



# North Ellenbrook Industrial Land Assessment

*Prepared for*

**Parcel Property**

**January 2021**



**LUCID**  
ECONOMICS

# lucid

/ˈluːsɪd/

*adjective*

1. expressed clearly; easy to understand

2. bright or luminous



## Document Control

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### Statistical Note:

This report was originally published in September 2019, using the most up to date data and information available at that time. Since publication, a number of official data sets quoted from the ABS have been updated. After reviewing this information, we feel that the updated information does not material impact on the findings of our analysis. As such, this data has not been updated.

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# Executive Summary

## Introduction

Lucid Economics has been engaged by Parcel Property to provide an industrial land assessment to inform planning for the future development of the company's North Ellenbrook project.

## Planning for Industrial Land in Perth and Peel

Planning for industrial land in the Perth and Peel Metropolitan regions has evolved over time and has included various studies, including:

- Industrial Land Needs Study (June 2008)
- Economic and Employment Lands Strategy (EELS) (April 2012)
- Economic and Employment Land Monitor (April 2015)
- North-East Sub-regional Planning Framework (March 2018)

During this time, future demand projections for industrial land have increased dramatically for the region from 80.5 ha per annum up to 291.5 ha per annum. At the same time, the dynamics and fundamentals that drive the industrial land market have not changed. Historical analysis would indicate that the most recent projections contained in the Sub-regional Planning Frameworks are grossly overestimated (Table E.1).

**Table E.1 Comparison of Industrial Land Demand**

	Timeframe	Demand Total (ha)	Annual Average (ha)
ILNS (WA Tomorrow)	2006-2030	3,154	131.4
ILNS (High Growth)	2006-2030	1,931	80.5
EELS	2006-2031	4,726	189.0
Sub-regional Planning Frameworks	2015-2031	4,955	291.5
Historical Average	1988-2001	1,040	80.0
Historical Average	1996-2010	1,394	99.6
Perth Region Actual	2011-2020	618	61.8

Note: Not all figures align to the Perth and Peel Metropolitan Regions. Total demand for industrial land 1988-2001 is inferred as the total demand figure was not provided in the ILNS.

Source: Syme Marmion (2008); Dept. of Planning (2012); DPLH (2018); Colliers (2019); Lucid Economics

The North Ellenbrook site is in the North-East Sub-region, which is expected to experience demand of 1,325 ha to 2031 and an additional 1,485 ha of demand afterwards, according to the North-East Sub-regional Planning Framework. By 2031, the North-East Sub-regional Planning Framework expects a surplus of 119 ha of industrial land for this sub-region.

## Industrial Land Market in Perth

Based on historical evidence and engagement with industry, future demand for industrial land across the North-East Sub-region will be well below the demand highlighted in the North-East Sub-regional Planning Framework. At the same time, industrial land in Hazelmere, Forrestfield and Malaga will be able to meet industrial demand over the short-term. Additionally, industrial land in Bullsbrook and Muchea is well placed to meet future demand for industrial uses in the sub-region.

## Summary

This assessment has identified a number of key findings that will have an impact on your planned project at North Ellenbrook, including:

- Both EELS and the Sub-regional Planning Frameworks likely overestimate the future requirement for industrial land across the Perth and Peel Metropolitan regions by a considerable margin
- The majority of future industrial land demand highlighted in the Sub-regional Planning Frameworks will take place between 2031 and 2050, which is so far into the future it is impossible to understand likely future demand
- The North-East Sub-region Planning Framework does not include the Muchea Industrial Park (1,150 ha), which is more advanced in its planning and development than the areas marked for industrial expansion and industrial investigation
- The Muchea Industrial Park can accommodate considerable industrial land demand for the North-East Sub-region and is readily accessible today
- The North-East Sub-region Planning Framework shows a surplus of 119 ha by 2031 (under very ambitious demand projections)
- The 270 ha parcel of industrial land held by Parcel Property makes up a relatively small portion (7.5%) of the current future supply of industrial land in the North-East Sub-region (3,580 ha), and including the Muchea Industrial Park (1,150 ha), its proportion is even smaller (5.7%)

In the current market, land in Hazelmere and Forrestfield will be developed in the near future, meeting some of the expected future demand. The Austral Brick site in Malaga, which is in the North-East Sub-region, has recently sold and the 11 ha property is to be subdivided and redeveloped, providing additional supply to future industrial needs in the region. Additionally, industrial developments in Bullsbrook and Muchea are very advanced and will be able to provide supply for likely all of the future demand for industrial land in the North-East Sub-region.

Given the significant overestimate of future demand contained in both EELS and the Sub-regional Planning Frameworks (including the North-East Sub-region Planning Framework) as well as the considerable industrial supply contained in the Muchea Industrial Park and Bullsbrook area, your 270 ha parcel of industrial expansion land will not be required for industrial uses.

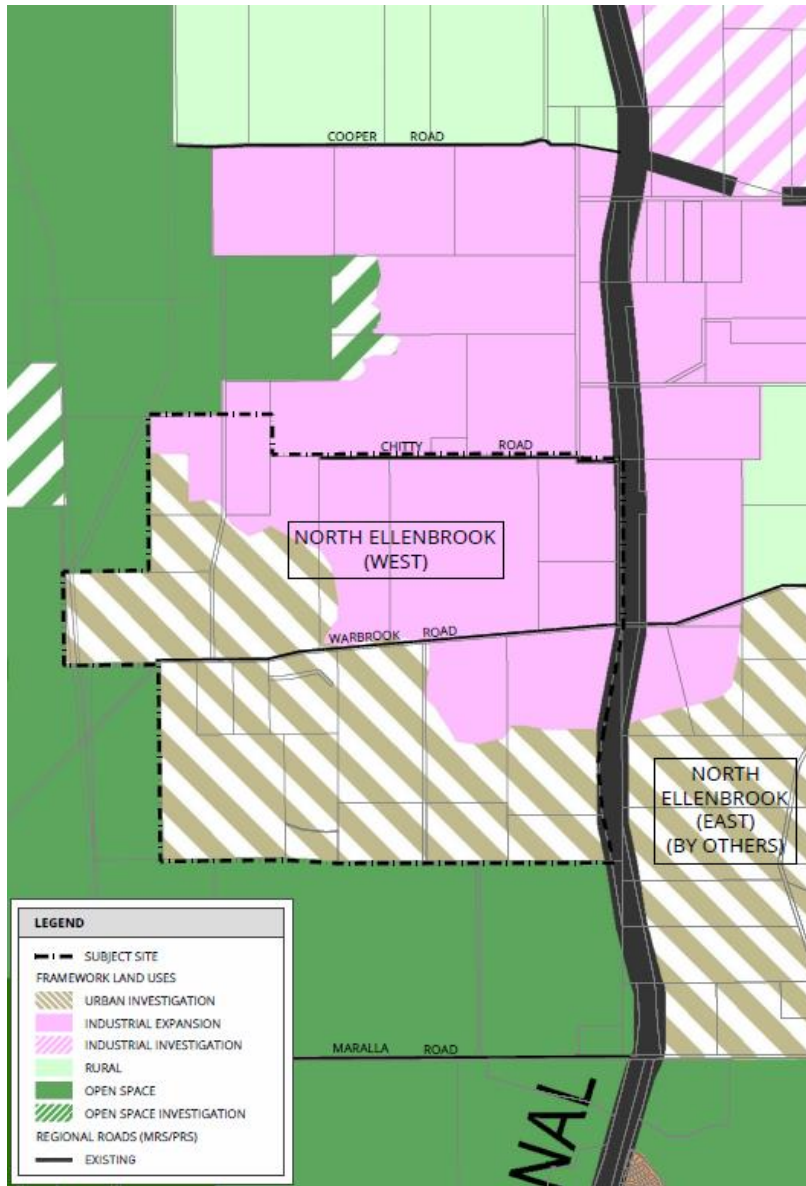


# 1. Introduction

Lucid Economics has been engaged by Parcel Property to provide an industrial land assessment to inform planning for the future development of the company's North Ellenbrook project.

Parcel Property is coordinating the planning for 407ha of land on the western side of NorthLink at the Warbrook Road Intersection (Figure 1.1). The site includes land zoned both 'Industrial Expansion' and 'Urban Investigation'. The site is located approximately 45km north of Perth.

**Figure 1.1 North Ellenbrook Site**



Source: Rowe Group (2019)

This assessment includes:

- A review of the relevant strategic planning documents
- Current economic context for industrial development
- Demand for future industrial development across the Perth Metropolitan Region

## 2. Planning Context

There are a variety of studies and reports that form the current basis for industrial land-use planning for North Ellenbrook, including:

- Industrial Land Needs Study (June 2008)
- Economic and Employment Lands Strategy (EELS) (April 2012)
- Economic and Employment Land Monitor (April 2015)
- North-East Sub-regional Planning Framework (March 2018)

### 2.1 Industrial Land Needs Study

The Industrial Land Needs Study (ILNS) was prepared in 2008 by Syme Marmion & Co. on behalf of Landcorp and the Department of Planning and Infrastructure to assess the likely short, medium and long term supply and demand conditions for industrial land across the Perth and Peel Metropolitan Regions.

The study identified that between 1988 and 2001, the Perth Metropolitan Region consumed an average of 80 ha of industrial land per year, however, the rate of consumption was increasing as between 1997 and 2001, the consumption rate increased to an average of 167 ha of industrial land per year. Overall, the study found that from 2006 to 2030, there would be an increase in industrial land demand of between 1,854 ha to 3,154 ha, which would create a shortfall of 990 to 2,300 ha of industrial land by 2030.

North Ellenbrook was considered as part of the Eastern Region (Figure 2.1), where demand was projected to be between 297 and 505 ha from 2006 to 2031. The report estimated existing vacant industrial land in the region of 72.6 ha (mostly in Malaga). Additionally, the report identified future supply pipeline of 344 ha, which included 294 ha in Muchea but no land in Bullsbrook. In total, there was 416.6 ha of industrial land supply identified in the Eastern Region. Overall, the report points towards a surplus of 120 ha to a shortage of 88 ha by 2031, depending on the demand scenario used.

**Table 2.1 ILNS Future Total Expected Demand (2006-2030)**

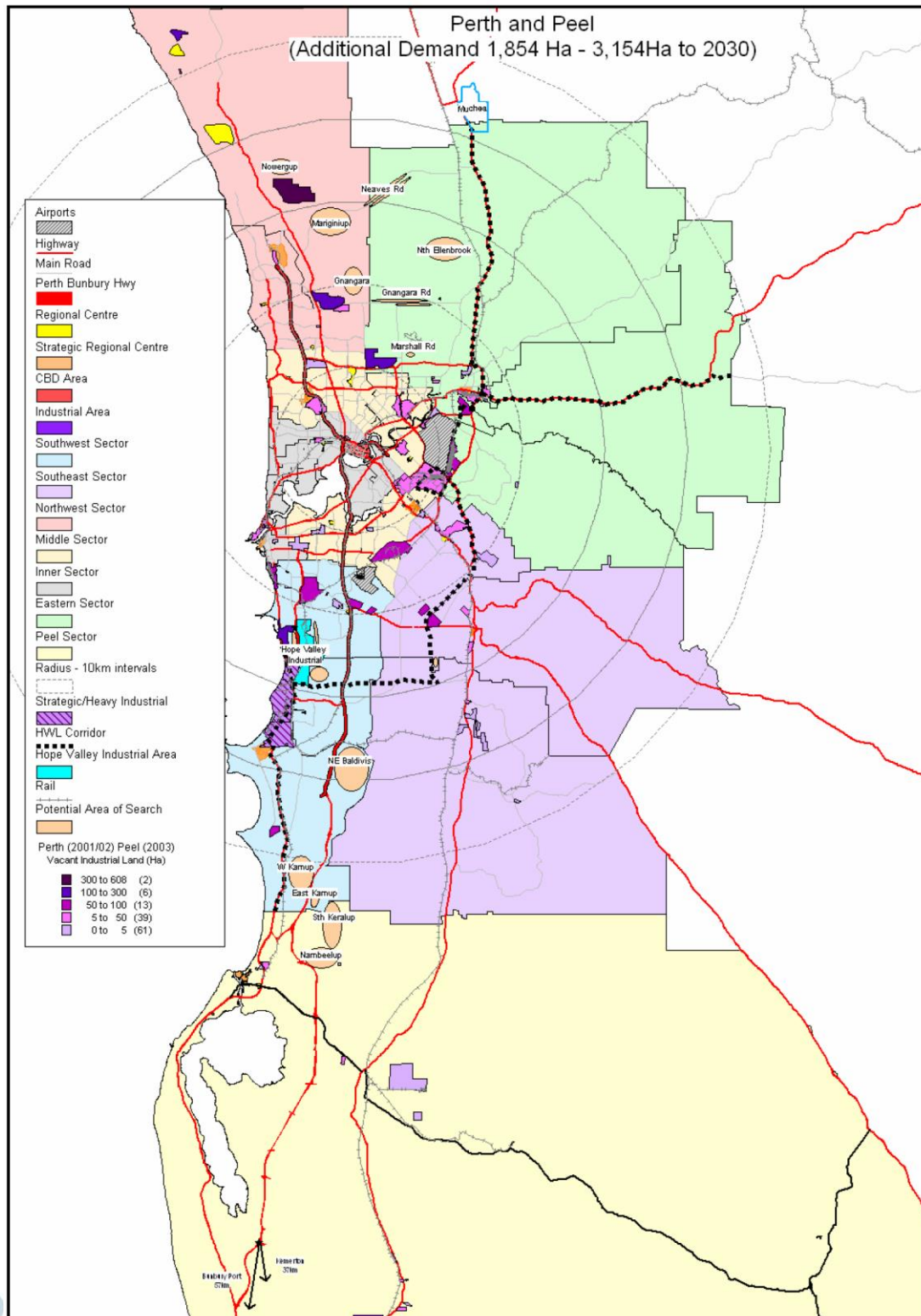
Region	Scenario 1 (WA Tomorrow)	Scenario 2 (High Growth)	Scenario 3 (Low Growth)
East	505	309	297
Inner	167	102	98
Middle	385	236	226
North West	729	446	428
South East	378	232	222
South West	621	380	365
Peel	371	227	218
<b>Total</b>	<b>3,154</b>	<b>1,931</b>	<b>1,854</b>

Source: Syme Marmion (2008).

The approach to identifying future demand and supply of industrial land is highlighted in Figure 2.2. In terms of demand, the study used the most recent data available at the time including the 2006 Census and the ABS Labour Force Survey 2008 (Table 2.2). Specifically, employment density (i.e. employment per hectare or in this case HA/employee) were based on employment data from the 2006 Census and land area (gross and occupied land) from previous industrial land use surveys from 1997 and 2001.

It should be noted that for this assessment, historical take-up rates and employment densities were based on a survey of industrial land over time. Consumption of industrial land was measured by vacant industrial land becoming occupied.

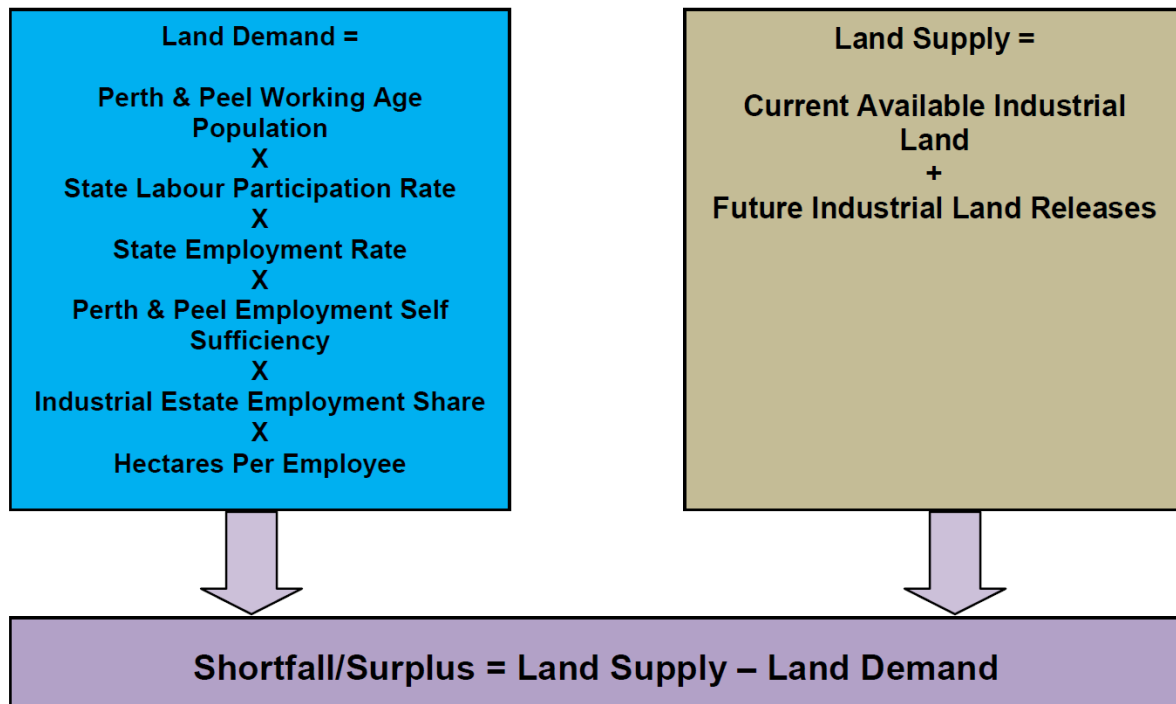
Figure 2.1 ILNS Regions



Source: Syme Marmion (2008).



Figure 2.2 ILNS Approach to Calculating Industrial Demand and Supply



Source: Syme Marmion (2008).

Table 2.2 ILNS Future Industrial Land Demand Inputs and Data Source

Model Inputs	Data Source
Perth & Peel working age population projections to 2030	WA Tomorrow (2005)
State labour force participation rate	ABS Labour Force Survey (2008)
State employment rate	ABS Labour Force Survey (2008)
Metropolitan employment self sufficiency	ABS Census (2006)
Industrial estate employment share	ABS Census (2006) & Industrial Land Use Survey (1997,2001)
Ha/Employee (gross & occupied Land)	ABS Census (2006) & Industrial Land Use Survey (1997,2001)
Current industrial land (Occupied & Vacant)	Industrial Land Use Survey (1997,2001)
Future releases of industrial land	Industrial Land Development Program (2006)

Source: Syme Marmion (2008).

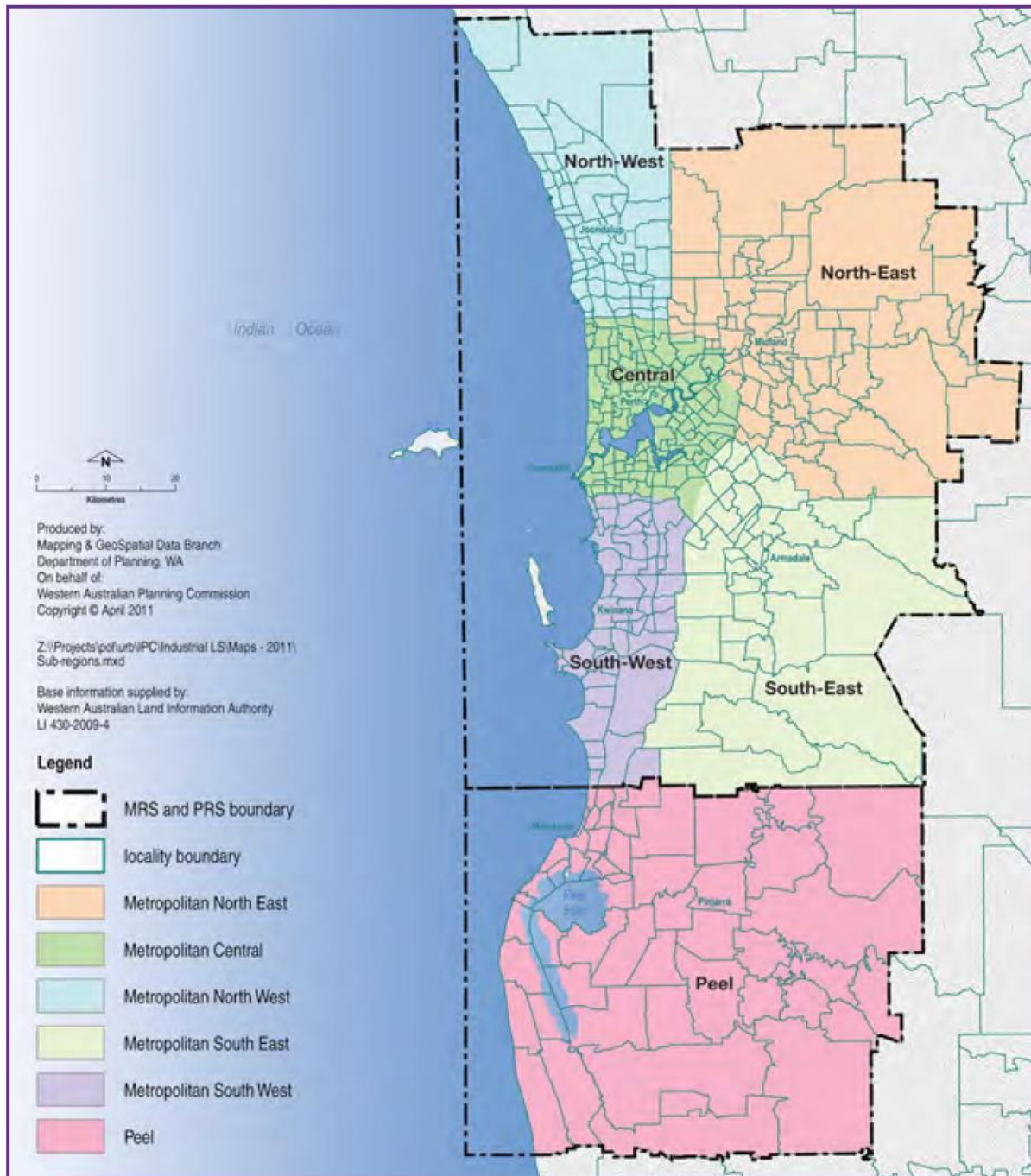
## 2.2 Economic and Employment Lands Strategy

The Economic and Employment Lands Strategy (EELS) was completed in 2012 and was developed by the Department of Planning and the WA Planning Commission. The study focused on general and light industry land across the Perth and Peel regions. EELS aimed to ensure that adequate forward planning is done to provide employment land over the next 20 years and beyond.

EELS projected demand for 4,726 ha of additional industrial land from 2006 to 2031 across the Perth and Peel regions, an increase of between 50% and 155% from the estimates created in the ILNS from 2008. The shortage of industrial land also increased to 2,878 across the Perth and Peel regions, with the Central sub-region having the largest shortage (Table 2.3). EELS generally followed the same demand modelling methodology as the ILNS.

North Ellenbrook was identified in the North-East Sub-region for the EELS, which highlighted future demand 2006-2031 of 1,646 ha of industrial land and future pipeline supply of 1,765 ha. EELS identified a current surplus of 119 ha in 2031 in the North-East sub-region (Table 2.3).

Figure 2.3 EELS Sub-regions



Source: Dept of Planning (2012).

EELS also tracked historical consumption of industrial land and found that between 1996 and 2010, the Perth and Peel region consumed an average of 99.5 ha of industrial land per year (Figure 2.4), which is a 24% increase over the average annual consumption rate in ILNS (i.e. 80 ha per year). It should be noted that the ILNS only considered the Perth Metropolitan Region and EELS included the Peel region. However, it is not possible to identify if the increase in geographic area (i.e. inclusion of the Peel Region) had any impact on these figures or not.

It should be noted that in the context of EELS, consumption of industrial land was measured as the rate at which industrial zoned land is acquired.

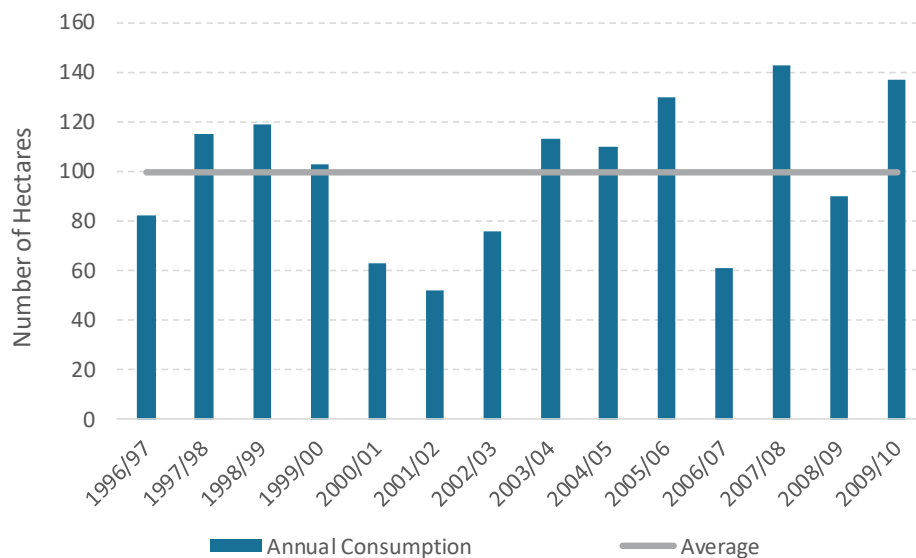
**Table 2.3 EELS Industrial Land Demand/Supply Forecast by Planning Sub-Region**

Sub-region	Demand at 2031 (ha)	Pipeline supply from current land development program (ha)	Shortfall/surplus
Central	5,243	3,407	-1,836
North-West	2,442	2,004	-438
North-East	1,646	1,765	119
South-East	1,397	1,583	186
South-West	1,828	1,525	-303
Peel	910	304	-606
<b>Total</b>	<b>13,466</b>	<b>10,588</b>	<b>-2,878</b>

Note: Demand includes existing and future

Source: Dept of Planning (2012).

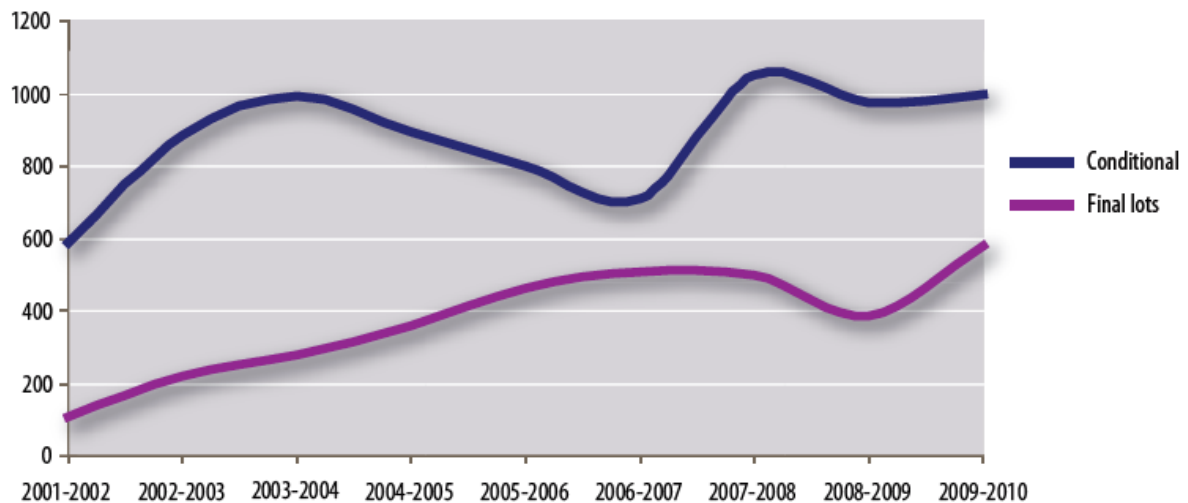
**Figure 2.4 Consumption Rates 1996-2010, Perth and Peel**



Source: Dept of Planning (2012).

EELS also identified analysed industrial lot subdivision as an indicator for industrial land development activity (Figure 2.5). The analysis found between 2001 and 2010, there was an average of 542 conditional approvals for industrial lots. EELS stated that as a 'rule of thumb', 45% of conditional approvals proceed to final approvals, which represents a lot created in the market. Using this metric, an average of 244 industrial lots were created between 2001 and 2010.

Figure 2.5 Industrial Land Subdivision Conditional Approvals



Source: Dept of Planning (2012).

## 2.3 Economic and Employment Land Monitor

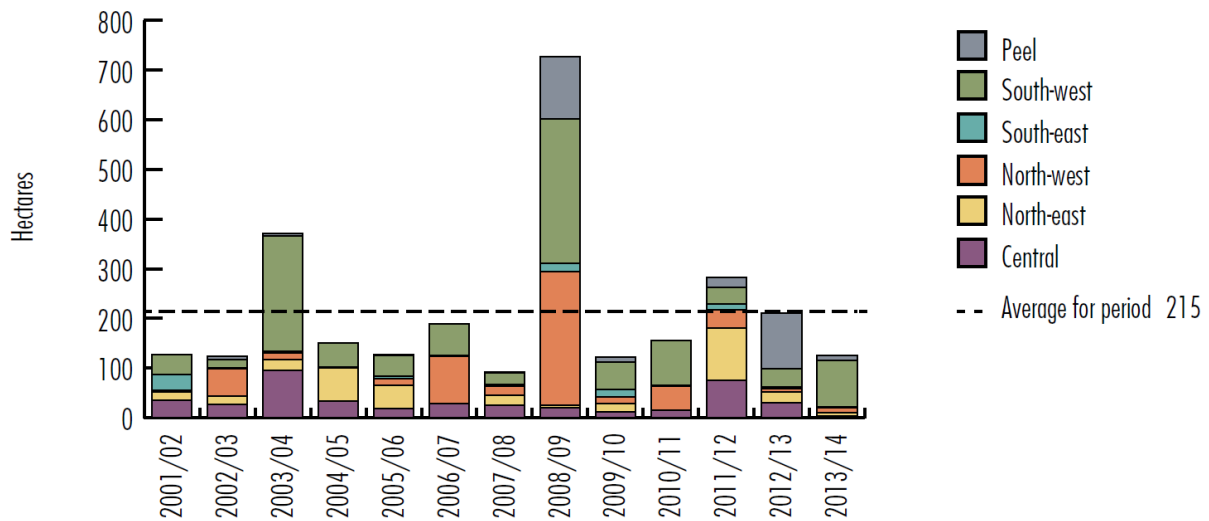
The Economic and Employment Land Monitor (EELM) was part of the Urban Development Program which tracks development of serviced land across the Perth and Peel regions. The EELM was produced in 2015, providing data as at the end of the year in 2013. The EELM was a direct product of the EELS and related to the recommended on-going approach to industrial land monitoring. EELM provided a detailed stock of industrial zoned land as well as analysis of industrial centres, industrial land consumption through subdivision and industrial market activity.

EELM highlighted that the consumption of industrial land (through subdivision) had fluctuated between 100 ha and 300 ha per year between 2001/02 and 2013/14, averaging 215 ha across the period (Figure 2.6). The EELM notes that industrial lot subdivision would only measure the net amount of industrial land, so the gross amount would be 15%-30% higher. Using this metric, the average consumption of industrial land (through subdivision) was between 247 ha and 280 ha per year between 2001/02 and 2013/14. This level of consumption represents an increase of 148%-181% above the average consumption levels highlighted in EELS.

It should be noted that just because industrial land has been subdivided does not mean that it has been consumed by the market. In the ILNS and EELS, consumption of industrial land occurred when vacant industrial land had been occupied. Furthermore, comparing Figure 2.4 from the EELS study and Figure 2.6 from EELM, there are noticeable differences between the rate of 'consumption' across individual years based on the type of consumption that occurred (i.e. vacant land being occupied or industrial land being subdivided). According to EELS, 2007/08 was the single largest year with 143 ha of industrial land being consumed. In EELM, the 2007/08 year had the lowest level of industrial lot subdivision (approximately 100) out of the whole time series.

The EELM did not address future demand for industrial land nor identify any future shortfall.

Figure 2.6 Historical Industrial Land Consumption – Final Subdivision Approvals



Source: Dept of Planning (2015).

## 2.4 North-East Sub-regional Planning Framework

The North-East Sub-regional Planning Framework (the Framework) was published in March 2018. It aims to establish a long-term, integrated planning framework for land use and infrastructure to guide future growth across the sub-region. The Framework builds on the principles established in Directions 2031 and Beyond: Metropolitan Planning Beyond the Horizon and provides guidance for future amendments to local planning strategies and structure plans as well as the staging and sequencing of urban development.

Across all the sub-regional frameworks (i.e. North-East, North-West and South Metro Peel<sup>1</sup>), demand for 4,955 hectares of industrial land to 2031 was identified. By 2031, the Framework highlights a shortage of 1,375 ha of industrial land. The Framework differs from both ILNS and EELS in that future demand and planning are extended to 2050. By 2050, demand for industrial land across the Perth and Peel region is expected to reach 10,500 ha. With an existing supply of 3,580 ha, by 2050 the Frameworks anticipate a shortage of 6,920 ha of industrial land. As such, the sub-regional planning frameworks have added an additional 8,710 ha of industrial land through identified industrial expansion and industrial investigation areas.

North Ellenbrook is located within the North-East Sub-region, which is expected to experience demand for 1,325 ha of industrial land to 2031. The Framework shows an existing supply of 760 ha of land, creating a shortage of 565 ha of industrial land in the North-East Sub-region (at 2031). In the North-East Sub-region, demand by 2050 is expected to be 2,810 ha, creating a shortage of 2,050 ha of industrial land. The industrial expansion and industrial investigation areas in the Framework provide a combined 2,820 ha of land, resulting in a surplus of 770 ha of industrial land by 2050.

It should be noted that over half of future projected demand for industrial land in the North-East Sub-region to 2050 is expected to take place after 2031.

The Framework did not provide an overview of the methodology used to calculate future demand.

<sup>1</sup> Centre Sub-Regional Framework does not identify any future demand for or shortage of industrial land. It is anticipated that future demand for industrial land will be met by the outer sub-regions.



### **Muchea Industrial Park**

The Muchea Industrial Park was acknowledged in the ILNS and EELS as a future industrial area for the Perth and Peel region. With the construction of NorthLink, the Muchea Industrial Park is currently being developed. Harvis is currently developing a 150 ha portion of the Muchea Industrial Park as part of their Northern Gateway development. Precinct 3 is currently undergoing structure planning and has already had sites purchased by both investors and owner/operators. A number of development approvals have been submitted for the area as well.

In total, there is 1,150 ha of industrial land across the Muchea Industrial Park. While some of the area is already occupied (i.e. WAMIA and AMS), there is a considerable amount of available industrial land.

The Framework does not recognise nor account for the Muchea Industrial Park, potentially skewing the future anticipated supply shortage or surplus of industrial land for the North-East Sub-region.

Lucid Economics was engaged in late 2020 to review the Draft Muchea Industrial Park Structure Plan, including the Muchea Industrial Park Land Demand and Economic Assessment (November 2019).

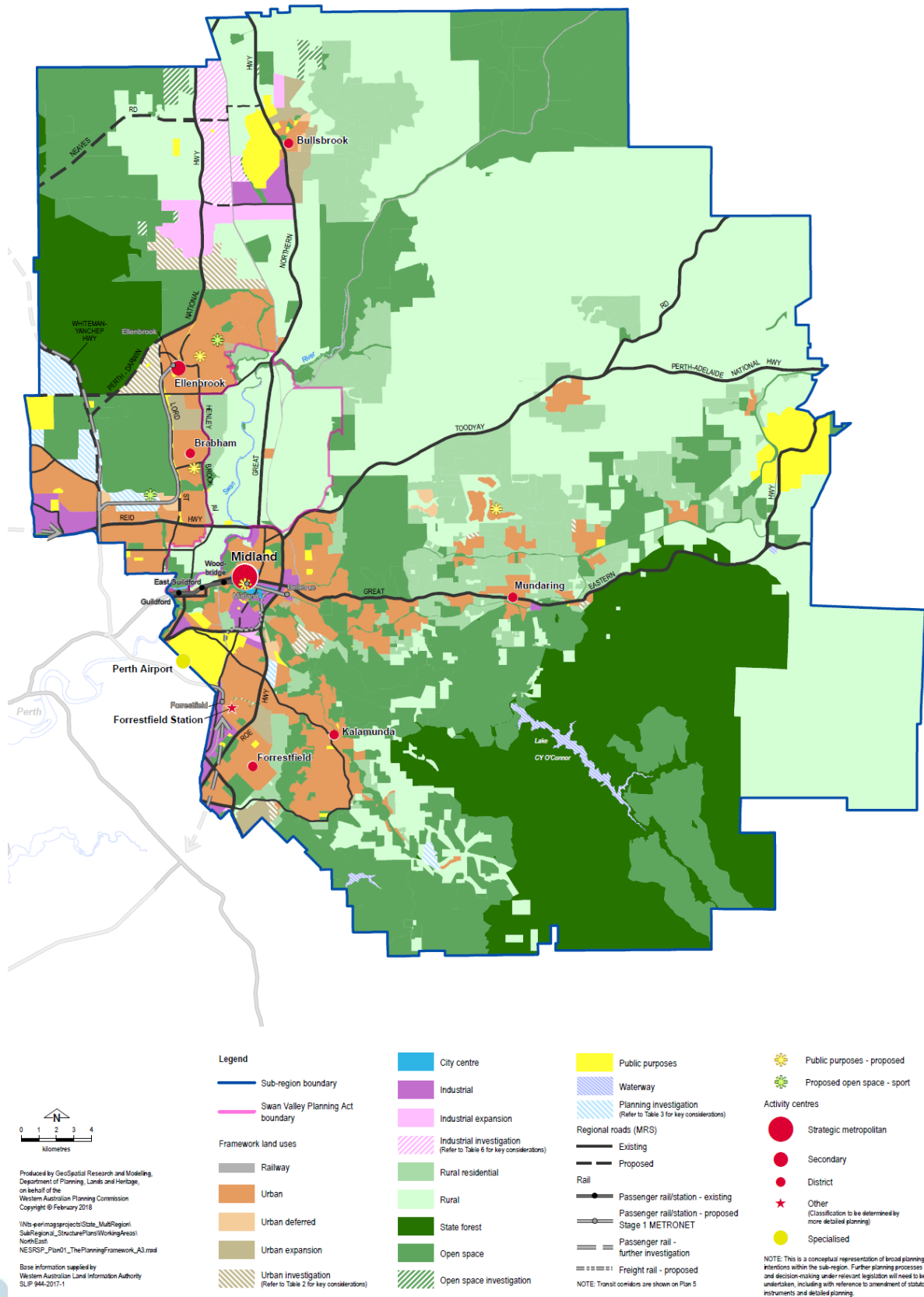
**Table 2.4 Industrial Land Demand and Supply (by Sub-region)**

	North-East	North-West	South-Peel	Total
<b>Demand</b>				
To 2021	545	345	1,150	2,040
2022 to 2031	780	490	1,645	2,915
Post 2031	1,485	935	3,125	5,545
<b>Total</b>	<b>2,810</b>	<b>1,770</b>	<b>5,920</b>	<b>10,500</b>
<b>Supply</b>				
Industrial	760	1,040	1,780	3,580
Industrial Expansion	1,370		3,140	4,510
Industrial Investigation	1,450	2,220	530	4,200
Total Supply	3,580	3,260	5,450	12,290
<b>Shortage/Surplus</b>	<b>770</b>	<b>1,490</b>	<b>-470</b>	<b>1,790</b>

Note: Central Sub-region not included due to a lack of future industrial land.

Source: DPLH (2018).

Figure 2.7 North-East Sub-region



Source: DPLH (2018).

### 3. Economic Context

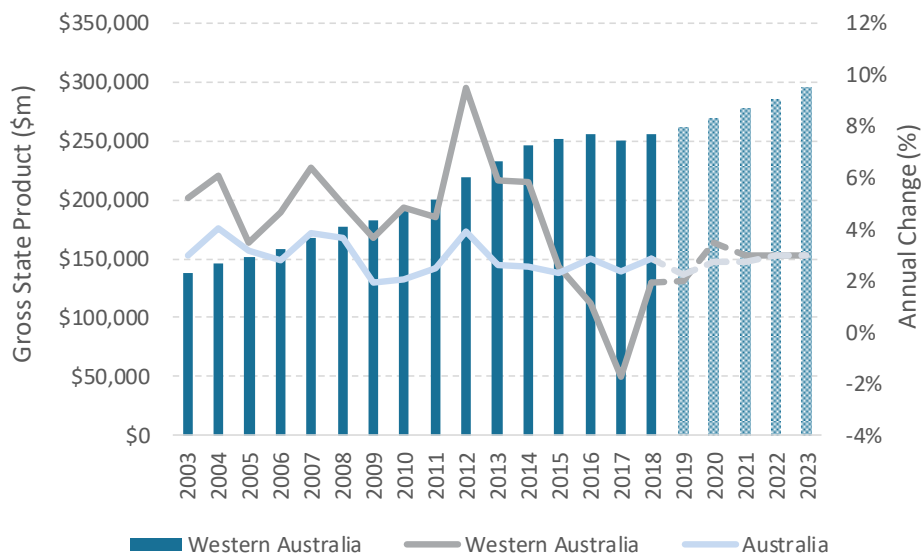
The economy of Western Australia has stabilised over the last two years after experienced considerable growth during the mining investment boom as well as the subsequent operational phase. During the mining investment boom, the economy benefited from the considerable business investment made into the state and as the major projects became operational Gross State Product continued to climb on the back of considerable new export volumes, however, the decline in business investment meant that employment became stagnant and the unemployment rate increased over time. While there has been a recent increase in employment, the unemployment rate remains above the national average.

The experience over the last decade is somewhat typical for Western Australia in that there was an economic boom followed by a subsequent downturn. However, it should be noted that the most recent cycle was extreme and the boom experienced is unlikely to repeat itself in the future. The State's economy is heavily influenced by movements in the resource and mining sector. The Perth and Peel metropolitan regions will experience the same movements as the State economy.

Demand for industrial land is impacted by two key, inter-related factors; movements in the resource and mining sector and population growth. As activity in the resource and mining sector increase, so too will employment in the State, which then creates a catalyst for population growth. As activity in the mining and resource sector and population increase, there is an increase in industrial activity, which creates demand for industrial land. As such, container movements through the Port of Fremantle and population growth in the Perth and Peel region are aligned.

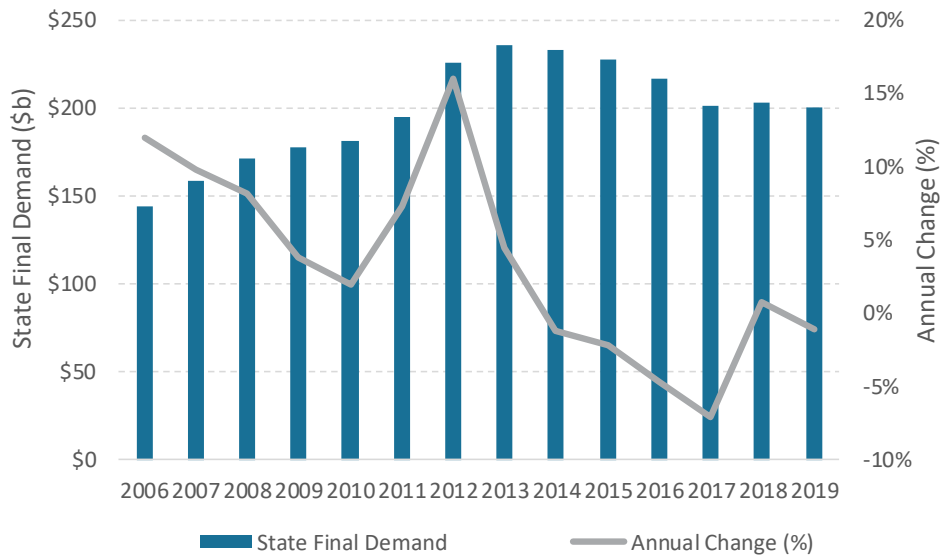
The current and historical economic context supports the relatively high level of demand for industrial land during the recent past as well as the subsequent downturn. More recently, the data would indicate an increasing level of demand for industrial land, but not to the extent experienced during the mining investment boom.

**Figure 3.1 Gross State Product, Western Australia**



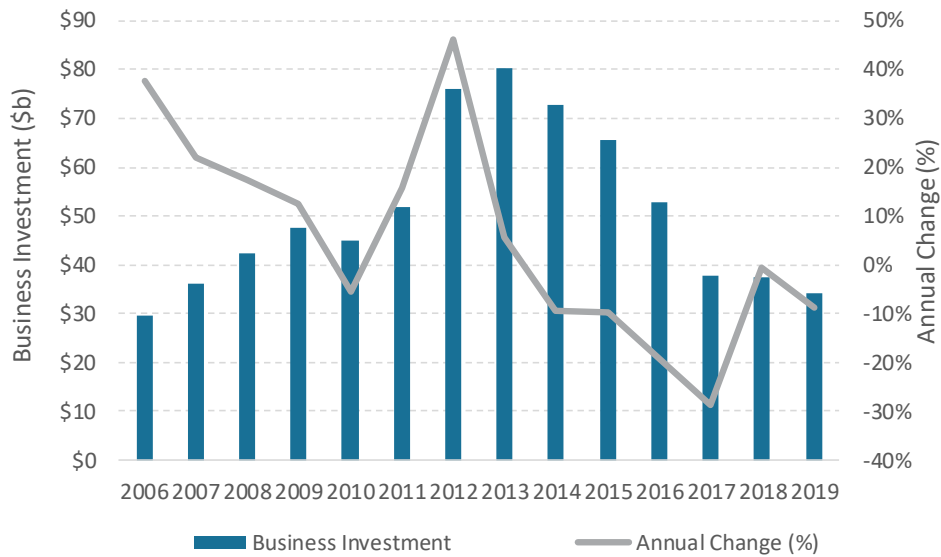
Note: Financial year.  
Source: ABS (2019a).

**Figure 3.2 State Final Demand, Western Australia**



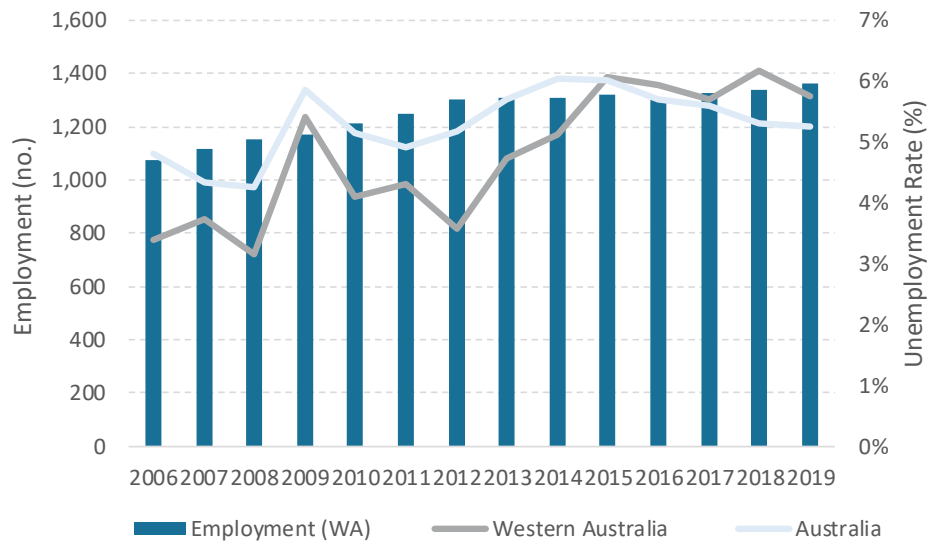
Note: Financial year.  
Source: ABS (2019a).

**Figure 3.3 Business Investment, Western Australia**



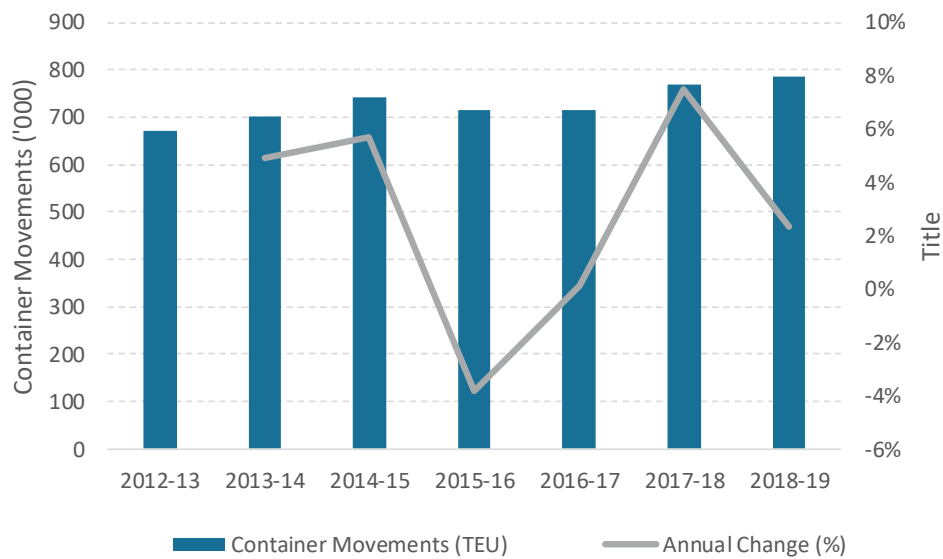
Note: Financial year.  
Source: ABS (2019a).

**Figure 3.4 Employment and Unemployment Rate, Western Australia**



Note: Financial year.  
Source: ABS (2019b).

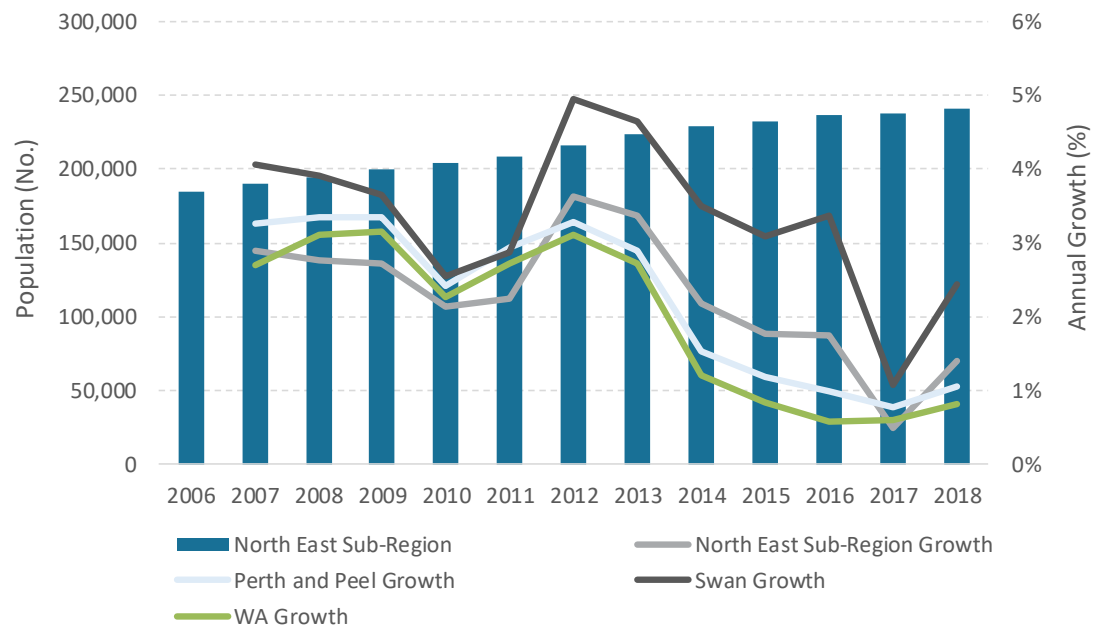
**Figure 3.5 Container Movements (TEU), Port of Fremantle**



Source: Fremantle Ports (2019).



Figure 3.6 Population, North-East Sub-region



Note: Estimated resident population, as at 30 June.  
Source: ABS (2019c).

## 4. Industrial Land Market in Perth

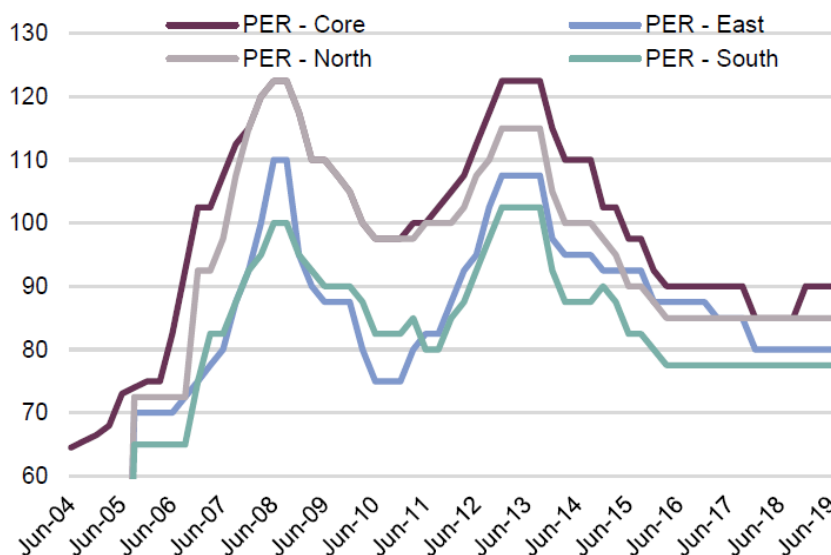
### 4.1 Current Industrial Land Market

An increase in commodity prices, major resource investments underway in the Pilbara by BHP, Rio Tinto and FMG as well as considerable public infrastructure investment has seen the industrial property market in Perth turn a corner.

Agents have reported increased activity from both tenants and investors. While rents and land values remain stable, the weight of capital is driving demand for prime industrial assets. However, the market seems very focused around Jandakot Airport, Perth Airport, Hazelmere, Kenwick, Maddington and Forresterfield, as opposed to more outlying areas around the region.

In terms of development activity, demand has been driven by the logistics sector (connected to the resource and mining sector). Development has been focused in the Eastern and Northern precincts, namely in Maddington, Kenwick and Hazelmere due to the availability of private, development-ready land. Wangara, Gnangara and Malaga are the active areas for industrial development in the Northern precinct.

Figure 4.1 Average Prime Net Face Rents by Precinct (\$)



Source: Savills (2019).

Demand for available land for development in Bullsbrook has been very low compared to other areas north of Perth such as Wangara or Gnangara. Agents and developers consulted indicated that the area is not at the same development ready state, so not currently as accessible to the market. At the same time, they indicated that the market views areas like Bullsbrook as being too far away from core industrial precincts such as Kewdale and Welshpool. Sentiment seemed to indicate that after NorthLink is completed, the market would move further north, but potentially with more of a focus on the Muchea area, given its direct access to Northlink and its readiness for development.

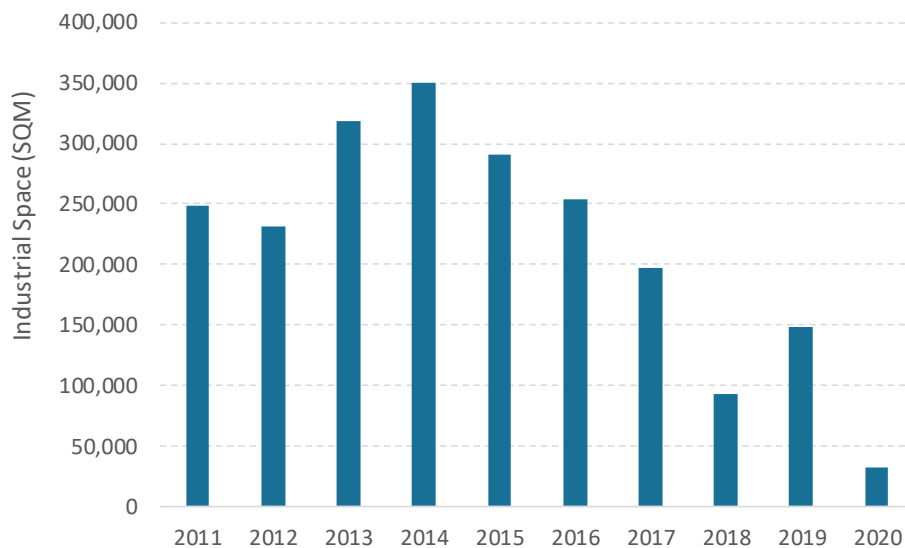
Industrial land in North Ellenbrook is not currently recognised by the market as a future opportunity, most likely due to land elsewhere that is more readily accessible and in demand by industrial land users.

## 4.2 Demand for Industrial Land

The demand for industrial land in the Perth and Peel region has been relatively subdued over the recent past, with industrial completions per year well below historical norms. Figure 4.2 shows the amount of industrial space completed by year. While the regional boundaries of this data do not align with the Perth and Peel Metropolitan regions, it would capture the majority of recent industrial developments, as there has not been a considerable volume of industrial space developed in the outer sub-regions.

Analysis of the current industrial property market would further indicate that demand for industrial land in the short-term will continued to be focused in Wangara, Gnangara and Malaga to the north of the City; Maddington, Kenwick and Hazelmere in the east and Jandakot in the south.

**Figure 4.2 Industrial Space Supply Increases (SQM), Perth Region**



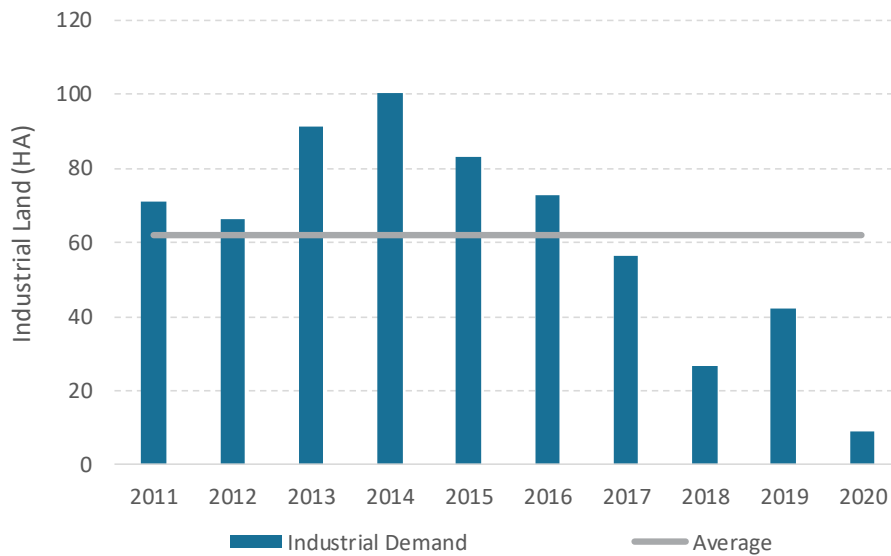
Note: Buildings over 2,000 sqm.  
Source: Colliers (2019).

Using data from Colliers regarding the recent development of industrial space, an estimate of the recent demand for industrial land has been prepared. While industrial land has not been tracked by Colliers, it has been assumed that the facilities delivered have an average site cover ratio (i.e. the ratio of the building footprint and the entire site area) of 50% and include an area of 30% dedicated to roads and other buffers.

Using this approach, there has been demand for 618 ha of industrial land across the Perth region over the last ten years (i.e. 2011 to 2020), which an average annual consumption or take-up of 61.8 ha. It should be noted that in this instance average annual consumption is based on the development of new industrial facilities and vacant industrial land becoming occupied with a facility.

The average annual consumption of 61.8 hectares over the last decade is representative of recent economic context and relatively subdued nature of the industrial sector since the mining investment boom. This level of development more closely aligns to historical levels of development (i.e. 80.0 ha cited in the ILNS and 99.5 ha per year cited in EELS), which would have captured periods of very strong growth. This historical evidence varies greatly compared to various future projections of industrial land demand, particularly from the EELS and the sub-regional planning frameworks (Table 4.1). Projected demand from EELS (i.e. 189.0 ha per year) is three times the estimated historical average over the last decade (i.e. 61.8 ha). Future demand highlighted in the sub-regional planning frameworks (i.e. 291.5 ha) is 4.7 times the recent level of demand.

Figure 4.3 Industrial Land Demand, Perth Region (HA)



Note: Gross hectares.

Source: Colliers (2019); Lucid Economics

Table 4.1 Comparison of Industrial Land Demand

	Timeframe	Demand Total (ha)	Annual Average (ha)
ILNS (WA Tomorrow)	2006-2030	3,154	131.4
ILNS (High Growth)	2006-2030	1,931	80.5
EELS	2006-2031	4,726	189.0
Sub-regional Planning Frameworks	2015-2031	4,955	291.5
Historical Average	1988-2001	1,040	80.0
Historical Average	1996-2010	1,394	99.6
Perth Region Actual	2011-2020	618	61.8

Note: Not all figures align to the Perth and Peel Metropolitan Regions. Total demand for industrial land 1988-2001 is inferred as the total demand figure was not provided in the ILNS.

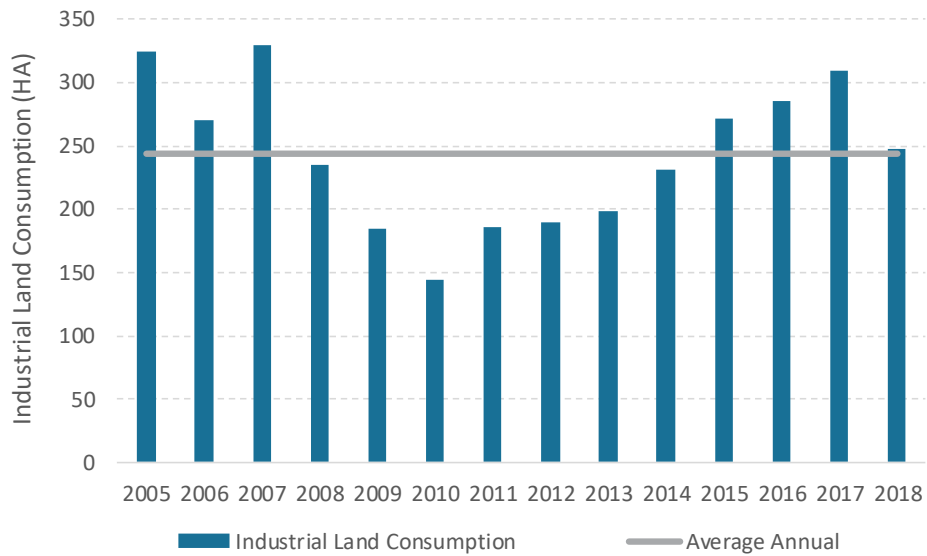
Source: Syme Marmion (2008); Dept. of Planning (2012); DPLH (2018); Colliers (2019); Lucid Economics

Comparisons of industrial land consumption rates with Melbourne and Sydney would also indicate that estimates made by EELS and the sub-regional planning frameworks are ambitious and that historical averages are more likely reflective of the Perth and Peel Metropolitan regions capacity to grow in the future. From 2005 to 2018, the Melbourne Metropolitan region consumed an average of 243.5 ha of industrial land and over the decade to 2017, the Greater Sydney region experienced an average take-up rate of 155.5 ha of industrial land.

Given the relative size of the Perth and Peel Metropolitan regions and its economic dynamics, it would seem unlikely that the region would be capable of consuming an average of 189.0 ha per year (EELS) or 291.5 ha per year (Sub-regional Planning Frameworks), relative to the evidence from Melbourne and Sydney. At the same time, the historical average of between 61.8 ha and 99.6 ha per year would seem appropriate for the Perth and Peel Metropolitan regions based on this comparison.

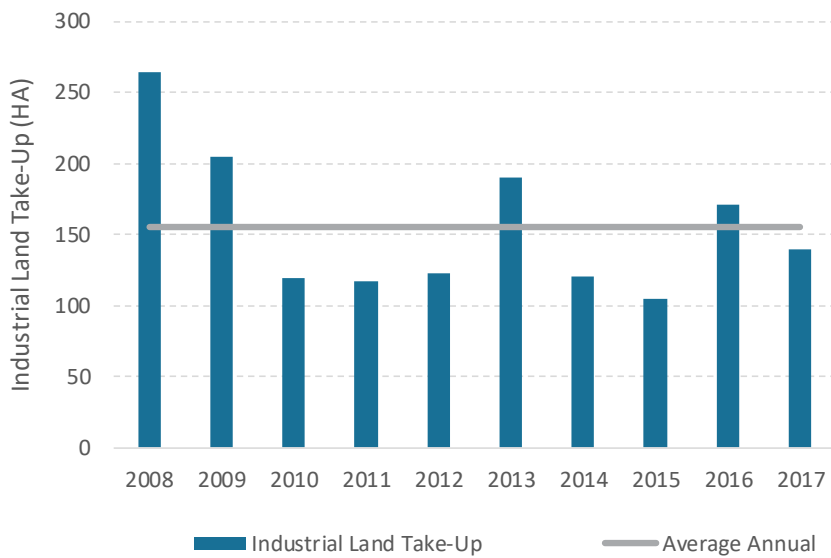
It should be noted that both the Victorian Government and New South Wales Government have similar definitions of industrial consumption or take-up, which related to vacant industrial land becoming occupied. This definition would align to the ILNS methodology as well as how we have estimated recent industrial land consumption in the Perth region.

Figure 4.4 Industrial Land Consumption, Metropolitan Melbourne (HA)



Note: Net hectares.  
Source: ELWP (2019).

Figure 4.5 Industrial Land Demand, Greater Sydney (HA)



Source: Dept. of Planning and Environment (2018).



## 5. Summary

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This assessment has identified a number of key findings that will have an impact on your planned project at North Ellenbrook, including:

- Both EELS and the Sub-regional Planning Frameworks likely overestimate the future requirement for industrial land across the Perth and Peel Metropolitan regions by a considerable margin
- The majority of future industrial land demand highlighted in the Sub-regional Planning Frameworks will take place between 2031 and 2050, which is so far into the future it is impossible to understand likely future demand
- The North-East Sub-region Planning Framework does not include the Muchea Industrial Park (1,150 ha), which is more advanced in its planning and development than the areas marked for industrial expansion and industrial investigation
- The Muchea Industrial Park can accommodate considerable industrial land demand for the North-East Sub-region and is readily accessible today
- The North-East Sub-region Planning Framework shows a surplus of 119 ha by 2031 (under very ambitious demand projections)
- The 270 ha parcel of industrial land held by Parcel Property makes up a relatively small portion (7.5%) of the current future supply of industrial land in the North-East Sub-region (3,580 ha), and including the Muchea Industrial Park (1,150 ha), its proportion is even smaller (5.7%)

In the current market, land in Hazelmere and Forrestfield will be developed in the near future, meeting some of the expected future demand. The Austral Brick site in Malaga, which is in the North-East Sub-region, has recently sold and the 11 ha property is to be subdivided and redeveloped, providing additional supply to future industrial needs in the region. Additionally, industrial developments in Bullsbrook and Muchea are very advanced and will be able to provide supply for likely all of the future demand for industrial land in the North-East Sub-region.

Given the significant overestimate of future demand contained in both EELS and the Sub-regional Planning Frameworks (including the North-East Sub-region Planning Framework) as well as the considerable industrial supply contained in the Muchea Industrial Park and Bullsbrook area, your 270 ha parcel of industrial expansion land will not be required for industrial uses.

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