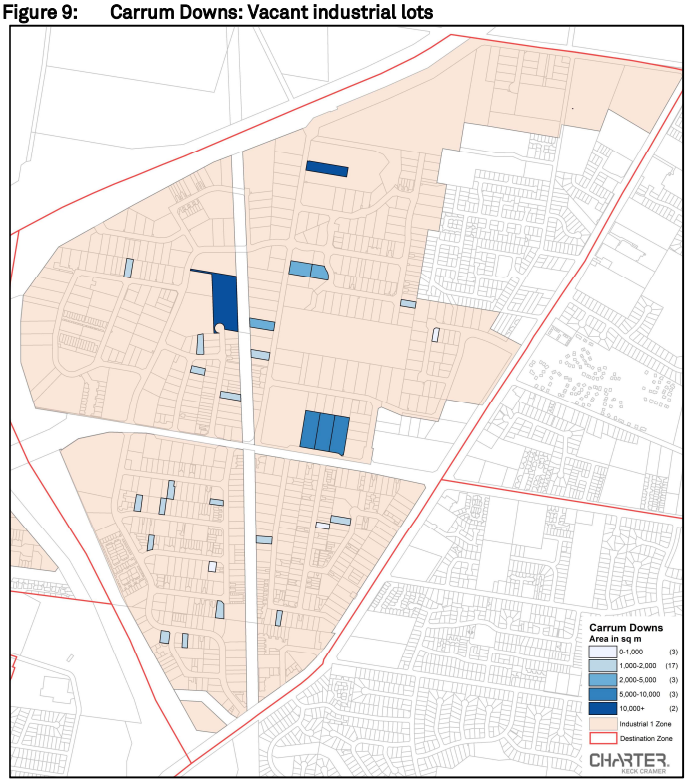
**Carrum Downs**

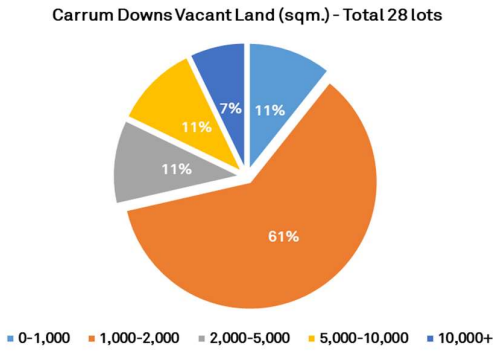
There are currently 28 vacant lots within Carrum Downs that make up a total supply of vacant land of 9 ha. There is one cluster of three lots along Lathams Road, other than this vacant lots are spread throughout the precinct.

The majority of vacant lots are between 1,000 and 2,000 sqm. In 2019, the 7.7 ha formerly vacant lot at 28 to 40 Colemans Road commenced earth works. Prior to this, this was the largest vacant industrial site in the precinct and in Frankston (C). There are now only 5 available lots greater than 5,000sqms in the precinct.

Approximately, 85% of industrial land in Carrum Downs is occupied which will increase to 95% occupancy in the near future once development along Colemans Road is complete. There are a number of lots that might be considered as underutilised, these sites constitute approximately 5 ha of land. There are also irregularly shaped lots that may present development challenges.

**Figure 9: Carrum Downs: Vacant industrial lots**



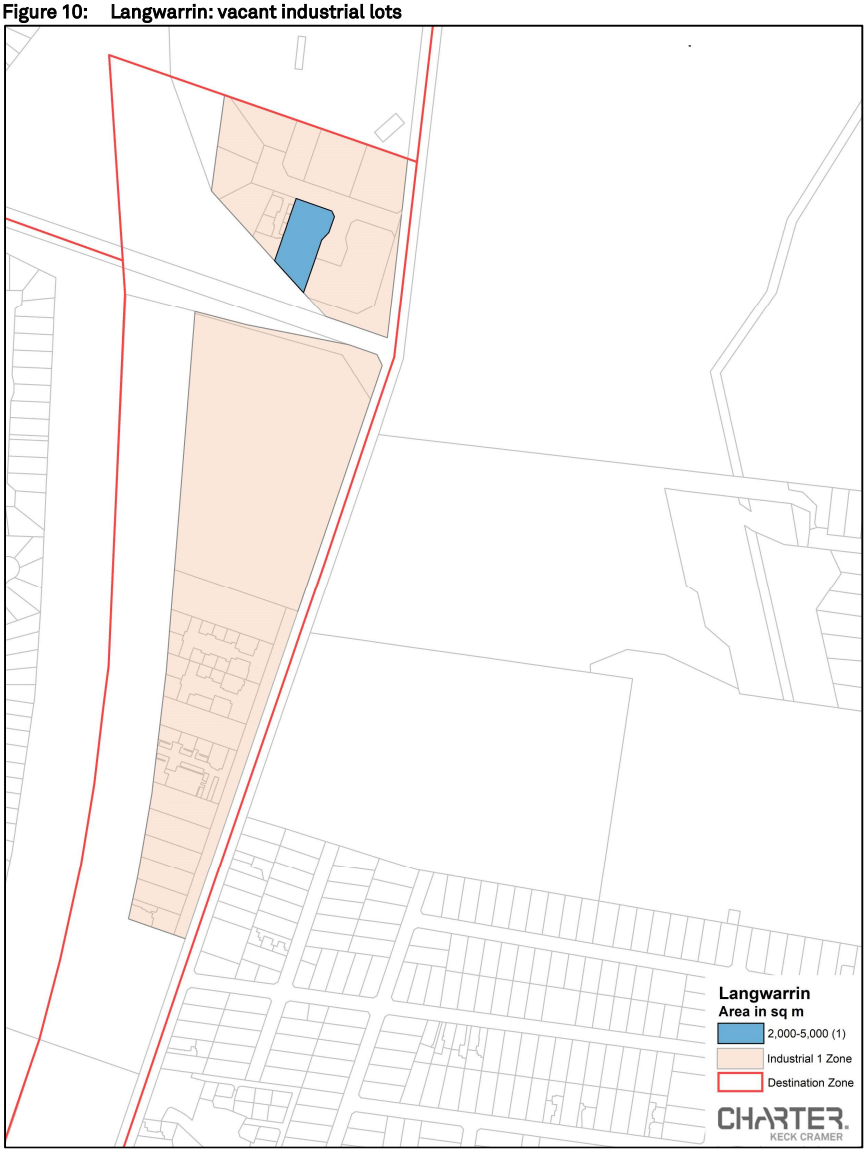




Source –Charter Keck Cramer

**Langwarrin**

Langwarrin is a small precinct that primarily functions as a service centre. There is a single 3,400 sqm vacant site located at the northern tip of the precinct.

**Figure 10: Langwarrin: vacant industrial lots**



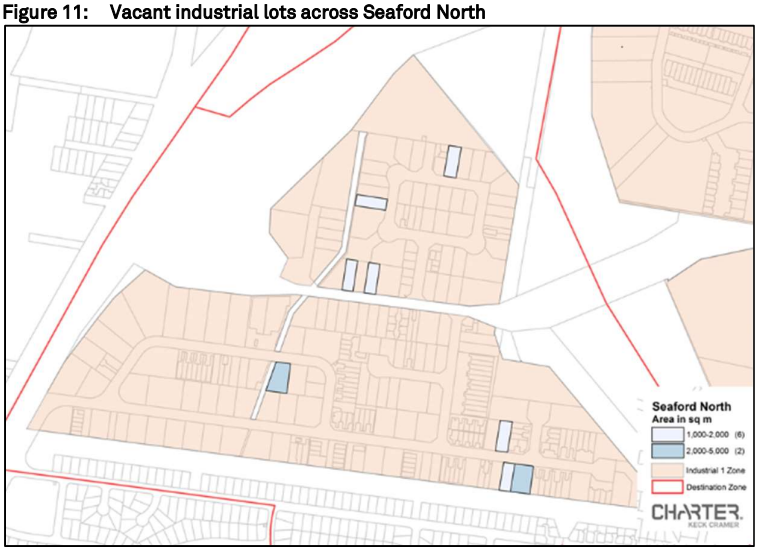

Source – Charter Keck Cramer

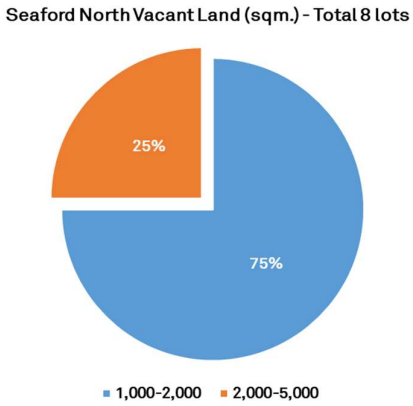
**Seaford North**

Seaford north incorporates 8 potentially available lots comprising 1.2 ha. These are primarily small sites ranging from 1,200 – 2,100 sqms.

There are a number of larger sites that incorporate extensive storage areas comprising approximately 4.5 ha. These sites, however, seem, at present, to be well utilised.

**Figure 11: Vacant industrial lots across Seaford North**



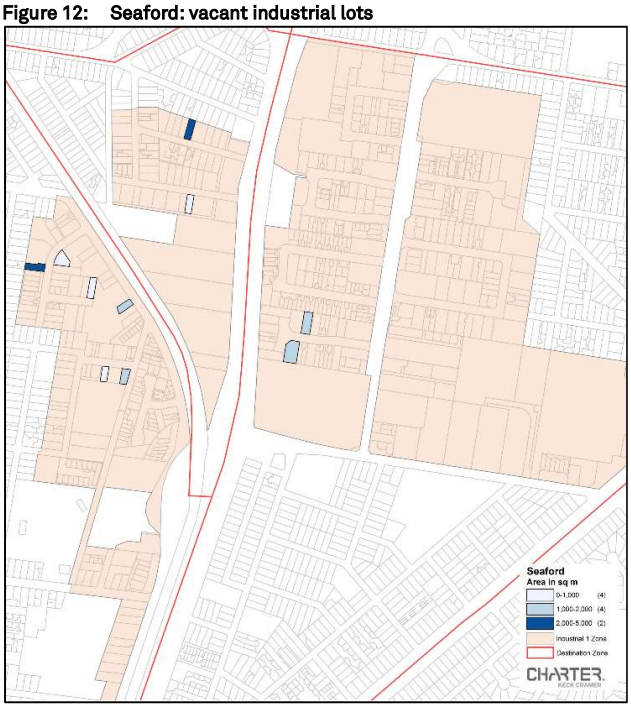

Source –Charter Keck Cramer

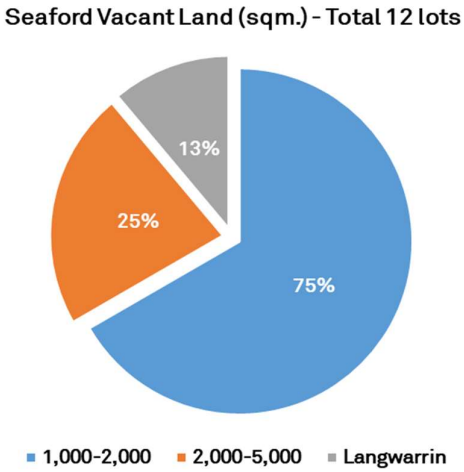
**Seaford**

Seaford incorporates 12 vacant lots totalling 4.3 ha. Only 3 of the available lots are above 2 ha.

There is a vacant 3ha lot at 10b Klauer Street. This lot, however, does not have direct street frontage and is therefore dependent on the owners of 10a Klauer Street providing access. There are a number of depots in the area encompassing about 5ha of land that in the future might be considered as an underutilisation of land. At present, there are active uses on these sites.

**Figure 12: Seaford: vacant industrial lots**



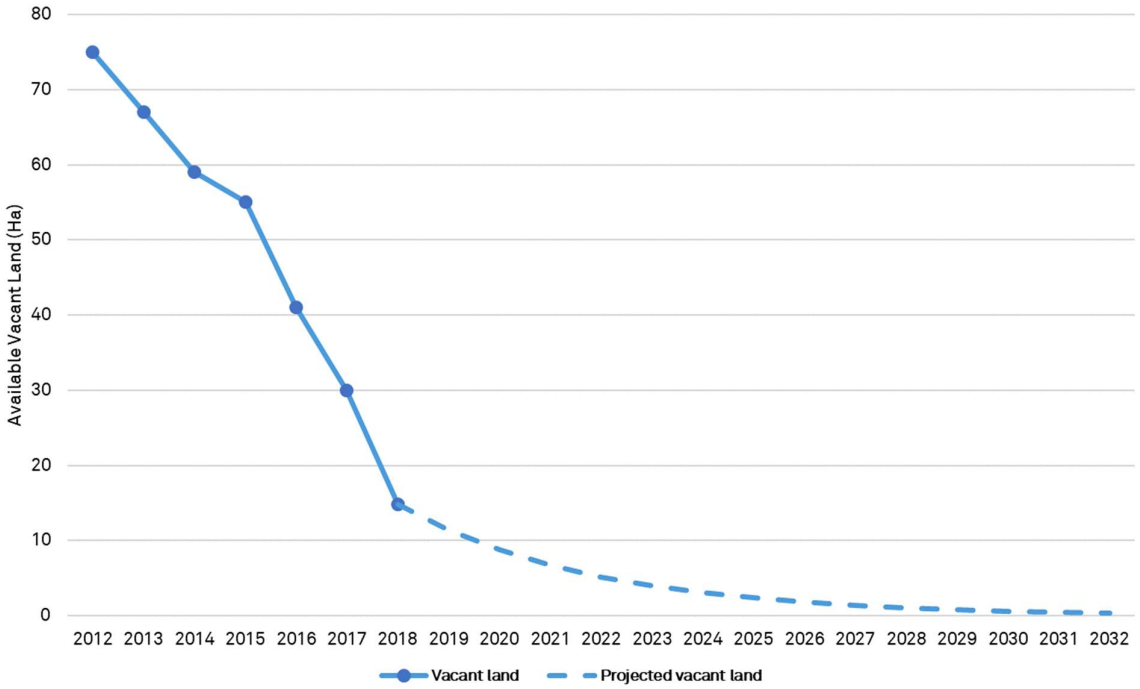

Source –Charter Keck Cramer

### Reconciling demand and supply

Based on trend land consumption, land availability is projected to fall below 10 ha in 2020. At this point, with only 7 sites of above 5000 sqm potentially available for development (one without direct street frontage), there will be limited land capacity within Frankston (C) to accommodate ongoing demand. Industry consultation has identified limited vacant sites and opportunities to expand as an issue for tenants and enterprises alike.

The graph below projects potential exhaustion of land supply within the municipality's industrial precincts. The graph suggests a smooth exhaustion of vacant land, however, in reality consumption is likely to decline much more arbitrarily as development options decrease.

**Figure 13: Projected industrial vacant land availability Frankston (C)**




Source – Charter Keck Crammer, Urban Development Program 2017

As stated earlier, industrial land increasingly provides a foundation for local economies and uses that are increasingly not permitted or of too big a scale to occur in dense urban areas. As well as its inherent economic importance, industrial land also supports local employment and often employment that is close to the homes' of workers. As will be discussed shortly, high numbers of workers travel to the municipality's industrial precincts from the nearby suburbs of Frankston, Langwarrin, Mount Eliza, Cranbourne and Seaford.

Recent analysis suggests that as the region's population continues to grow the number of workers that need to leave the region for employment will continue to expand particularly if there is limited opportunities for local employment. At 2015, there were 44,000 workers in the Shire of Mornington Peninsula and Frankston (C) that left these municipalities for other areas of Melbourne for employment, representing 41% of workers. By 2046 this is projected to grow to 70,000 workers representing 44% of the local workforce.[4] Without an increase in local jobs the volume of commuters will therefore grow in defiance of the *Plan Melbourne* aspiration to facilitate more localised lifestyles as part of the delivery of the 20 minute neighbourhood objective.

[4] Source: SGS Economics and Planning; *Melbourne Functional Economic Region Report March 2019*; derived from MABM (KPMG, 2018).

### Opportunities for industrial expansion within Urban Growth Boundary

Charter has sort to identify logical options to expand the municipality's industrial precincts within the existing Urban Growth Boundary.

To do so, Charter identified land both within the Urban Growth Boundary and within either of the:

- Rural living zone
- Farming zone
- Rural activity zone
- Special use zone
- Commercial 1 and 2 zoned land abutting industrial uses

The search identified five sites all of which are constrained. The search identified two operational golf courses in the Special Use Zone (the Peninsula Country Golf Club and the National Golf Club). The Peninsula Private Hospital is also within the Special Use Zone. These sites are currently considered as constrained for future development. There is also an 18 ha site on Quarry Road, Langwarrin that may provide a long term opportunity, albeit that it abuts residential areas. The site abuts green wedge land to the north that is primarily used for quarries. However, it also abuts residential land to the south and east and incorporates a number of rural residential dwellings.

**Figure 14: 18 Ha site on 75 Quarry Rd, Langwarrin**

Source – Nearmaps, Charter Keck Cramer

### Other options

Employment projections for the region by the Department of Jobs and Small Business project regional annual job growth of 1% to 2023 with the construction sector seeing job growth of over 2% per annum. In the longer term, 2016 Deloitte employment projections for Infrastructure Victoria project employment growth in the region of 1.2% per annum.

For Frankston (C) to support, influence and benefit from this growth, its industrial areas will inevitably need to increase their land use efficiency and productivity. With limited land capacity under current conditions this is likely to involve the development of a more vertical and dense industrial form.

In highly urbanised locations in North America and Asia developers are beginning to consider and, in some cases, develop multistorey warehousing. In Melbourne, Woolworths recently developed a highly automated multi-deck facility in Dandenong which is one of the first examples of this form in Australia. Similar projects are mooted in Sydney and Melbourne that incorporate between 3 to 5 storeys of mixed office and warehouse space as well as multi-deck access for trucks.

In the short term, this form of industrial built form is unlikely to provide a solution to the industrial needs of Melbourne's south as there are a range of cost and design issues that need to be addressed before this form can become a pro forma based product that is accepted by users and investors alike in the same way that precast steel and concrete warehouses have.

Other options include redeveloping at grade car parking into multideck carparking in order to free space for new industrial uses and via the redevelopment of underutilised storage space. As discussed above, there is only a relatively limited supply of underutilised industrial land in the municipality much of which is used for storage that for current occupiers might be considered as essential to their business operations.

**Key insights:**

- Since 2010 land consumption within the Frankston's (C) industrial precincts has averaged 9 ha per annum. At 2017, the industrial precincts were nearing a complete build out with over 85% of land developed.
- Charter's vacant land analysis has identified 14 ha of vacant land. This includes 7 sites of above 5000sqms – one without direct street frontage.
- Charter's land search for potentially new industrial precincts identified 5 primarily constrained sites within the Urban Growth Boundary.
- Limited local employment opportunities are likely to compel local workers to leave the region for employment.

**Recommended actions:**

In the face of both ongoing and growing demand for high quality accessible industrial space, Council needs to investigate options that will support the expansion of the municipality's industrial sector. This should include:

- A focus on renewing older industrial areas. As will be elaborated on shortly, Council needs to develop a vision and accompanying program of actions to facilitate the renewal of its older industrial areas.
- Reviewing the future land use of local golf clubs in the Special Use Zone and reviewing the future use of land along Quarry Road, Langwarrin.

In addition to the above, the current zoning of the Frankston East precinct requires review.

# 6. Evaluating Urban Design Requirements

## 6.1 Evaluation of attributes

Frankston's industrial precincts reflect different eras of development which is represented in their diversity of built form and underlying subdivision patterns. The precincts incorporate a variety of approaches to setbacks, interface treatments, fencing, signage, storage and waste management.

The following examines the urban form of Frankston's (C) industrial precincts with the aim of isolating issues that may justify the need for land use policy and further urban design investigations that will guide future built form outcomes. The work focuses on the main industrial precincts individually, although issues and potential responses may require a combination of overarching and location specific actions and policy directions.

**Built form overview**

The following section provides an overview to the general built form features observed in the precincts which provides the context for more specific analysis that follows.

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
| • The precinct incorporates a modern corporate built form.<br>• The northern portion of Carrum Downs is primarily comprised of precast concrete structures. Building heights, setbacks, landscaping and overall site layouts appear to be highly consistent throughout this portion of Carrum Downs (the area north of Lathams Road). As a result, the area has a sense of rhythm and regularity as well as legibility. There also appears to be a consistent use of colours and finishes across this portion of the precinct.<br>• The southern portion of the precinct is, likewise, primarily comprised of precast concrete built form. This built form, however, is interspersed with a number of large, steel warehouses. As such, there is a greater diversity of building types, building heights and site layouts in this area.<br>• Overall, Carrum Downs exhibits high quality built form that translates into a high level of street amenity and attractive presentation.<br>• The study, nonetheless, identifies a number of safety and security issues for the precinct and issues related to the way in which some built form interfaces with residential areas. There are also issues with incomplete footpaths. | • The precinct encompasses a mix of small, medium and large scale sites as well contemporary and older built form. Different eras and forms of development often abut each other.<br>• Built form tends to differ by street. Pascal Road is comprised of major manufacturing and warehousing operations on large sites with large front setbacks. In contrast, premises along Keppler Circuit are generally on smaller lots with more limited setbacks.<br>• The precinct incorporates a variety of building heights, setbacks, materials and site layouts. Colour palettes and finishes tend to also differ between sites. Despite this, the streets that comprise the precinct are generally open and legible, primarily due to generally 5m+ front setbacks and generally high levels of permeability into and between sites from adjoining streets.<br>• While the overall standard of presentation and built form is generally high, there are a number of lots in which front storage, waste disposal and dilapidated fencing present poorly. | • Built form differs between the areas east and west of Wells Road.<br>• Areas west of Wells Road comprise a mix of primarily small and medium sized brick and steel factories and warehouses.<br>• Areas west of Wells Road are the oldest industrial form in the region and, as such, a number of sites are aged and present poorly (particularly in more isolated areas such as Patrick Court and Wise Avenue). Added to this there are numerous examples of waste and disorderly storage within front setbacks that further undermine the amenity of the area.<br>• Sites along Wells Road include a number of automotive dealers whose sites generally encompass a higher standard of presentation. A number of large sites along Wells Road north of Klauer Street will, in the near future, be redeveloped as a metropolitan train stabling facility.<br>• The industrial area east of Wells Road incorporates higher quality built form. The area is made up of a mixture of sites with bulky goods and consumer focused enterprises situated along Hartnett Drive. Brick, steel and precast concrete factories and warehouse sites are situated in the streets intersecting Hartnett drive. These tend to incorporate large setbacks and landscaping that provides a sense of openness and legibility to the environment. | • Langwarrin encompasses 3 estates that are primarily made up of modern precast concrete warehouses.<br>• These support a mix of automotive, services, office and retail activities.<br>• The precinct is fronted by a substantial verge that together with the front setbacks of the estates create a sense of openness and, in specific parts, support for mature vegetation.<br>• The premises with street frontage tend to support active consumer based uses. |

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
|  |  |  |  |
| The precinct presents attractively, reflecting its contemporary built form and planned environment. | The precinct encompasses a diversity of industrial built form in which site layout, materials, colour palettes and roof lines differ between sites. | Many areas of west Seaford present poorly with disused materials visible from the street. | Langwarrin is mainly comprised of row based warehousing units. |
|  |  |  |  |
| The southern portion of the precinct incorporates a greater diversity of built form that is generally of a high standard. | While built form differs between lots, the streets that comprise the precinct are generally open and legible. | Seaford east incorporates a variety of built form, including large, open warehouse sites and more dense premises on smaller lots. The building stock is more contemporary and of a higher standard than west Seaford. | The built form supports road based retail, recreation and food services which is enabled via onsite carparking. A number of automotive businesses also operate from the precinct. |

**Setback assessment**

Prevailing setbacks have been reviewed with a focus on the impact of setbacks on sightlines, legibility, presentation and openness. Note setbacks to sensitive uses are discussed in a separate section below.

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
| • The southern portion of Carrum Downs generally incorporates front setbacks of between 15-25m. Together with permeable fencing this size of setback supports a sense of openness from the street.<br>• An average front setback of 20 to 30 metres was identified in the northern region. These setbacks combine with underground electricity infrastructure and permeable fencing to provide a sense of openness.<br>• In general, larger sites have more generous front setbacks.<br>• Front setbacks incorporate a large number of uses including storage, landscaping, waste management, services, loading bays and vehicle parking. For most sites these uses have designated spaces within the setback.<br>• Across the precinct rear setbacks average 3 to 5 metres which provides for very limited opportunity for rear storage and/or any other form of use. Rear setbacks are larger (usually 10m) where the site abuts a road, green space or residential area.<br>• Zero (or <1m) side setbacks are evident across the precinct. Some of the larger sites have side setbacks of between 10 to 15m. | • There is a diversity of setbacks evident across the precinct ranging from 5-20m.<br>• While front setbacks differ across the precinct, individual streets and sections of streets tend to maintain a relatively consistent front setback. There are a limited number of locations in which the front setback changes abruptly.<br>• At a minimum the front setback is typically 5m+ which is sufficient to provide a sense of openness and clear sight lines within and across properties. This is especially true for sites in which fencing is permeable.<br>• Rear setbacks average between 3 to 5m.<br>• Side setbacks differ between sites and depend on layout. There is no clear rhythm to side setbacks in the precinct. Contemporary precast concrete sites tend to have a zero side setback. There are a number of older sites which have significant side setbacks that are used for storage and car parking.<br>• Front setbacks are used for a variety of purposes including parking, landscaping, storage and waste management. On older sites front setback uses can lack planned and designated areas which can contribute to a sense of disorder within sites. | • There is no consistent front setback within sites west of Wells Road. In this area setbacks average between 1 and 5m (although there are a small number of sites that have more generous front setbacks). There is a lack of rhythm and regularity in the area's front setbacks that contributes to the disorderly presentation of the area and a lack of legibility.<br>• A lack of front setback has potentially impacted on the significant volume of on street car parking throughout this area (proximity to Kananook station may be a further factor).<br>• Front setbacks in eastern Seaford range between 5 to 10m. Like Seaford North, individual streets tend to incorporate consistent front setbacks most of which are used for car parking. In combination with permeable fencing, these sites contribute a sense of openness to the streetscapes in east Seaford.<br>• In almost all sites in the east Seaford area there are very limited rear and side setbacks that are either zero or negligible (<3m). As such, there is limited evidence of rear storage and other uses in the rear of properties. | • Front setbacks range from 15-20m. The front setbacks combine with the large verge that runs parallel to McClelland Drive which results in a significant sense of openness from the street.<br>• There are negligible side setbacks.<br>• The front verge is often used for car parking with many examples of cars parked amidst front verge vegetation. |

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
|  |  |  |  |
| There are consistent and generally generous front setbacks across the precinct | While front setbacks differ across the precinct, individual streets and sections of streets have relatively consistent front setbacks (with the occasional exception for specific sites). | There is limited consistency in front setbacks across west Seaford. In a number of streets the front setback differs lot by lot which creates an incoherent streetscape and obstructed sight lines. | Front setbacks provide carparking often for enterprises with high volumes of public interaction. |
|  |  |   |  |
| Consistent heights, setbacks and underground electricity infrastructure add legibility and a consistent rhythm to the urban form. | While front setbacks differ within the precinct, in most streets they are often of a sufficient size to create a sense of openness and clear sight lines within and across properties. | Individual streets and sections of streets in east Seaford generally provide consistent setbacks that tend to result in clear sight lines, legibility and a sense of openness. | Generous front setbacks combine with the verge along McClelland Drive to create a sense of openness and opportunities to retain mature trees. The verge is regularly used for car parking. |

### Landscaping

This section reviews the general approach to the scale, approach and quality of landscaping in the different precincts.

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
| • The vast majority of sites include landscaping within their front setback which tends to integrate with street trees and grassed nature strips to soften the visual impact of predominantly precast concrete built form.<br>• On site planting as well as public landscaping seems to be well maintained. There is minimal evidence of landscaping interrupting sight lines or compromising personal security.<br>• There is the occasional site in which planting is degraded but these sites are rare.<br>• High quality landscaping contributes to the overall attractiveness of the area. A number of streets include mature canopy trees (for instance, Frankston Garden Drive).<br>• Car parking on the street verge detracts from landscaping. | • While most sites incorporate landscaping, the mixture of styles and front setback depths results in a lack of consistency between sites. Landscaping outcomes also differ between streets –the quality of landscaping along Brunel and Pascal Roads, for instance, is generally superior than Rutherford Road.<br>• Nature strips and front setback planting is not consistently maintained. Likewise, some sites incorporate planting within their front setback while others only incorporate grassed areas.<br>• There are sites in which planting, weeds, storage and waste are mixed within the front setback which presents poorly to the street.<br>• In general older sites tend to lack specific and designated areas for front setback planting that clearly distinguish planting areas from storage or other uses. | • The majority of sites throughout Seaford east incorporate distinct areas for planting and trees. Landscaping is well maintained (on both public and private land) and contributes to the attractiveness of the area and softens the overall visual impact of the built form.<br>• The western portion of Seaford incorporates minimal landscaping on private land although there are intermittent street trees throughout the area. In some locations, nature strips have been poorly maintained.<br>• The majority of sites in west Seaford do not incorporate distinct areas for landscaping and planting as per contemporary industrial locations. There are a few sites along Bardia Avenue in which consumer based business have incorporated high quality landscaping. | • Langwarrin primarily presents as a well landscaped precinct in which mature trees within the verge combine with private landscaping which is predominately made up of shrubs.<br>• As a relatively contemporary precinct, industrial sites incorporate distinct areas for landscaping which are well utilised. These areas are typically small areas near entrances and garden beds in areas in the front setback.<br>• There are areas, however, in which the verge is degraded or poorly maintained perhaps as a result of car parking uses.<br>• There are a small number of industrial units that interface with the road that do incorporate landscaping in their front setback.<br>• In the row based estates the rear industrial units incorporate garden beds near entrances. |

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
|  Street trees combine with private planting |  While landscaping is generally well maintained there are sites with evidence of poor maintenance in which shrubs are overgrown or that interact with other uses. |  The majority of sites in west Seaford do not incorporate landscaping in their front setback |  On site landscaping integrates with substantial nature strip |
|  Front setback include planting areas of various sizes. These soften the appearance of precast buildings. |  Streets incorporate planting that is both private and public. There is, however, no evident rhythm or consistent landscaping approach as per Carrum Downs which reflects the diversity of sites in the precinct. |  Streetscapes in east Seaford incorporate mid-sized trees that integrate with front landscaping to create a consistent look, softening the built form. |  There are sections in which the nature strip and site landscaping is not integrated. There are also sites which do not include front landscaping |

**Loading and storage assessment**

Loading facilitates and general storage practices have been reviewed with a focus on the impact on presentation and visual legibility of sites.

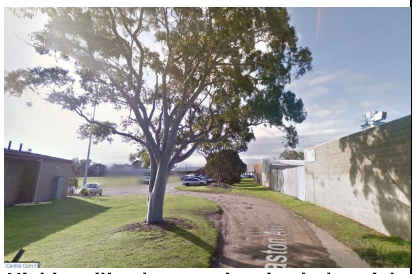
| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
| • The majority of sites incorporate flush dock loading bays in which the loading bay is setback from the pedestrian entrance to the building. This arrangement provides space for loading and unloading without typically impacting on car parking and pedestrian movement.<br>• There is negligible use of open and elevated docks (in which the dock protrudes from the front wall) or depressed docks (in which the dock is setback from the front wall).<br>• Some larger sites include multiple docks and enclosed loading bays.<br>• Storage is primarily within the interior of facilities. There are sites in which equipment and less often materials have been stored within the front setback. Often goods are stored in the front setback in a specific area. This does not tend to detract from visual amenity of buildings.<br>• As discussed, most industrial sites throughout the municipality including Carrum Downs incorporate limited rear setbacks, as such there is limited evidence of rear storage. | • The majority of sites incorporate flush dock loading bays. These tend not to be setback from entrances, particularly on older sites.<br>• Storage is primarily within the interior of facilities. There are sites in which equipment and materials have been stored within the front setback.<br>• A number of sites do not have distinct areas for particular uses which results in storage, equipment landscaping and waste disposal mixing together. This impacts negatively on visual presentation.<br>• There are a number of dedicated storage sites in the precinct in which used cars, car parts, scrap metal, timber and sand are stored. Depending on the arrangement of these materials these sites can present as either quite orderly or relatively disorderly. These uses are, however, in keeping with the uses supported in industrial locations.<br>• Many sites store empty palettes in their front setbacks. | • The majority of units incorporate flush dock loading bays. Unlike contemporary built form these tend not to be setback from entrances. This tends to create less visible and intuitive distinction between front setback uses (pedestrian entrance, car parking and loading).<br>• There are sites in which materials and waste have been stored or placed in the front setback (often in a disorderly manner). | • There is limited evidence of external storage in the precinct. This may be because there is limited unused space within front setbacks to support storage.<br>• Most units incorporate flush dock loading bays. These are generally distinct from car parking, landscaping and access points. |

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
|  Industrial units in a row format with consecutive loading bays |  Dedicated storage facilities vary in their presentation to the street |  Cargo containers are occasionally used to provide additional storage capacity in front setbacks. |  Loading docks, car parking and landscaping are integrated in rear units |
|  Flush dock loading bays are typical of the area these are typically set back from administrative areas |  Storage within the front setback varies in orderliness on a site by site basis |  Flush dock loading bays are generally not setback from entrances in older industrial built form which can create a lack of distinction between uses. |  There is limited evidence of external storage in this precinct |

**Surveillance and safety assessment**

The surveillance and safety implications of the prevailing built form have been assessed. The study considers opportunities for passive surveillance and the impact of public and private landscaping on safety.

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
| • New industrial buildings include administrative space at the front of the building that tend to incorporate extensive windows that provide views onto the street. The occasional use of tinted windows may, however, limit a sense of visibility.<br>• There are also sites with minimal windows or very small windows that limit opportunities for surveillance.<br>• Site and street layouts create clear sight lines through streets and into properties. The precinct's fencing tends to be permeable allowing for high levels of visibility and passive surveillance.<br>• Overall, landscaping is well maintained which supports the high quality appearance of the precinct but also minimises the incidence of dense vegetation which can create a sense of unsafety for pedestrians.<br>• There are sites with long blank walls that face the street. These are, however, setback from the street and not obscured by thick vegetation.<br>• Pedestrian access from residential areas at Clifton Park Drive incorporates dense vegetation at the ground plane which has the potential to create a safety hazard for pedestrians, particularly after dark. | • In general sight lines are clear along streets and into properties.<br>• There are sites in which storage in the front setback and/or thick vegetation obscure visibility.<br>• There are also older sites with long blank walls that face the street. These sites are, however, generally setback from the street and separated from footpaths by permeable fencing.<br>• There are problematic stretches along the Peninsula Link Trail in which areas with blank walls and a lack of lighting abut dense landscaping at the ground plane. These areas may create a safety hazard, particularly after dark. | • Older built form tends to lack windows on to street frontages, limiting the opportunity for passive surveillance on to the street.<br>• There are a number of parking courts within the west Seaford precinct that lack lighting and incorporate long blank walls.<br>• There are sites in west Seaford that because of inconsistent setbacks and the positioning of waste and storage create physically isolated spaces.<br>• Connections between Kananook Reserve, the Basketball centre through Easton Avenue are problematic as there are areas that include blank walls and poor lighting. The area in and around Easton Avenue which is a focus for pedestrian activity at night needs review.<br>• There are a number of transition areas between the industrial precinct and residential areas in which thick vegetation at the ground plane may create a safety hazard for pedestrians particularly after dark (for example, transition areas at Miles Grove and Wise Avenue).<br>• The eastern portion of the precinct incorporates more contemporary built form which tends to generate clear sight lines between and within sites. | • The majority of the built form incorporates windows that face the street.<br>• Sheds without street frontage are potentially more problematic. In general, however, these have been designed with clear frontages that minimise areas in which sight lines are obscured.<br>• High volumes of road traffic support a level of passive surveillance as well as consumer based business within the precinct.<br>• Front setbacks provide for clear sight lines between and within properties.<br>• Verge landscaping is permeable. |

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
|  The size of the windows limits opportunities for passive surveillance (there are limited examples of this) |  A lack of lighting and long blank walls in combination with dense vegetation along the Peninsula Link Trail |  Parking courts without lighting and limited street visibility |  The precinct provides clear sight lines into and between properties |
|  Streets provide clear sight lines into and between properties |  Dense vegetation abutting pedestrian links (to the left of the picture) |  Dense vegetation posing a safety hazard in the transition between industrial and residential areas | |
|  A lack of lighting and dense vegetation create a safety hazard in laneways linking into industrial areas (Clifton Park Drive) |  A lack of lighting in laneways linking industrial areas to residential areas. |  Highly utilised areas abutting industrial uses lack lighting and adjoin areas with extensive blank walls | |

**Fencing assessment**

The study considers consistency of fencing height, form, and interaction with other front setback elements.

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
| • Chain wire mesh fencing is prevalent across Carrum Downs South more contemporary sites incorporate Vanguard security fencing (tubular steel fencing with Galvanised steel tubing and posts).<br>• Vanguard fencing is the dominant form of fencing across Carrum Downs north.<br>• In general, fencing is well maintained and permeable. There are a limited number of sites in which fencing is not permeable. There are also sites in which fabric has been hung onto fencing to limit permeability. These sites tend to detract from the appearance of the area and undermine the legibility of street scapes as well as opportunities for passive surveillance. | • There is a diversity of fencing styles throughout the precinct. Fencing can differ on a site by site basis.<br>• Despite the diversity of fencing, fence heights are generally consistent.<br>• There are a number of sites in which fencing is poorly maintained in which thick vegetation and weeds abut fencing. These tend to be the same sites in which storage, waste and vegetation interact freely in the front setback. | • A high number of sites in west Seaford do not incorporate fencing. Sites that include fencing tend to incorporate mesh wire fencing.<br>• There is evidence of poorly maintained fencing in the precinct. Again, this tends to be on the same sites in which the overall front setback is poorly maintained and degraded.<br>• Fencing in east Seaford is of a higher standard and is generally well maintained. There are a small number of sites in which poorly maintained front setbacks interact with degraded fencing.<br>• Many sites in east Seaford do not incorporate fencing. | • There is limited fencing in the precinct. Vangaurd fencing is used on one site.<br>• There is extensive fencing around the storage facility. |

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
|  Chain wire mesh is prevalent in southern Carrum Downs |  Material is hung from fencing |  A poor presenting front setback combines with degraded fencing in east Seaford |  Vanguard fencing is used on one lot |
|  Vanguard fencing is prevalent in Carrum Downs north |  A variety of fencing styles are evident throughout the precinct. There is general consistency in height. |  Fencing in west Seaford is primarily chain wire mesh fencing of various styles and heights |  The majority of lots do not incorporate fencing |

**Signage Assessment**

The height, positioning and size of signage has been assessed.

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
| • Signage is, in general, consistently located below the roof line of buildings.<br>• In general, signage is large enough to be legible from the street without being excessively large.<br>• Tenants operating on larger scale sites and consumer focused businesses often have relatively larger signboards.<br>• There is limited signage on front fencing. Occasionally frame boards are used by consumer focused enterprises.<br>• Signs are generally well maintained.<br>• Overall presentation of signs contributes to the sense of order in the area. | • There is a variety of approaches to signage across the precinct which is consistent with the diversity of built form in the precinct.<br>• In general signage is located below the roof line. Signage is also located on front fences.<br>• In general, consumer facing businesses deploy more extensive and higher quality signage particularly along main roads.<br>• Some sites do not incorporate signs that identify businesses.<br>• Signage is occasionally above the roof line. Some signs are poorly maintained and degraded.<br>• Differences in sign sizes and locations is evident across the precinct. This, however, does not contribute to any sense of disorder – poorly maintained front setbacks are far more problematic than inconsistencies in signage. | • There is no consistent approach to signage in the west Seaford precinct in relation to both the size and positioning of signs.<br>• There are a number of sites which do not incorporate signs.<br>• Signs for consumer focused enterprises tend to be of a higher standard.<br>• Hartnett Drive in east Seaford incorporates many public and consumer focused businesses. There are sections of the Hartnett Drive that demonstrate a high density of signs that risk impressions of visual clutter.<br>• Within the streets that intersect with Hartnett Drive signs appear orderly and well maintained. In general, the size of signs is sufficiently large to be legible from a distance without being intrusive.<br>• There are signs below the roof line of buildings, signs on fencing and standalone signs on purpose built structures. | • Signs are below the roof line.<br>• Signage for consumer focused business facing McClelland Drive are more extensive and relatively larger. |

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
|  Consumer focused units tend to have larger signage |  There are sites in which signage exceeds the roof line of the property |  There is a density of signage for consumer focused enterprises along main roads such as Wells Road and Hartnett Drive |  Signage is clear and focused on McClelland Drive |
|  Consistent signage below the roof line is evident across the precinct this signage is legible from the street without creating visual clutter |  Various forms of signage are evident across the precinct including the occasional signs that exceed roof lines |  A number of sites do not incorporate signage which undermines street legibility |  Larger signs are deployed on a number of sites. Signs do not exceed the roof line. |

**Interface with sensitive uses**

The interface of lots abutting non-industrial uses including residential areas and open space has been assessed to investigate the way in which setbacks, landscaping and other attributes combine to manage interface interactions.

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
| • Eastlink, Mornington Peninsula Freeway, and the Dandenong Valley Highway generally segregate Carrum Downs from sensitive uses including Green Wedge land and residential land. There is, however, a pocket of residential land within the north eastern portion of the precinct.<br>• Rear setbacks and canopy trees are deployed to manage the interface between industrial and residential uses. For dwellings abutting industrial uses along Clifton Park Drive there is a 10-15m setback that incorporates canopy trees. In general, this is effective in obscuring industrial built form from residential outlooks. However, there are sections along Trafford Road in which the topography slopes downward to industrial uses in which trees are not yet sufficiently mature to screen industrial built form. This is likely to change over time.<br>• Industrial built form along Malibu Circuit is set back from residential uses by approximately 20 to 25m. This is a more generous setback than has been implemented for industrial lots along Access Way. However, because the buffer does not incorporate canopy trees industrial built form is still visible from residential areas in many locations. Notably, the industrial | • Seaford North is bound by Eastlink and the Mornington Peninsula Freeway to the north, east and west. The southern portion of the precinct is separated from the Seaford residential catchment by the Peninsula Link Trail.<br>• The rear of properties on the south side of Brunel Road abut the Trail. These properties do not respond to the open space at their rear, as might be expected of non-residential properties. Several structures have been built to the boundary, resulting in a number of sections containing blank walls that abut the Trail.<br>• Canopy trees line the northern side of the Trail, softening the impact of blank walls and industrial built form.<br>• It should be noted that the residential lots on the south side of the trail do not generally respond to the link and its open space. In combination a lack of responsiveness from both residential and industrial sites results in this section of the Trail not being an inviting location for passive recreation.<br>• Nonetheless, the Trail appears to be well maintained and in good condition. As discussed above, dense vegetation in some parts combined with a lack lighting | • Seaford has multiple interfaces with residential areas. The western portion of the precinct abuts residential uses in a variety of locations. While the east Seaford abuts residential areas primarily along Holroyd Street and Seaford Place.<br>• In west Seaford interfaces are poorly managed with minimal setbacks and landscaping to separate and transition uses. Industrial built form is visible from residential areas and there are numerous examples of poor transitions between uses where there is no or minimal screening of industrial uses from residential areas. In some locations, the impact of this is somewhat reduced because the height of industrial built form is typically in keeping with the height of a single storey dwelling.<br>• In east Seaford large setbacks and substantial landscaping along Seaford Place and Klauer Street effectively manage the transition between industrial and residential uses. Along Holroyd Street the interaction between residential and industrial is managed via a small (3m) rear setback and canopy trees. This is effective in obscuring and screening industrial built form from residential uses. In general, canopy planting is continuous throughout | • Langwarrin industrial precinct is isolated from sensitive uses via a substantial setback from the street along McClelland Drive and its interface with major roads to the west. |

| | | | |
|---|---|---|---|
| built from incorporates rear windows and is not a continuous built form. Without canopy trees to soften and screen the interface, the appearance of this form from residential areas is problematic.<br>• Industrial lots located along Yazaki Way transition in height and scale as they interface with residential areas. | potentially create a sense of hazard for pedestrians. | the residential and industrial interface. There are, however, locations in which industrial built form is clearly visible from residential areas (Webb Street) as a result of an absence of canopy trees. | |

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
|  Industrial form protrudes over dwellings. A lack of canopy trees results in poor screening into residential areas. Nonetheless, rear windows break up the built form. |  Peninsula Link Trail separates industrial uses from residential uses. In many locations canopy trees along the north of the Trail obscure industrial built from |  Industrial built form interfaces directly with residential areas in west Seaford without any transitional treatments |  The precinct is generally segregated from sensitive uses |
|  Rear units abutting residential uses are setback, however, without landscaping to obscure the built form the setback is ineffective. |  A lack of landscaping along Frankston Freeway creates a poor interface to the road |  The height of industrial built form is generally in keeping with the height of adjacent dwellings which supports the transition of uses. |  The verge buffers the precinct from residential areas to the east of McClelland Drive |
|  Canopy trees line the rear setback. These effectively screen industrial built form. |  Industrial built form is visible from residential streets where there is an absence of screening landscaping |  A lack of landscaping and screening treatments (Webb Street) result in poor visual amenity from residential areas |  Rear of storage centre is setback from caravan park |

**Pedestrian accessibility**

This evaluation focuses on entry to buildings and the legibility of entrances.

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
| • For all sites there is a dedicated pedestrian entry point into buildings which is distinct from loading areas and visible from the street.<br>• Administrative space at the front of buildings incorporates a clear pedestrian entrance.<br>• As discussed above, loading areas are typically setback from administrative entrance points.<br>• There were no sites without a clear entry point into the building that were identified.<br>• Most sites do not provide a pedestrian path that supports and guides safe movement from car parking into entrances – this is potentially problematic for consumer facing businesses.<br>• Articulation and colouring often supports the identification of entrance points. | • There is no consistent style or rhythm to pedestrian movement and entry within the precinct.<br>• There are numerous sites with clear entrance points that are separate from car parking. There are also sites in which entry into the building is via loading areas or not clearly evident from the street.<br>• While loading areas in new facilities are setback from the main administrative entrance in Carrum Downs, this style of separation is not as common in Seaford North.<br>• On smaller sites there is minimal separation of car parking from entrance points (there tends to be close interaction between car parking and entrance points). | • In east Seaford the majority of sites incorporate a dedicated pedestrian entry point into buildings which is distinct from loading areas and visible from the street. Often this is supported by building renders and building articulation.<br>• There is no consistent approach to entry and movement in west Seaford. Many sites lack a clear entrance point and/or are via loading areas.<br>• Consumer facing sites along Bardia Avenue and Wells Road tend to have clear entrances and pedestrian pathways. | • Lots incorporate a single distinct entry from the street.<br>• For row based industrial units there is often a tight interaction between landscaping, car parking and entrance points.<br>• A number of consumer facing sites lack dedicated pedestrian pathways to entrance points.<br>• Entry points to row based units are not evident from the street. |

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
|  Single distinct entry points that are articulated from loading areas |  Entry is via loading areas |  Distinct entry point for units is not set forward from loading areas unlike contemporary built form |  Pedestrian entry points interact with vehicle movement |
|  There are sections of the precinct without dedicated footpaths (Lathams Road) |  Separate entry door not evident from the street |  A separate entry door is not evident from the street |  Car parking, landscaping and entry points interact closely |

**Assessment of waste management**

The integration of waste management into front setbacks and site management is assessed.

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
| • Waste storage is generally located in the front setback.<br>• These either occupy a car space or have been allocated a dedicated area within the front setback typically on the perimeter of the property.<br>• No evidence of poor waste practices were observed.<br>• Waste is generally not stored in rear setbacks. | • More recently constructed units incorporate areas for waste storage and disposal.<br>• A number of older units and smaller units do not have dedicated space for waste disposal. On these sites a car space or an area near the loading bay is used to store and manage waste.<br>• There is evidence of waste units being stored within garden beds and nature strips.<br>• Amenity and presentation is adversely impacted when poor waste disposal practices combine with neglected landscaping. This is evident on a limited number of sites. | • More recently constructed units incorporate areas for waste storage and disposal.<br>• A number of older units and smaller units do not have dedicated space for waste disposal. On these sites a car space or an area near the loading bay is used to store and manage waste.<br>• There is evidence of waste units being stored within garden beds and nature strips.<br>• Amenity and presentation is adversely impacted when poor waste disposal practices combine with neglected landscaping. This is evident on a number of sites. | • There is no evidence of disorderly waste management. Waste is stored within the front setback of sites or within the interior of units. |

| Carrum Downs | Seaford North | Seaford | Langwarrin |
|---|---|---|---|
|  Waste is stored on the site boundary |  Bins are stored on the verge |  The front setbackis used for waste storage |   Waste is stored along the side setback |
|  Larger sites incorporate distinct service areas |  Waste is stored near the loading bay |  Waste is stored within a parking bay | |

### 6.2 Discussion and key insights

The above analysis examined a wide variety of urban attributes with the aim of assessing the need for further policy guidance and other actions to improve the amenity of the municipality's industrial precincts.

Key insights are discussed as follows:

- **Front setbacks**: The organisation and appearance of front setbacks is a critical component in the urban form of the municipality's industrial sites. The vast majority of industrial sites do not incorporate rear or side setbacks of a sufficient size to accommodate major uses such as storage, waste management or loading – this is with the exception of sites that abut residential areas which tend to incorporate rear and/or side setbacks. As a result, for the majority of sites, front setbacks support a wide variety of uses including waste management, landscaping, loading, vehicle parking, building entrances and, on some sites, storage. On contemporary sites these uses are usually assigned designated areas and are well planned (many contemporary sites, nonetheless, lack designated areas for waste storage). On sites where uses within the front setback are unplanned and poorly maintained, the front setback can appear disorganised and chaotic which in turn undermines the appearance and amenity of streetscapes.

  The reliance on the front setback to support a large number of uses requires organisation to ensure efficient interactions between uses as well as high levels of site and street amenity. As such, guidance in relation to the optimal organisation of the front setback may be beneficial. Guidelines for the management and layout of front setbacks in which there is a clear separation of uses are likely to be particularly important in guiding the redevelopment of aged and redundant industrial sites where there is an opportunity to improve the organisation and presentation of sites. Such guidelines would, nonetheless, need to be sensitive to the overall scale of sites and their use. Such guidelines might also consider the minimum setback that is required to provide a sense of openness and legibility within and between sites. This was assessed as between 5m to 10m but requires further confirmation.

- **Interaction with sensitive uses**: The primary methods for managing interaction with abutting sensitive uses is via landscaping and setbacks. In some locations, the height of industrial built form decreases to create a transition in scale to residential areas.

  The study found that mature canopy tress were most effective in screening industrial uses. Setbacks from residential areas that did not incorporate canopy trees were assessed as ineffective in screening industrial mass. The study identified examples of interface areas which incorporated large setbacks that were nonetheless highly visible from residential areas due to a lack of canopy trees. Conversely, the study identified interface areas with minimal setbacks that were effectively screened from residential areas via canopy planting.

- **Safety and surveillance**: Contemporary built form generally incorporates windows that provide for passive surveillance and open permeable front setbacks that support clear sight lines. In contrast, older sites often lack street facing windows to support passive surveillance.

  A number of areas that have the potential to engender a sense of hazard were identified. There are pedestrian pathways that provide access into industrial precincts from residential areas in Carrum Downs, west Seaford and Seaford North in which either dense vegetation and/or a lack of lighting are likely to engender a sense of hazard for pedestrians at night. The study is not advocating for vegetation at the interface of industrial areas to be cleared as this is critical to softening and screening industrial built form from residential areas. Rather the maintenance of vegetation at the ground plane requires consideration by Council particularly to minimise the incidence of blind spots.

  Safety treatments in the industrial areas that abut the Frankston Basketball Centre in Seaford require review. A lack of lighting and dense vegetation throughout Easton Avenue may engender a sense of hazard for pedestrians using Easton Avenue to access car parking or to access residential areas to the south west.

  The study also identified a number of sites in which dense vegetation protrudes from fence lines on industrial sites that obscure sight lines.

- **Disorderly sites**: The study identified a number of sites in which poor maintenance, storage, landscaping and waste management combined to create a chaotic and unattractive appearance that undermines the streetscape and the presentation of the broader precinct. Such sites are particularly prevalent in courts (Patrick Court, Curie Court). In the short term, such sites may be a focus for local law enforcement, however, in the long term, as these sites develop, legacy issues related to poor front setback organisation might be addressed via urban design guidance.

- **Managing the interaction between consumers, vehicles and entrances**: A number of sites support high volumes of public interaction (dance schools, entertainment and leisure centres, nurseries, automotive facilities). In general, front setbacks are not organised for high volumes of vehicle and pedestrian activity. Most sites, for instance, do not incorporate dedicated pedestrian paths that guide pedestrians to entrances – pedestrian and vehicle access and movement is typically shared. The need for more dedicated pedestrian space within the

front setback of industrial sites needs to be reviewed. Most often sites on major roads take on consumer facing uses. Dedicated pedestrian space may, therefore, be considered for sites along major roads where higher volumes of pedestrian movements are to be expected.

- **A plan for the renewal of west Seaford**: The western portion of the Seaford industrial precinct is the most problematic industrial area in the municipality. The area incorporates a range of urban issues including inconsistent setbacks, a lack of windows on to streets, poor storage practices, dilapidated sites, and a lack of transitional treatments that manage the interaction between industrial and residential areas.

  Given the shortage of industrial land in the region, industrial land values are likely to continue to increase within the region. This, in turn, is likely to increase the renewal potential of sites in west Seaford and Seaford North, particularly larger aged sites. To help improve the amenity of these areas as they undergo long term renewal, Council might consider the development of guidelines in relation to interface management, the depth and organisation of front setbacks, the size and location of signage and fencing treatments. Given the fragmented nature of the existing urban form, creating a more consistent and legible urban form within west Seaford is likely to be difficult. However, the renewal of individual sites will provide the opportunity to incrementally improve the presentation of the area and the organisation of sites and, moreover, to establish a precedent for higher quality urban form within these precincts.

Other matters that might be considered include the height and permeability of fencing. In most locations, fencing is permeable which supports clear sight lines between sites and across streetscapes. There may, however, be circumstances where enclosed fencing is warranted (for instance, for noxious uses).

**Recommended actions:**

Council should develop urban design guidelines for industrial areas that provide guidance on:

- the effective organisation and presentation of front setbacks
- buffering and screening treatments for areas that interact with sensitive uses
- the improvement and management of streetscapes
- the renewal of older precincts. As will be discussed shortly, this should form part of a larger vision of industrial renewal in which individual sites and streets are actively upgraded and investment precincts facilitated.

In addition to the above, Council should address the issue of disorderly sites via local law enforcement. Council should also ensure that vegetation at the ground plane at pedestrian access points into and from industrial precincts is maintained to avoid safety risks.

# 7. Assessment of Public Transport Connectivity

## 7.1 Overview

The municipality is intersected by major highways that primarily provide north south connectivity. These highways include the Nepean Highway, East Link, the Moorooduc Highway and the Peninsula Link Freeway. Further north south connectivity is provided by Wells Road.

Connectivity to the suburbs east of the municipality is serviced by the Cranbourne Frankston Road, Thompsons Road, Hall Road and Ballarto Road which connect the municipality to the suburbs of Cranbourne, Clyde, Lynbrook and Dandenong as well as the Officer and Pakenham growth areas.

The Frankston Rail Line is the only rail line that services the municipality. The Carrum, Seaford, Frankston and Kananook stations are located along the bay and provide high frequency services to the CBD and locations in between. These stations are serviced by the region's bus network which enable commuters from the east and south east of the rail line to interchange with rail services. The largest bus/rail interchanges are at Frankston and Kananook stations. There are 24 bus services throughout the municipality.

**Figure 15: Major Road network – Frankston LGA**


Source – Charter Keck Cramer

The level crossings removal program has resulted in rail movements at the Skye Road and Seaford Road intersections separated from vehicle traffic improving the efficiency and reliability of rail services and vehicle movements. In the long term, the proposed Suburban Rail Loop will provide significant east west public transport connectivity, potentially improving linkages to the Dandenong and Clayton employment areas. Council is also seeking to promote the electrification of the Frankston Rail Line to Baxter in the Mornington Peninsula which may provide opportunities to relocate stabling facilities currently housed in the municipality whilst also providing increased public transport connectivity to residents on the peninsula.

From a commercial perspective, the municipality is not well positioned relative to Melbourne's major port and national road infrastructure as such the area is not attractive for major transport and logistics uses particularly those that require

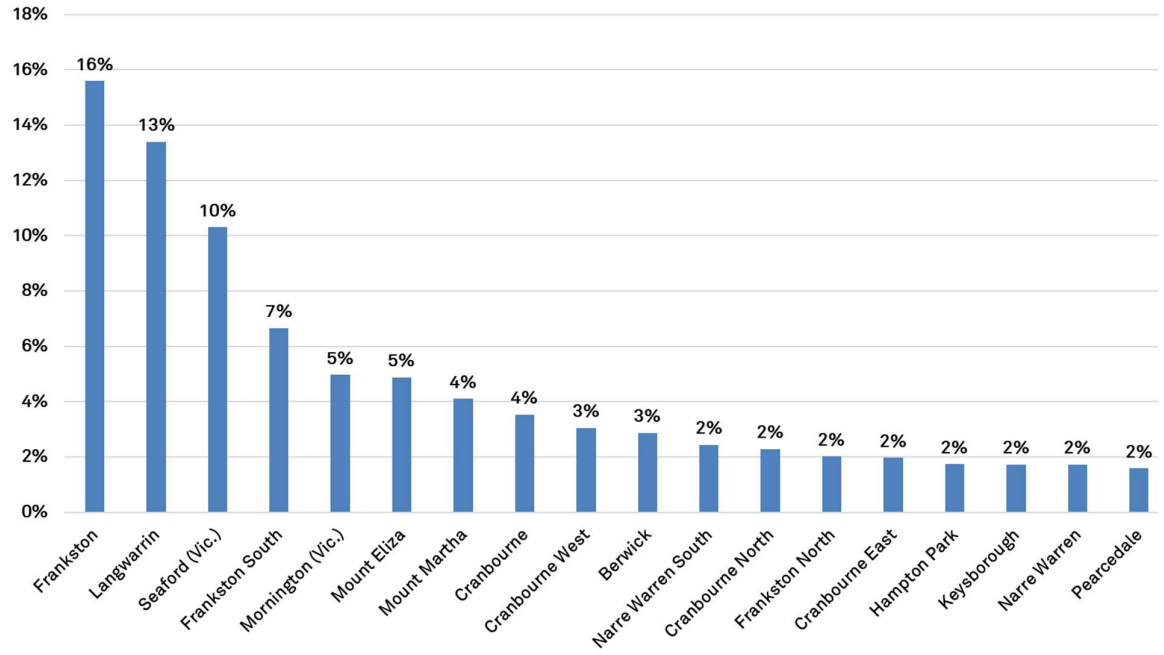
national and all of state accessibility. Notwithstanding this, due to its accessibility to Eastlink, Carrum Downs is seen as an ideal location for second tier warehousing and distribution centres servicing the south east.

## 7.2 Public transport options for industrial workforce

The following examines public transport options currently available to the municipality's industrial workforce. To do so, the study identifies the locations from which employees commute and then examines the public transport options available in these locations.

At the time of the 2016 Census, nearly half (47% +) of workers in the municipality's industrial areas lived within suburbs that were within the municipality. Large numbers of workers resided in Langwarrin, Seaford and Frankston. A further 25%+ workers lived in areas east of the municipality with large numbers in and around Cranbourne and Narre Warren.

**Figure 16: Industrial precinct worker catchments proportion of workers (top 15 locations)**




Source – Charter Keck Cramer, ABS table builder

Apart from the west Seaford industrial area which incorporates the Kananook rail station, public transport to the municipality's industrial areas is via bus services. Of the 24 bus routes that service the municipality five routes include stops within or in direct proximity to industrial precincts. In general, these routes provide workers that reside in Frankston, Frankston North, Seaford and Carrum Downs with the most direct and rapid public transport accessibility to industrial precincts. Bus services that service industrial areas are provided in 30 minute to 1 hour frequencies. This is with the exception of the 901 Smart Bus service which services the southern portion of the Carrum Downs and east Seaford precincts at 15 minute frequencies. Bus services to industrial areas are profiled in the table below.

**Figure 17: Major public transport routes connecting Industrial precincts to surrounding residential catchments**

| Route | Origin/Destination of route | Suburbs serviced | Industrial precincts serviced | Frequency |
|---|---|---|---|---|
| 778 | Kananook - Carrum Downs via Lathams Rd | Seaford, Frankston central, Carrum Downs, North Seaford | Access to the southern perimeter of Carrum Downs, the centre of Seaford North and east Seaford via Hartnett Drive. Seaford west at Kananook station. Enables rail commuters and bus commuters to interchange at Kananook rail station. | 50 minute to 1 hour service frequency |
| 779 | Frankston - Belvedere via Kananook | Frankston Central, Seaford | The route services Kananook station and therefore provides access to the west Seaford precinct. The service provides access to the edge of North Seaford at Maple Street which is via the centre of east Seaford through Hartnett Drive. The service enables rail and bus passengers to | 50 minute to 1 hour service frequency |

| Route | Origin/Destination of route | Suburbs serviced | Industrial precincts serviced | Frequency |
|---|---|---|---|---|
| | | | interchange at Kananook and Frankston rail stations. | |
| 832 | Carrum Downs via Kananook & McCormicks Road | Frankston North, Frankston, Carrum Downs | Provides access to the north eastern portion of the Carrum Downs precinct and the southern portion of east Seaford. The service enables rail and bus passengers to interchange via Kananook and Frankston rail stations | 30 minute service frequency |
| 833 (North South route) | 833 Frankston Station - Carrum Station via Carrum Downs | Frankston town centre, Frankston North, Sandhurst, Carrum Downs, Patterson Lakes, Carrum | Provides access to the north eastern portion of the Carrum Downs precinct and the south eastern portion of Carrum Downs (this however requires commuters to walk at least 500 metres to access the precinct). Enables commuters to interchange at Frankston rail station. | 30 minute to 40 minute service |
| 901 (North South route) | Frankston - Melbourne Airport- smart bus | Frankston Central, Dandenong, Dandenong North, Dandenong South, Seaford, Rowville, Carrum Downs | Connects to the eastern portion of Carrum Downs and the southern portion of east Seaford. Enables commuters to interchange at Kananook and Frankston rail stations as well as Dandenong stations. | 15 minute frequency |

Source – Public Transport Victoria

Workers that reside in areas east, north and south of industrial precincts generally need to use two public transport services to access industrial areas. Typically workers need to interchange with buses that service industrial areas at Frankston or Kananook rail stations. East west travel options for workers that reside in suburbs including Cranbourne, Langwarrin, Karingal, Narre Warren, Mornington and Mount Eliza are detailed in the table below. For workers travelling from these suburbs public transport travel times generally involve 60 minutes trips or longer.

**Figure 18: Major public transport routes connecting suburbs to the east, west and south of industrial precincts**

| Route | Origin/Destination of route | Residential suburbs serviced | Interchange options | Frequency |
|---|---|---|---|---|
| 791 (East West route) | Frankston Station - Cranbourne Station | Cranbourne, Cranbourne East, Langwarrin, Frankston | Provides access to Langwarrin (the bus stop is located 1 km from precinct). Enables commuters to interchange at Frankston station. | 20 minutes service frequency |
| 770 (East West Route) | Karingal via Ashleigh Avenue | Frankston Central, Karingal | Enables commuters to interchange at Frankston station. | 50 minutes service frequency |
| 771 (East West Route) | Frankston - Langwarrin via Karingal | Frankston Central, Langwarrin and Karingal | Provides access to Langwarrin (the bus stop is located 1 km from precinct). Enables commuters to interchange at Frankston station. | 40 minutes service frequency |
| 760 (East West route) | Cranbourne - Seaford via Carrum Downs | Cranbourne, Cranbourne West, Seaford residential, Frankston North | The route enables commuters to interchange with services to industrial locations at Hall Road and Ballarto Road. | 40 minutes service frequency |
| 783 (North South route) | Frankston - Hastings via Coolart Road | Frankston South, Hastings, Somerville Baxter, Frankston Central | Enables interchange of buses at Frankston station. | 1.5 Hr service frequency |
| 785 (North South route) | Frankston - Mornington East via Mt Eliza & Mornington | Mornington, Mt Eliza, Mt Martha | Enables interchange of buses at Frankston station. | 1 Hr service frequency |
| 788 (North West route) | Frankston - Portsea via Dromana & Rosebud & Sorrento | Mornington, Mt Eliza, Mt Martha, Portsea, Rosebud | Enables interchange of buses at Frankston station. | 40 minutes service frequency |

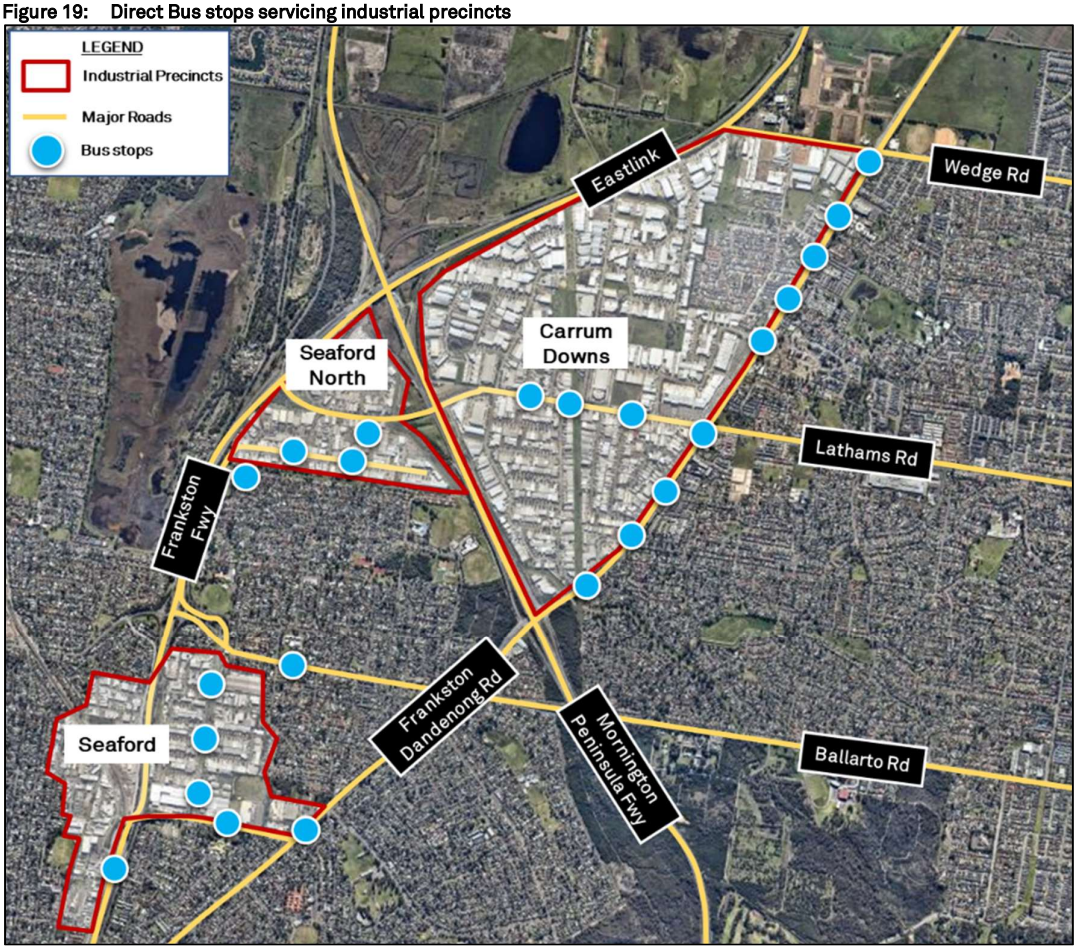
| | | | | |
|---|---|---|---|---|
| 789 (East West route) | Frankston - Langwarrin via Langwarrin North | Langwarrin, Cranbourne, Frankston Central | Provides access to Langwarrin (the bus stop is located 1 km from precinct). Enables commuters to interchange at Frankston station. | 40 minutes service frequency |

Source – Public Transport Victoria

Bus stops that service the municipality's industrial areas are depicted in the map below. As can be seen, there are currently no stops that service the north western portion of the Carrum Downs precinct. The only bus stop within the Langwarrin precinct is for a once a day service that links the Log Cabin Caravan Park to the Karingal shopping centre. Other than that, the nearest bus stops that connect Langwarrin to regional bus routes are more the 1 Km from the precinct (McClelland Dr/Cranbourne-Frankston Road).

The Seaford precinct enjoys the highest level of public transport connectivity, primarily via Kananook station and via the bus routes that provide interchange options at the station. Bus stops through the centre of the east Seaford precinct at Hartnett Drive provide workers with a convenient location to access public transport services.

**Figure 19: Direct Bus stops servicing industrial precincts**




Source – Charter Keck Cramer

### 7.3 Public transport travel time assessment by precinct

Maximising the full economic potential of a region requires high levels of accessibility to employment areas. For industry accessibility and commuter travel times determine the effective size of a labour market. Barriers to accessibility limit the number of workers that businesses can access. Notably, the *2018 Industrial Needs Analysis* report found that 12% of businesses identified transport as a barrier to obtaining a skilled workforce.

The following examines public transport options to each of the municipality's industrial precincts by examining public transport services and travel times from the top 15 locations from which workers commute.

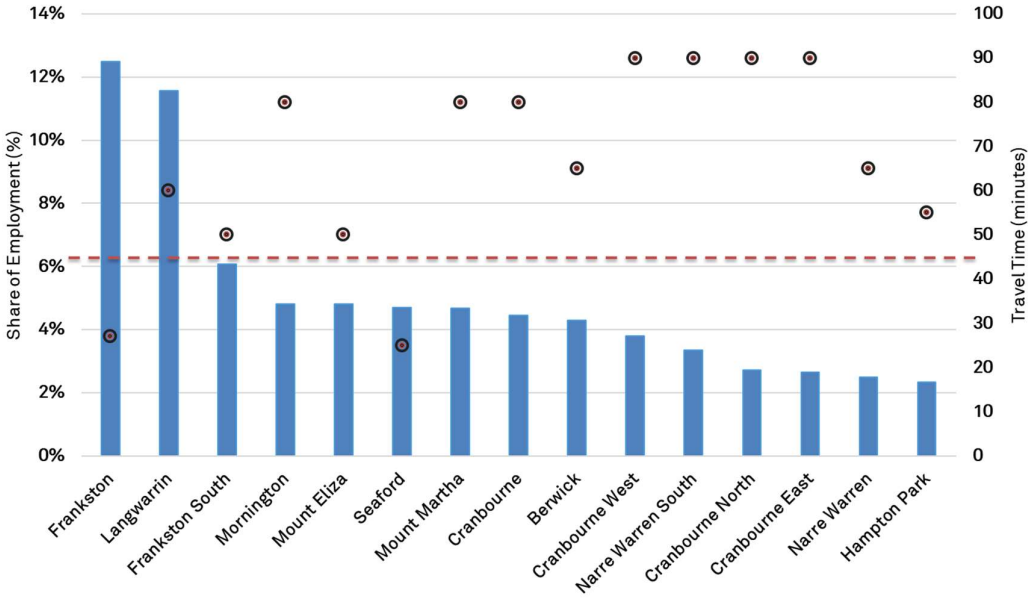
#### Carrum Downs

More than one third of the Carrum Downs workforce lives within the municipality (primarily within the suburbs of Frankston, Langwarrin and Seaford). For these workers, Carrum Downs is generally accessible within a 45 minute trip by public transport with workers in Seaford and Frankston enjoying the shortest travel times typically via a single public transport trip (bus routes 778, 832 and 901 provide the most direct options from these areas).

A further third of workers live in suburbs east of Carrum Downs with high numbers of employees in Cranbourne, Narre Warren and Berwick. While many of these areas are within 10 kilometres of the precinct, public transport travel times generally involve a 75 minute commute (to access the bus services that service Carrum Downs workers need to interchange at either Frankston or Kananook Stations). In comparison private vehicle travel is generally within 30 minutes.

A high proportion of workers (+10%) live in Langwarrin which is within 6 km of the precinct. As there is no direct public transport route to the precinct, workers need to use multiple services to access the precinct which is why public transport travel times are greater than 60 minutes from Langwarrin whereas private vehicle access is within 15 minutes.

**Figure 20: Carrum Downs – Travel time assessment – top 15 employee locations at am peak[5]**

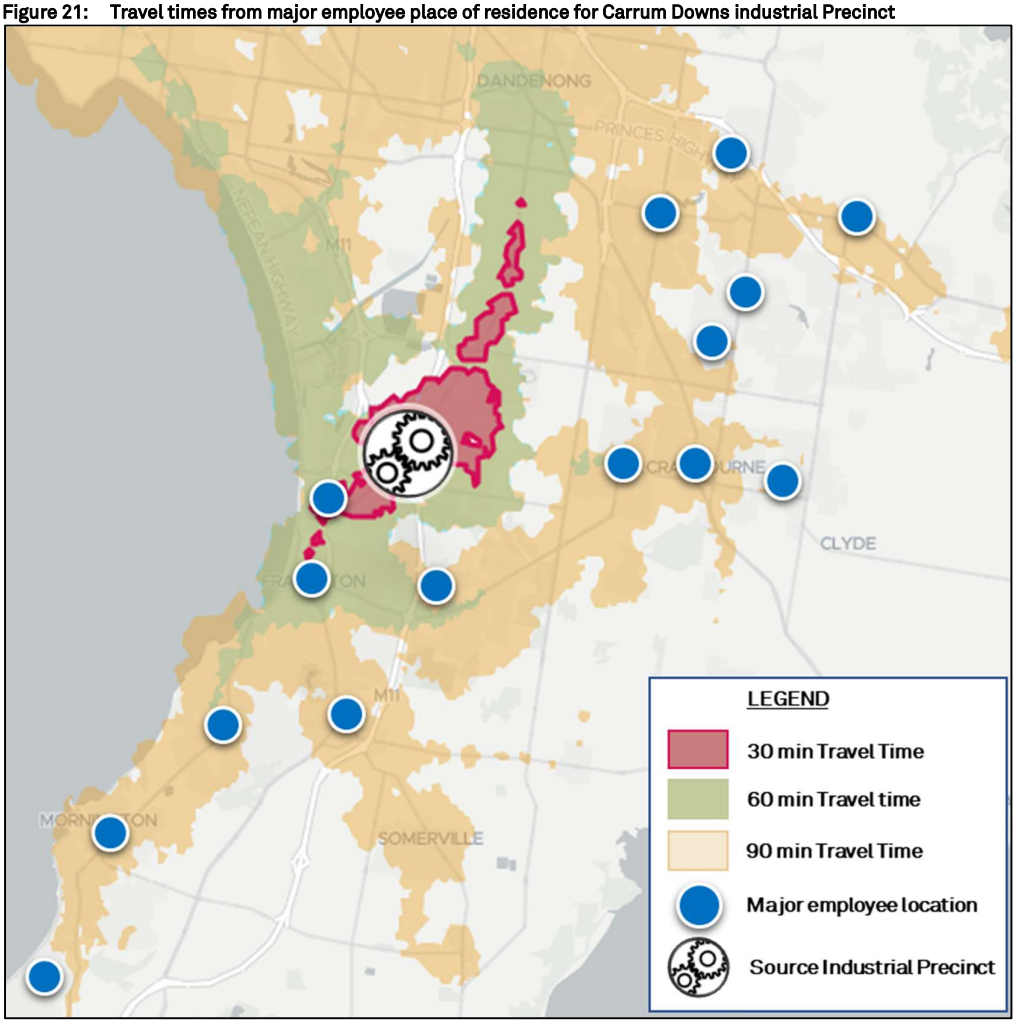



Source – Charter Keck Cramer

[5] *The travel time assessment is based on travel duration from the epicentre of suburbs to the relevant precinct via public transport. The time of travel has been calculated at the morning peak.*

Given the location of bus stops on the eastern edge of the precinct and through Lathams Road, employees that work in either the north, north western and south western portions of the precinct are likely to need to walk between 500m to 1 km to reach their work place. There are no public transport stops in the north western portion of the precinct – employees in these locations may need to walk for as much as 20 minutes to reach their workplace.

**Figure 21: Travel times from major employee place of residence for Carrum Downs industrial Precinct**




Source – PTV, ABS, Charter Keck Cramer

*Note: Colour progressions represent travel time ranges with 'red' depicting 0-30 min, 'green' depicting 30-60 min and 'yellow' depicting 60-90 min travel times.*

### Seaford North

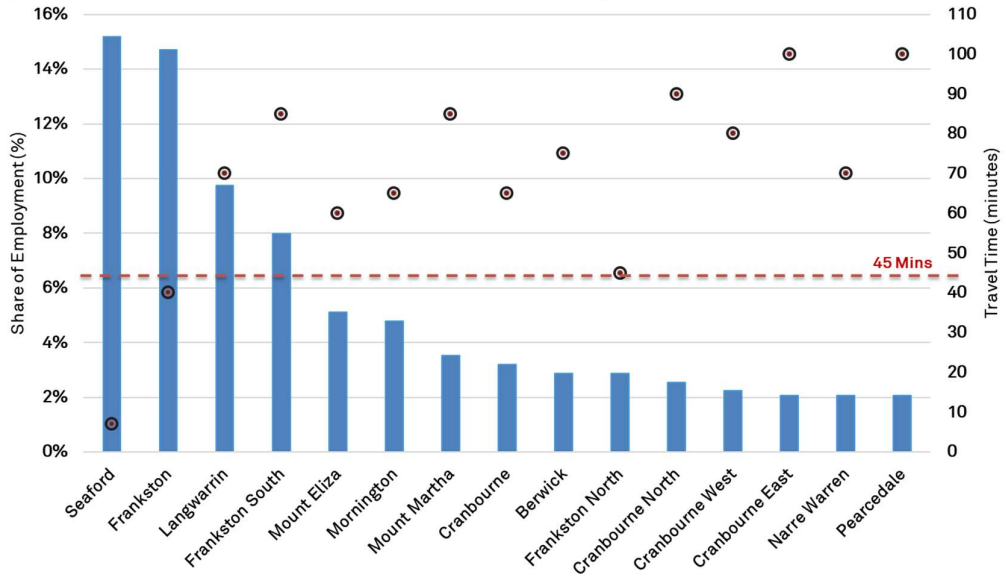
More than one third of the Seaford North workforce lives within the municipality (primarily within the suburbs of Frankston, Langwarrin and Seaford). For these workers, the precinct is generally accessible within a 45 minute public transport trip, with workers in Seaford and Frankston enjoying the shortest travel times, typically via a single public transport trip (routes 778 and 779 provide direct access to these areas at 50 minute to 1 hour service frequencies).

A further 20% of workers live in southern suburbs including Frankston South, Mount Eliza and Mornington. For these workers the precinct is accessible within 60 to 90 minutes via the use of multiple services (workers need to interchange at either Kananook or Frankston rail stations to access routes 778 and 779).

A further 20% of the precinct's workers live in suburbs that are east of the precinct (primarily suburbs of Cranbourne). Public transport travel times from these locations are generally greater than 60 minutes. In comparison private vehicle travel is generally within 30 minutes to the precinct.

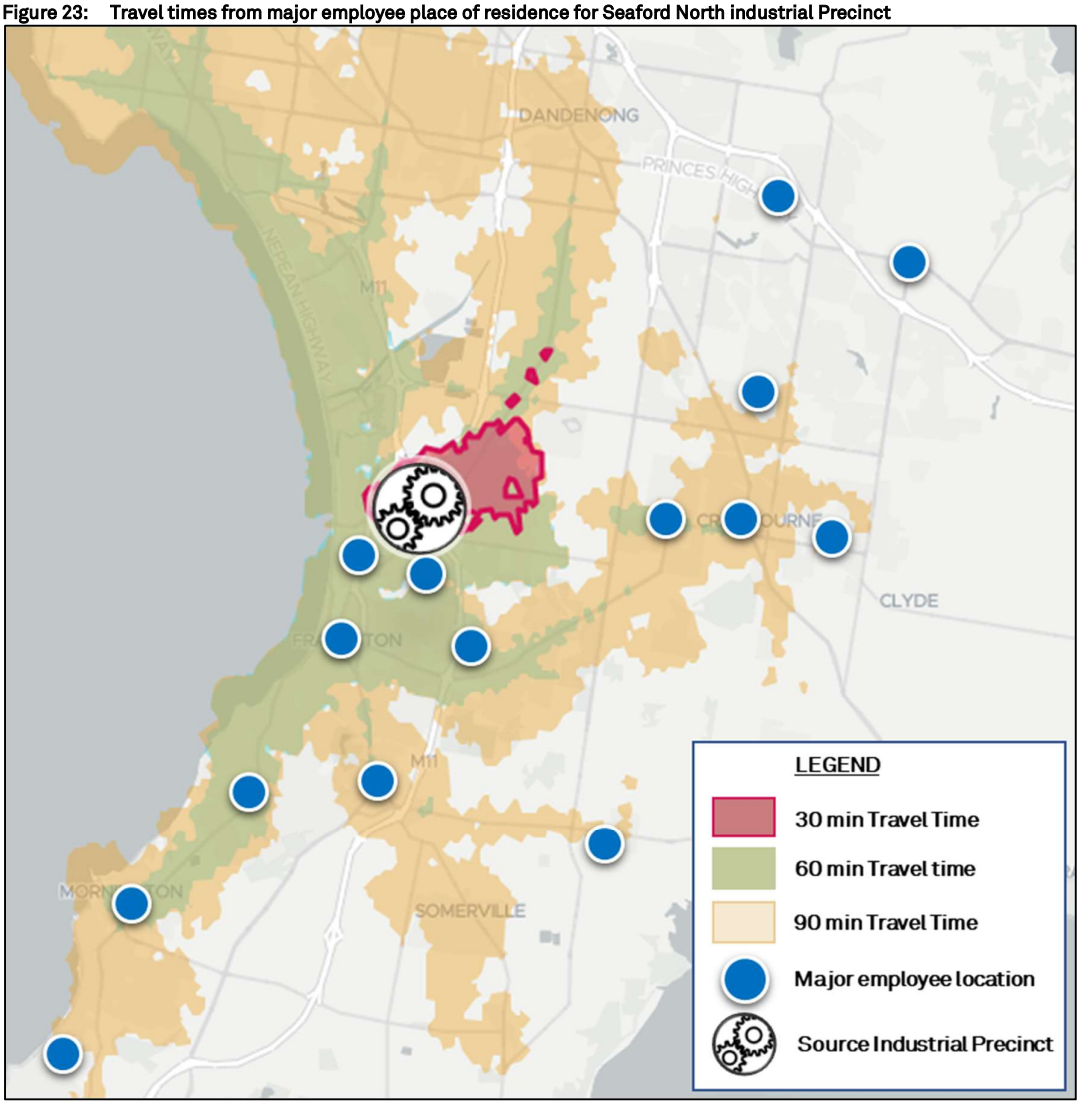
As is the case with Carrum Downs a high proportion of workers (+10%) live in Langwarrin which is within 7 km of the precinct. As there is no direct public transport route to the precinct, workers need to use multiple services to access the precinct which is why public transport travel times are greater than 60 minutes from Langwarrin whereas private vehicle access is within 15 minutes.

**Figure 22: Seaford North– Travel time assessment from major employee bases**




Source – Charter Keck Cramer

**Figure 23: Travel times from major employee place of residence for Seaford North industrial Precinct**




Source – PTV, ABS, Charter Keck Cramer

### Seaford

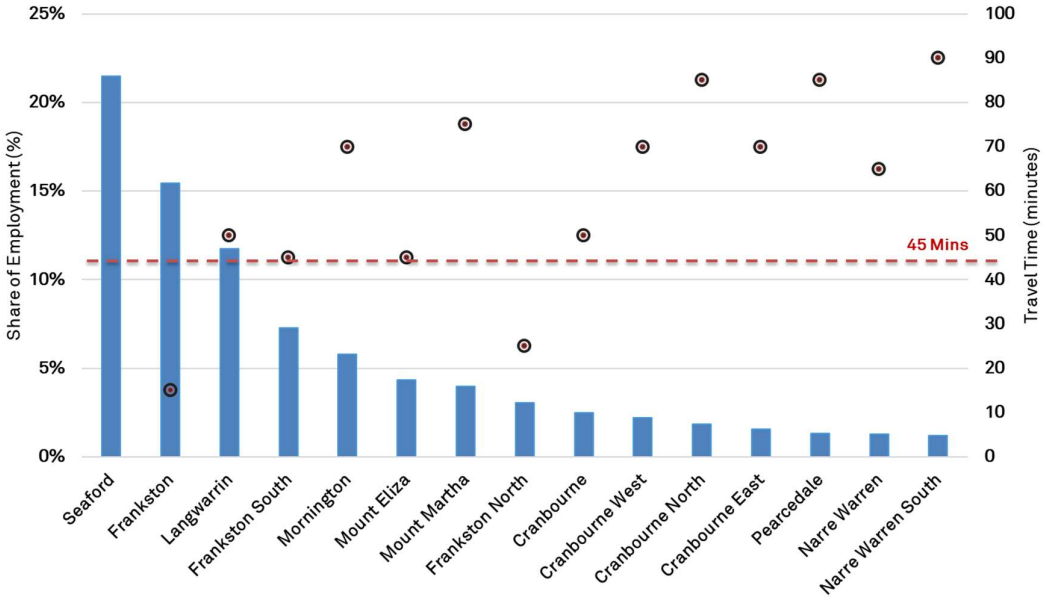
The Seaford precinct is the municipality's most accessible precinct via public transport. A high (20+%) proportion of the precinct's workforce live within the suburb with a further 19% of the work force living in Frankston and Frankston North. These workers are able to access the precinct within 30 minutes via public transport.

There are also significant numbers of workers that live in suburbs east and south of the precinct (more than 20% of workers live in Mornington, Mount Martha, Mount Eliza and Frankston South). For these workers public transport travel times are generally greater than 45 minutes and involve the use of more than one service.

As with the other precincts, despite its proximity to Seaford, Langwarrin entails public transport travel times of more than 45 minutes. Langwarrin is home to more than 10% of the precinct's workforce.

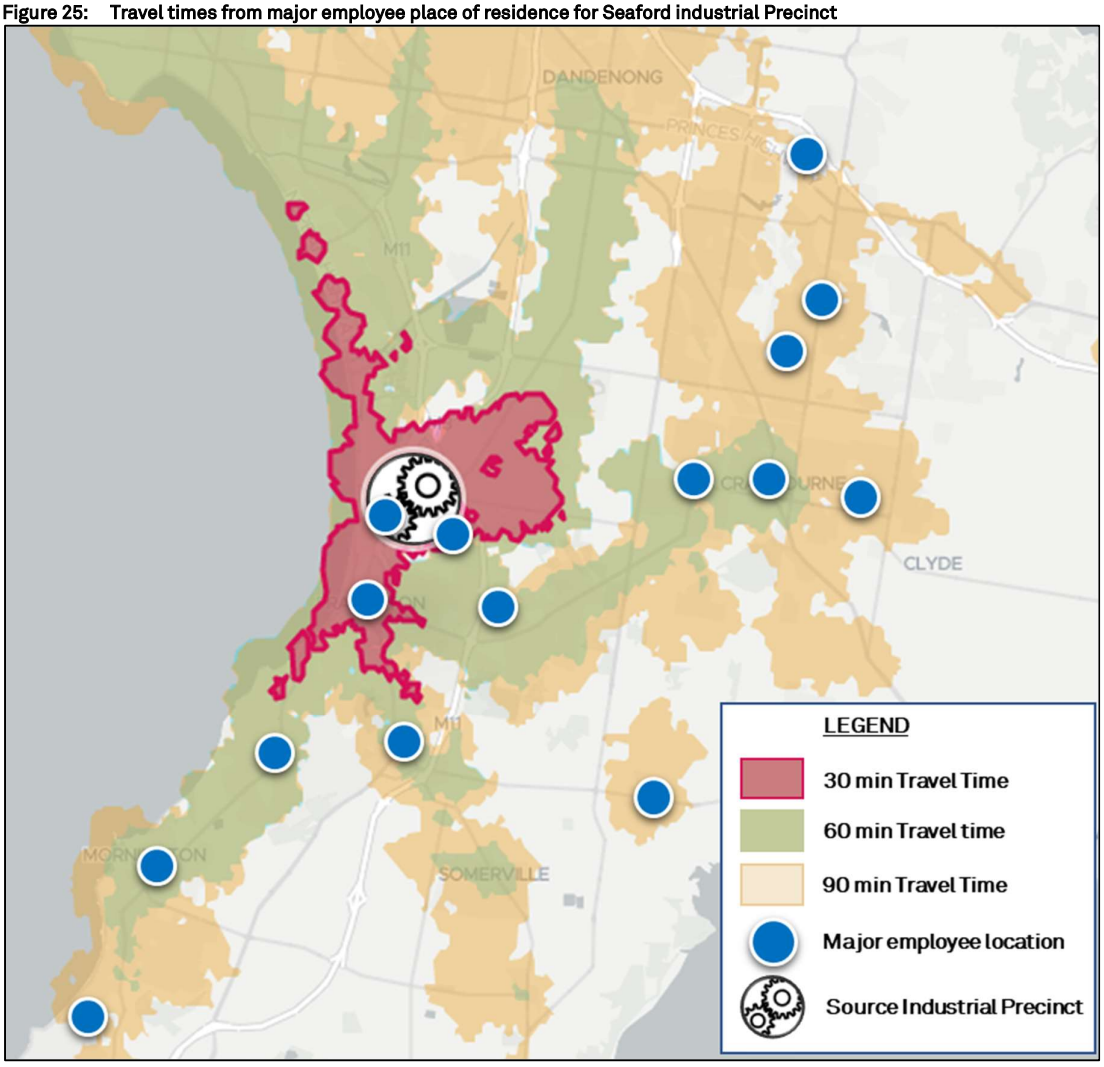
There are a number bus routes to the western portion of the precinct including routes 778, 779, 832 and 901. These routes (with the exception of route 778) also service the eastern portion of the Seaford precinct primarily through Hartnett Drive.

**Figure 24: Seaford – Travel time assessment from major employee bases**




Source – Charter Keck Cramer

**Figure 25: Travel times from major employee place of residence for Seaford industrial Precinct**




Source – PTV, ABS, Charter Keck Cramer

### 7.4 Discussion and key insights

The public transport assessment investigated public transport options and travel times for workers within the municipality's industrial precincts. The assessment provides the basis for the following insights:

- **Service frequencies**: The largest numbers of workers employed in the municipality's industrial areas work in Carrum Downs, east Seaford and Seaford North precincts. For these workers accessing these precincts by public transport entails the use of bus services (services 778, 779, 832, 833 and 901). Apart from bus route 901 which is a Smart Bus service, bus routes to industrial precincts are provided in 50 minute to 1 hour service frequencies. According to academic studies, this is likely to generate low levels of satisfaction in commuters and relatively higher levels of commuter related stress.[6] Low service frequencies are also associated with low patronage levels while, in contrast, higher frequency services are known, in the long term, to increase patronage.[7]
- **High accessibility locations**: The assessment demonstrates that residents in the suburbs of Frankston, Seaford and Frankston North have the most rapid and direct access to industrial precincts via public transport. These are also areas in which high numbers of industrial workers reside. Residents in these areas can generally access the precincts within 30 minutes by public transport via a single service.
- **Low accessibility locations**: Approximately 40-50% of workers live within 15 kilometres of the municipality's industrial precincts in locations that are either directly east or south of the precincts. For these workers public transport options typically involve 50+ minute travel times via multiple public transport services. Further to this, given the location of bus stops on the edge of Carrum Downs and to a lesser extent Seaford North, workers may need to then walk relatively long distances to access their workplace. For these workers public transport options are likely to generate low levels of satisfaction and higher levels of commuter related stress. When comparing public transport travel times in eastern and southern suburbs with the accessibility provided by private vehicles, private vehicle travel is likely to appeal as a far more efficient and convenient travel mode.
- **Gaps in the bus network**: Although 20% of the workforce live in suburbs directly east of the municipality's industrial precincts, there are no bus services from these areas that provide direct access to industrial precincts. For workers coming from suburbs such as Cranbourne public transport options involve lengthy trips and interchanging services. Bus service 760, however, provides access into Frankston and Seaford from Cranbourne via both Hall and Ballarto Roads but does not incorporate stops that directly service the precincts. This service or an equivalent service may have the potential to more directly support the public transport needs of workers in suburbs east of the precinct. As also discussed, there are no direct services to precincts from Langwarrin from which a large number of workers commute.

[6] Cantwell, M, Caulfield, B, O'Mahony, M, Examining the Factors that Impact Public Transport Commuting Satisfaction, Journal of Public Transportation 12(2) June 2009

[7] Currie, Graham, Effective Ways To Grow Urban Bus Markets – A synthesis Of Evidence, Institute of Transport Studies, Monash University

## 7.5 Assessment of Bicycle Network

Over time, the municipality has developed an extensive bicycle network with substantial off road and shared options. A map of both off road and shared cycle paths within the municipality is provided below.

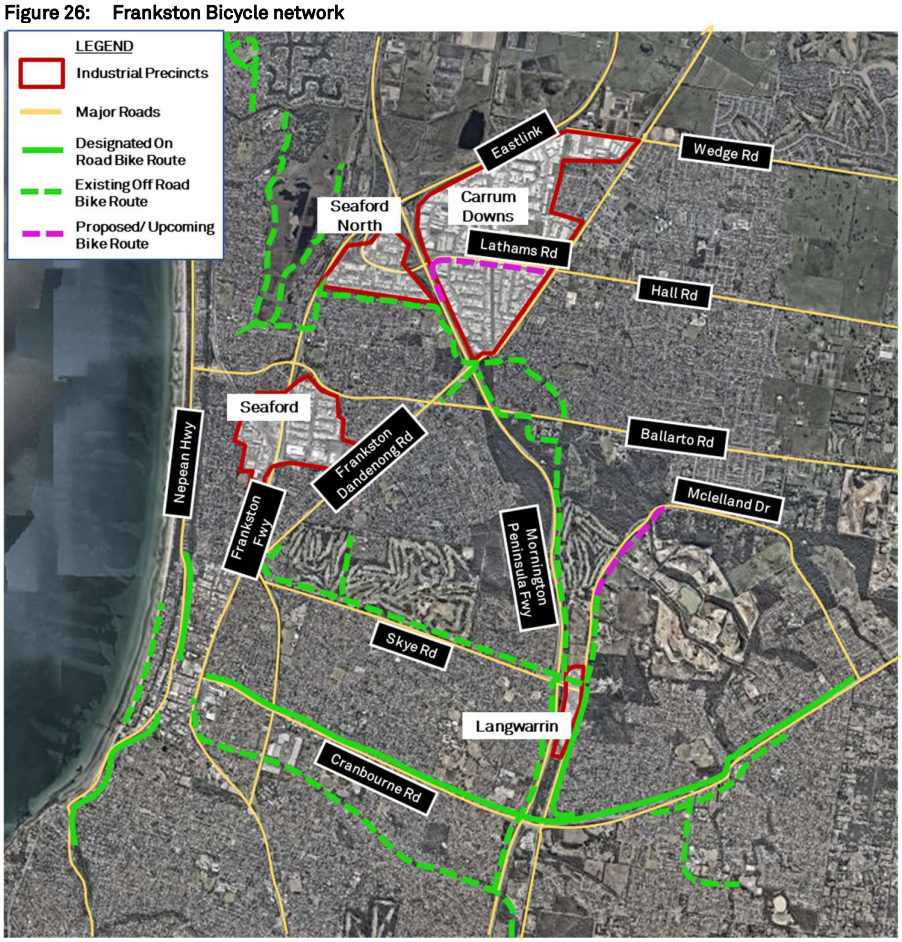
The Peninsula Link Trail, the Frankston – Baxter Trail and the Seaford Wetlands Trail are the primary bicycle routes in the municipality. Overall, the municipality's north south bicycle infrastructure is most complete and comprehensive. Workers in Langwarrin, Frankston South and Mount Eliza are able to access a number of east west off and on road bike paths to connect with the Peninsula Link Trail which provides off road access to the southern portion of Carrum Downs and Seaford North and is in proximity to the northern section of the Seaford precinct.

Workers in Frankston need to combine shared paths, local roads and off road options to access precincts. For workers commuting from Cranbourne and other eastern suburbs there is a lack of both shared and off road cycling options to the precincts. The Cranbourne-Frankston Road provides a shared path in the municipality from Cranbourne and surrounding areas, however, the route is over 6 km from industrial precincts.

Langwarrin abuts the Peninsula Link and McCelland Drive road bicycle networks which connect the Langwarrin, Karingal and Frankston residential catchments to the precinct. The Seaford Wetland bicycle network runs along the southern section of Seaford North and touches the southern tip of Carrum downs directly connecting to surrounding Carrum Downs, Seaford and Patterson Lakes residential catchments to the precincts.

There is minimal bicycle infrastructure within the precincts. A route is proposed for Lathams Road which will connect with the Peninsula Link trail. Ideally, the Lathams Road connection would also, in the future, connect with new east west cycling infrastructure connecting to Cranbourne.

**Figure 26: Frankston Bicycle network**




Source – Vic Roads, Charter Keck Cramer

**Recommended actions:**

Council should engage with Public Transport Victoria and the Department of Transport to advocate for the following:

- A review of bus service frequencies and routes for those buses that service industrial precincts particularly at AM and PM peaks.
- The provision of new bus stops in the northern portion of Carrum Downs.
- Improved and more direct public transport connectivity from and to Cranbourne and other suburbs east of the municipality.

There is an ongoing opportunity to further enhance the municipality's cycling connectivity. Cycling accessibility to and within industrial precincts should be enhanced via the:

- Development of shared cycle routes through Lathams Road that connect with the Peninsula Link Trail.
- Development of east west cycling connectivity that supports accessibility from Cranbourne. A route along Hall Road that connects with Lathams Road should be investigated.

# 8. Review of Frankston Industrial Strategy

## 8.1 Introduction

In 2009 SGS Economics and Planning completed *the Frankston Industrial Strategy August 2009* for Frankston City Council.

The final section of this study reviews this strategy. In so doing, the study seeks to identify:

- enduring policy directions and actions
- directions and actions that require review
- new initiatives that might be considered in response to changing conditions
- next steps in industrial strategic development

### Strategy context 2009

The strategic context for Frankston's industrial precincts has changed substantially since 2009. At this time, the Carrum Downs precinct was largely a greenfield location with significant potential to attract and support new economic uses in the region. A high proportion of the strategy is, therefore, focused on shaping and directing future outcomes in Carrum Downs. The strategy promotes a highly aspirational vision for the precinct, specifically in relation to sustainability and supporting advanced technology manufacturing. Recognising the aspirational character of its vision, the strategy also specifies intermediate and minimum outcomes for the precinct. It also seeks to leverage from the recently completed EastLink road connection (completed in 2008).

At 2019, the Carrum Downs precinct is near completion. As is discussed below, development has not realised the aspirational vision for the precinct. However, many of the minimum and intermediate development objectives of the 2009 strategy have been achieved.

The emphasis on Carrum Downs in the 2009 strategy was highly appropriate for its time. In 2019, however, with minimal greenfield land remaining in Carrum Downs, the strategic emphasis for the management of industrial land needs to shift to the long term redevelopment and improvement of all industrial areas. In particular, the Seaford and Seaford North established industrial areas.

**Review: 2009 Strategic Directions**

The following assesses key directions, objectives and actions detailed in the 2009 strategy that require review.

**Figure 27: Review of Carrum Downs**

| Initiative | Summary of key directions | Commentary |
|---|---|---|
| **Carrum Downs -- context** | The strategy includes a broader metropolitan context map and a Carrum Downs opportunity map (pages 4 and 5). | The overall strategic context for industrial land in the municipality has changed considerably both in relation to broader industrial policy, industrial demand and uses and land supply.<br><br>A new strategy would include a broader metropolitan context map that contextualises all of the municipality's industrial areas, as well as identifying key industrial trends and policy priorities. |
| **Carrum Downs as a flag ship sustainable industry park** | The strategy advocates for the precinct to become a leading industrial park by achieving high standards of sustainability through, for instance, the use of recycled water. The strategy advocates for the area to attract high tech manufacturing and over time become a green business hub.<br><br>At the same time, the strategy acknowledges that its sustainable and green objectives are aspirational. | To date, the precinct is yet to become a leader in sustainable industrial development nor a hub for green businesses. These objectives/aspirations need to be reconsidered and potentially refocused. If retained, future redevelopment objectives might be more specific in relation to solar energy, water harvesting and local power networks. Objectives need to be broadened to include all areas.<br><br>In light of the above, the strategic overview map on page 7 requires review, as the map does not currently represent on the ground outcomes. |
| **Road network** | The strategy includes a number of ambitious street illustrations that depict boulevard style outcomes with generous landscaping and separate pedestrian and cycling access along Colemans and Boundary Road. | Streets have not been developed in the manner depicted. The ongoing development of streets, nonetheless, needs guidance particularly to support the introduction of cycling and further pedestrian infrastructure.<br><br>The current street illustrations within the report are not helpful in this respect as they do not provide guiding principles or clear objectives for directing the renewal of streets and do not account for existing conditions.<br><br>New sections for primary roads need to be developed that respond to 2019 conditions, as well as the need to institute adequate pedestrian and cycling infrastructure that respond to on the ground conditions. |
| **Carrum Downs design objectives and standards, gateways and visual front door** | The strategy incorporates a number of design objectives that seek to achieve the highest quality standards of urban design and architecture. This includes directions related to frontages and orientation, landscaping and fencing.<br><br>As part of the overall vision for the precinct, there is a particular focus on the appearance of the Carrum Downs precinct along its interface with EastLink and the facilitation of landmark gateway | Along with gateway sites, the sites abutting EastLink are now built. The aspirations of the strategy in relation to landmark gateway outcomes and "front door" development, however, have not eventuated. At the same time, and perhaps more importantly, the precinct has uniformly achieved high levels of design and built form on a site by site basis. |

| Initiative | Summary of key directions | Commentary |
|---|---|---|
| | built form. In relation to this, the strategy seeks to create a visually attractive 'front door' that helps shift perceptions of the broader Frankston area. In addition, the strategy emphasises entry points at Boundary and Colemans Road and achieving higher levels of design and architectural merit in these locations. | With much of the precinct built, gateway and EastLink objectives are now largely redundant. In 2019, built form objectives might be better served by focusing on achieving high standards for all sites. |
| **Carrum Downs - setbacks and heights** | The strategy details a number of setback requirements. Requirements differ for corner sites as well as sites on main roads and secondary roads. | With most sites now developed, setback provisions are largely redundant. For the few remaining sites in the precinct and potential future redevelopment sites, setbacks need to respond to the existing built form and, in particular, the existing rhythm of front and side setbacks within individual streets.<br><br>The focus for contemporary setback provisions should be about facilitating consistency between sites and legible streetscapes rather than following specific numerical directions.<br><br>Setback directions only relate to Carrum Downs. All new industrial buildings, however, require some direction in relation to setbacks, particularly those that interface with sensitive uses. Additionally, setback provisions may need greater nuance, (a) to enable office and administration facilities to protrude forward (provided the majority of the built form is setback in accordance with the overall rhythm of the street), (b) to facilitate the redevelopment of existing industrial areas in Seaford and Seaford North. Setback requirements should also recognise the overriding importance of the organisation of the front setback in the presentation and orderly use of sites (as has been demonstrated in the previous section). |
| **Building Frontages and Orientation** | Directions seek to encourage attractive buildings of a high standard. Specific design elements relate to the design and positioning of the office and showroom components of buildings, the avoidance of blank facades and the need for buildings to incorporate windows that face onto streets. | Building design and frontage directions remain current.<br><br>Notably, directions related to the orientation of office and administration uses have largely been adhered to. Likewise, the aspiration to achieve a 'human scale' public realm has been achieved with building outcomes that support pedestrian movement and the legibility of sites for pedestrians.<br><br>Built form directions, however, need to be broadened to relate to all precincts. |
| **Carrum Downs landscaping and fencing** | Directions encourage extensive garden beds and clean stemmed canopy trees on major roads.<br><br>The work also includes directions in relation to the East Link and areas that abut residential areas. | Most front setbacks incorporate dense garden beds. Canopy trees are prevalent in the public realm along main and secondary roads, although not as prevalent as the strategy might have advocated for on private land.<br><br>An updated strategy would emphasise the importance of canopy trees for sites that interface with residential areas. |

| Initiative | Summary of key directions | Commentary |
|---|---|---|
| **Carrum Downs Signage landscaping and fencing** | The strategy advocates for the integration of landscaping, design features and signage into the built form. | Signage is well organised as per the strategy's directions and generally integrated into building design to communicate uses and the identity of enterprises, while avoiding visual clutter.<br><br>Directions related to signage remain current and relevant. However, the strategy's focus on gateway signage and the use of signage towers now seems redundant. Signage directions, however, need to be broadened to relate to all precincts. |
| **Carrum Downs Services and parking** | The strategy promotes carparking within the front setback and for services to be located to the side or rear of lots. | The vast majority of sites provide carparking in the front setback (for row based industrial form, car parking is typically provided along the side of lots). The position of services to the rear or side of sites is rare. For most sites the services are located within the front setback as this is typically the most convenient and efficient location for services.<br><br>The overall organisation of front setbacks to accommodate both carparking, pedestrian movement and services requires greater attention, as this is critical to the presentation and functioning of sites. |

Figure 28: Established areas review

| Initiative | Summary of key directions | Commentary |
|---|---|---|
| **Established industrial areas general observations** | Many of the objectives remain current. These are, however, depicted as intended to "fine tune" existing areas and as "low intervention" initiatives.<br><br>The plan outlines a number of design principles for established areas that broadly seek to improve the appearance, functionality, amenity, and image of these locations. They also seek to address issues of traffic and drainage related to site and precinct built form. | While objectives remain current, the focus on "fine tuning" and "low intervention", given the findings of this study, seem no longer appropriate, particularly for the Seaford and Seaford North precincts which include significant redundant built form. For these areas more active management and substantial intervention is warranted including planning and associated actions to facilitate renewal and regeneration.<br><br>The plan outlines a number of design principles for established areas related to various features of site and precinct built form. Overall, these remain current. Although, as is noted in the commentary, there is a need to refine and, in specific instances, expand directions. |
| **Road network** | The strategy includes advocacy for improved pedestrian and cycling infrastructure.<br><br>This part of the strategy also advocates for the enhancement of existing premises in gateway locations. | Advocacy for improved pedestrian and cycling infrastructure remains current. Likewise, advocacy for street treatments to minimise the impact of industrial traffic on adjoining residential streets remains current. The emphasis on gateway sites, given the many issues facing established locations, might be regarded as a secondary priority. |
| **Estate layout and street design** | Directions identify the need for landscaping to create buffers to residential areas and the need for adequate lighting to support security. | These directions remain current, particularly those related to the use of landscaping to create buffers to residential areas. As has been demonstrated in the study, there is a need for adequate lighting to support security, particularly at interface locations. The role of canopy trees in effective buffering needs to be emphasised. |
| **Site layouts** | The strategy sets out a number of practical site layout directions including those related to pedestrian access and the separation of vehicles and pedestrian movement. | Directions in relation to site layouts remain current. These are, however, not comprehensive and could be expanded to focus on front setback organisation and the integration of car parking, pedestrian access, landscaping, storage and services.<br><br>The intent of the site layouts recommended for "Gateway Roads" is not clear and may be impractical to implement. All gateway related recommendations should be reconsidered. |
| **Building design** | The strategy sets out a large number of directions related to built form including directions related to sustainability and water harvesting. | These directions remain current, particularly those related to blank walls, building entrances and the need to distinguish office components from industrial uses. Examples that depict the integration of major building design elements would be beneficial in establishing high quality outcomes. There are now sufficient examples of high quality built form within existing industrial precincts to guide this (as well as poor outcomes).<br><br>Gateway directions which propose higher standards for gateway sites require reconsideration as all sites should achieve a high level of built form regardless of location and prominence. |

### 8.2 Discussion

Policy directions and analysis within the 2009 strategy are split between Carrum Downs and established industrial areas, with the strategy's main emphasis on Carrum Downs.

Many of the directions and aspirations detailed in the strategy remain current. However, the division between Carrum Downs and all other locations is no longer warranted. Instead, there is a need for an overarching and unified strategic direction for Frankston's industrial precincts that supports their long term growth while guiding long term development via common development principles (which is lacking in the 2009 strategy).

**An updated strategy**

The 2009 strategy provides the basis for common industrial development principles/guidelines including landscaping directions, built form guidance, signage directions and site layout principles. Existing content might, nonetheless, be enhanced and expanded to provide more comprehensive and contemporary directions.

Suggested enhancements are as follows:

- **Front setback organisation**: Given the intensity of uses within front setbacks, policy principles that help guide the organisation of services, parking, pedestrian access and landscaping in front setbacks are likely to benefit the redevelopment of aged industrial sites.
- **Improving road networks**: Precincts such as Carrum Downs and Seaford North provide the opportunity to link and expand broader cycling networks. Road networks need to be reviewed to accommodate cycling and increased pedestrian movements in a way that responds to current conditions. At present, the strategy is solely focused on Carrum Downs for improved infrastructure. Current road illustrations do not represent existing conditions and require updating.
- **Buffering and landscaping**: Directions related to Carrum Downs in relation to buffering and landscaping need review and need to be broadened to apply to all areas.
- **Storage and waste**: At present there are no directions related to external storage practices and ancillary storage facilities such as cargo containers.
- **New illustrations**: Further to the above, urban design directions would benefit from up to date illustrations. This might include illustrations of setback requirements, site accessibility and pedestrian movement, as well as the overall organisation of front setbacks.
- **Sustainability**: If an updated strategy is to continue to focus on sustainable outcomes, its focus needs to be broadened to include solar power generation, water harvesting, local electricity generation and distribution and achieving higher building ratings.
- **Security**: Improving pedestrian security in interface areas and in areas that generate high levels of civic activity, such as the area abutting Kananook Reserve and the Frankston Basketball Centre.
- **Non-traditional industrial uses**: Industrial areas increasingly support taverns, child care, entertainment and recreation facilities. Whether these uses trigger new design requirements in relation to access, parking and pedestrian activity needs to be verified.
- **Future challenges**: There are emerging challenges for industrial precincts that may need to be considered. For instance, in response to significant land constraints, multi storey industrial facilities may eventually be proposed and may require specific planning consideration.

In addition to the above, the broader strategic context that shaped the 2009 strategy has fundamentally changed. Specifically, demand for industrial sites has changed and grown particularly as a result of the growth of ecommerce, the displacement of inner city industrial businesses and the prevalence of non-traditional industrial uses in industrial areas. Similarly, industrial land use policy has changed since *Plan Melbourne 2017-2050*. An updated strategy would need a uniting vision for the use and development of industrial land that reflects current aspirations for industrial precincts.

**A plan for redevelopment and renewal**

This work suggests that the established industrial precincts require far greater focus, and, in fact, should in 2019 be elevated to become a primary planning and development focus for Council. This might entail a strategy to work with land owners to incrementally renew industrial precincts as part of a broader redevelopment vision for existing industrial sites. Such a strategy might consider committed council investments and incentives to facilitate action.

In conjunction with the above, Council might also consider an increased focus on local law enforcement in response to neglected and derelict sites. Owners need to ensure buildings are in a good state of repair and appearance. This study has identified a number of neglected and seemingly dilapidated sites that warrant council attention.

**Recommended actions:**

Council needs to update its policy and strategic settings for the management of industrial land. This needs to include:

- A strategic vision and a program of actions for the renewal of older industrial areas.
- Policy to manage non-traditional uses in industrial locations.
- Urban design guidelines that encompass directions for the management of front setbacks, the improvement of streetscapes and the management of waste and storage.

The 2009 strategy included urban design aspirations for major roads within Carrum Downs. Council should continue to develop Lathams Road as a high amenity road that includes extensive landscaping as well as high quality pedestrian and cycling infrastructure.

Council needs to investigate the prevalence and impact of non-traditional industrial uses within industrial precincts. In particular, Council needs to understand whether non-traditional uses are crowding out industrial uses that may be unable to locate in other parts of the municipality.