

**This document was prepared as a background report to input into the preparation of the Growth Corridor Plans.**

**The report represents the view of the consultant only and not the Government.**

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# **Industrial Land in Melbourne**

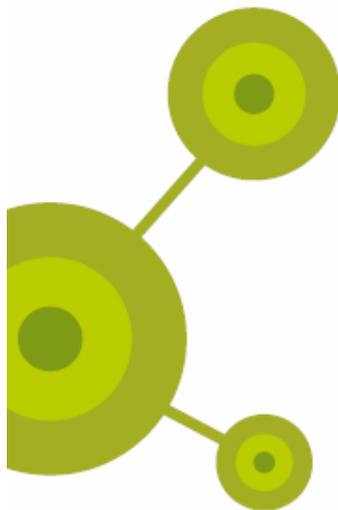
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**An analysis of the use, zone, distribution and  
consumption of industrial land**

**Undertaken by Spatial Economics for the  
Growth Area Authority  
October 2010**



**Spatial Economics**

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## 1.0 IMPLICATIONS & CONCLUSIONS

Section 1 of the following report is a summary of the major conclusions and implications in terms of the quantum, location and composition of historic, current and projected demand supply of industrial land across metropolitan Melbourne. Its prime objective is to further inform the future industrial land requirements within the Investigation Area.

The UDP identifies the location and consumption of land. To identify the use of the land, Spatial Economics has cross-tabulated the land parcels with industry types using the Australian Business Register (ABR). This gives a comprehensive understanding of the location and consumption of industrially zoned land by the type of industry that is located on the site. The type of industry is identified using 1-digit ANZSIC codes.

The report illustrates the data in various forms: first investigating the supply of industrial land across metropolitan Melbourne and the supply of land in the industrial nodes. The consumption of industrial land is shown for metropolitan Melbourne and the industrial nodes. The type of industries is shown for both supply and consumption. The data also provides information on the number and size of lots. With this data, it is possible to investigate issues including which industries use large lots and the distribution of specific types of industries.

Sections, 4, 5 and 6 of the report detail the existing stock of industrial land including industry composition and consumption of industrial land, these sections are presented (including data appendices) as a statistical resource to contribute to the understanding of industrial land consumption and related composition.

### Gross Future Land Requirements

#### Adequacy within the Urban Growth Boundary

Across metropolitan Melbourne, there are approximately 23,798 gross hectares of zoned industrial land, of which 6,805 gross hectares are vacant. Within the combined industrial nodes of metropolitan Melbourne, there are an estimated 11,098 gross hectares of zoned industrial stock, of which 4,399 gross hectares are vacant. The vacant land stock in the industrial nodes represents 64% of all vacant zoned industrial land across metropolitan Melbourne. Some 3,150 net hectares<sup>1</sup> of land have been identified for future industrial use across metropolitan Melbourne.

During 2009, consumption of industrial land decreased by approximately a third to 225 hectares. This decline is coming off a very high level of consumption in 2008 of 339 hectares. Over the last five years, land consumption within the designated industrial nodes accounted for 81% of total industrial land consumed across metropolitan Melbourne. In 2009, 193 hectares were consumed in the industrial nodes, compared to an average of 230 hectares each year from 2004 to 2009<sup>2</sup>.

Melbourne's six industrial nodes within the current Urban Growth Boundary (UGB) are estimated to have sufficient land stocks of zoned and unzoned land to satisfy 27 years of demand. This is based on the current methodology employed by the Urban Development Program.

However, outside of the Industrial Nodes within the established urban area of Melbourne, there is an estimated net developable industrial land stock of 1,696 ha, of which 844 net developable hectares is zoned Special Use located in Mornington Peninsula. This land is intended for port uses at Western Port and is characterised by specific conditions for specialised port uses only (not general industrial land) and therefore not considered suitable for general industrial uses.

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<sup>1</sup> Note: Gross figure not published in 2009 UDP Annual Report or related data releases

<sup>2</sup> Sourced from 2009 Urban Development Program Annual Report



Based on historical demand patterns outside of the industrial nodes and employing the adequacy technique employed by the UDP there is approximately 17 years of industrial land supply (excluding Special Use land located in Mornington Peninsula).

It is assumed that once the supply of industrial land outside of the Industrial Nodes is exhausted, the demand will be transferred to the Industrial Nodes. This would reduce the years of industrial land supply within the Nodes to 24 years.

#### **Adequacy by Planning Region**

To establish the quantum of industrial land required by Planning Region, the existing adequacy of each Planning Region needs to be established. It is recognised that the Investigation Areas are only located within the West, North and South Planning Regions and these regions are also the location of the existing Industrial Nodes. This is a metropolitan assessment of adequacy (years of supply) and factors in the depletion of industrial stocks within the Inner and East Planning Regions. It is based on recent (2004 to 2009) industrial land consumption at a regional level, identified net developable areas sourced from the 2009 UDP and removes the Special Use zoned land located in Mornington Peninsula from the supply stocks. In summary, the years of industrial land supply by Planning Region are:

- West - 19 years of supply;
- North - 30 years of supply;
- South - 28 years of supply;
- East - 22 years of supply; and
- Inner - 24 years of supply.

Across metropolitan Melbourne, it is estimated that there is currently 25 years of industrial land supply.

#### **Land Requirements - Investigation Areas**

As stated previous, based on recent demand trends and existing stocks of zoned and unzoned industrial land, there is approximately 24 years of industrial land supply across the Industrial Nodes, this is in the context of depleted industrial land stocks outside of the Nodes.

Analysis has been undertaken to establish the land requirements to provide for an additional 15 years of industrial land supply within the Investigation Areas i.e. outside of the current Industrial Nodes.

To meet an additional 15 years of industrial land demand approximately 4,223 net developable hectares are required. It is estimated that 6,702 gross hectares are required to achieve the stated net developable area<sup>3</sup>. The gross area can be increased or decreased depending on the site specific land development constraints. The incidence of native vegetation, terrain (slope) and existing high value uses are the major factors that influence the quantum of gross land requirements. Further investigation is required on site specific land parcels to refine the gross land requirements.

#### **Land Requirements - Planning Region**

A detailed assessment has been undertaken to establish the years of industrial land supply within each Planning Region. A regional assessment was undertaken as it has been established that industrial land will be depleted over the next 18 years outside of the industrial nodes, there are no future identified industrial land stocks within the Airport Node, the East and Inner Regions. A metropolitan demand and supply approach has been undertaken to establish the quantum of industrial land to provide for an additional 15 years of supply.

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<sup>3</sup> Ratio of gross to net for future large industrial parcels sourced from 2008 UDP



This assessment identifies a total of 4,223 net developable hectares to satisfy an additional 15 years of supply across metropolitan Melbourne, this would result in a total supply of industrial land stocks to satisfy 40 years of demand.

Due to the existing stock and differing regional demand projected land consumption rates, differing quantum of land are required to achieve an even spread of 40 years land supply per Planning Region. It is recognised that the East and Inner Planning Regions have no scope for increased industrial land supply, therefore future demand for these areas once existing stock are depleted have been spread evenly across the West, North and South Planning Regions.

To achieve a total of 40 years land supply (equating to additional 15 years supply across metropolitan Melbourne) within each Planning Region where the Investigation Areas are located the following quantum of land is required:

- West Region - 2,359 net developable hectares (3,744 gross hectares);
- North Region - 672 net developable hectares (1,066 gross hectares); and
- South Region - 1,192 net developable hectares (1,891 gross hectares).

However, if the policy objective is to achieve an additional 15 years supply (equating to additional 15 years supply across metropolitan Melbourne) for each Planning Region where the Investigation Areas are located the following quantum of land is required:

- West Region - 1,733 net developable hectares (2,751 gross hectares);
- North Region - 1,020 net developable hectares (1,620 gross hectares); and
- South Region - 1,471 net developable hectares (2,334 gross hectares).

Based on the methodology employed by the Urban Development Program to estimate the number of years of industrial land supply, it is estimated that there is currently 24 years of industrial land stocks within the Industrial Nodes. This estimate is based on the depletion of all industrial land outside of the Nodes and the transfer of demand to the Industrial Nodes.

In summary, the years of industrial land supply by Planning Region are: West - 19 years of supply; North - 30 years of supply; South - 28 years of supply; East - 22 years of supply; and Inner - 24 years of supply. Across metropolitan Melbourne, it is estimated that there is currently 25 years of industrial land supply.

In total, to meet an additional 15 years of industrial land demand approximately 4,223 net developable hectares are required. It is estimated that 6,702 gross hectares are required to achieve the stated net developable area.

### Composition of Recent Industrial Land Consumption

#### Industrial Uses - Premises

As at 2009, there were approximately 45,000 individual business premises on industrial zoned land. The analysis indicates that there are numerous business enterprises located on industrial zoned land that are not 'traditionally' perceived as industrial uses, such as retail trade, administrative services, arts & recreation etc.

The top 50% (in terms of the number of premises) of industry types that occupy zoned industrial land across metropolitan Melbourne include:

- Manufacturing - 7,900 premises (17% total premises);
- Wholesale trade - 5,700 premises (13% total premises);
- Rental, hiring & real estate services - 5,200 premises (11% total premises); and
- Construction - 4,900 premises (11% total premises).



Across metropolitan Melbourne there was at 2009, approximately 1,700 Transport, Postal and Warehousing premises. This equates to 4% of all business premises located on industrial land.

From 2000 to 2009 there was approximately 5,900 business premises constructed on industrial land across metropolitan Melbourne, 53% of which were located within the Industrial Nodes. In terms of the top five industry types that have recently been constructed on industrial land across metropolitan Melbourne include:

- Manufacturing - 1,020 premises (58% located within the nodes);
- Wholesale Trade - 1,009 premises (53% located within the nodes);
- Construction - 966 premises (50% located within the nodes);
- Rental, hiring & real estate services - 648 premises (53% located within the nodes); and
- Professional, scientific & technical services- 456 premises (40% located within the nodes).

From 2000 to 2009 there was 280 premises constructed on industrial land for the purpose of transport, postal and warehousing services.

#### **Industrial Uses - Area**

From 2000 to 2009 a total net area (with identified premises) of approximately 1,900 ha were consumed within the industrial nodes and 1,000 ha outside of the nodes in metropolitan Melbourne. Approximately 50% of the total net area consumed was within three industry types namely (Nodes and metro Melb):

- Wholesale Trade (19% or 540 ha - metro Melbourne);
- Manufacturing (17% or 501 ha - metro Melbourne); and
- Construction (11% or 326 ha - metro Melbourne).

Transport, postal & warehousing consumed 205 ha of industrial from 2000 to 2009, representing 10% of land consumption within the Nodes and 7% across metropolitan Melbourne.

#### **Future Land Requirements - Core Industry Types**

The core industry types of Manufacturing, Wholesale Trade, Transport & Warehousing and Construction are critical for Victoria's economics growth and competitiveness. Subsequently ample land stocks to accommodate such uses are imperative to facilitate the growth of these industry types.

The core industry types represent 55% of all newly constructed premises on industrial land across metropolitan Melbourne as measured from 2000 to 2009. In terms of net land consumption these industry types accounted for 54% of total consumption. The average site area for recently consumed core industry types include:

- Manufacturing - 4,900sqm;
- Wholesale Trade - 5,350sqm;
- Transport & Warehousing - 7,315sqm; and
- Construction - 3,400sqm.

It was estimated previously that to achieve an additional 15 years of land supply outside of the current industrial nodes a total of 4,223 net developable hectares are required. The net developable area to achieve an additional 15 years land supply to 'support' the core industry types is 2,280 ha, by specific industry type include:



- Manufacturing - 730 ha;
- Wholesale Trade - 775 ha,
- Transport & Warehousing - 296 ha; and
- Construction - 479 ha.

The above is based on recent consumption patterns (2000 to 2009) in terms of industry types and recent land area usage.

### Industry Specialisations

Analysis of particularly recent construction (2000 to 2009) of industrial premises by industry type and the existing usage of occupied industrial land across the Industrial Nodes and Planning Regions illustrate that the industry structure is relatively uniform or more specifically the core industry types are relatively evenly distributed across metropolitan Melbourne. Core industry Types include: Manufacturing; Wholesale Trade, Transport & Warehousing, and Construction.

However, there are subtle spatial variances of industry specialisations emerging. In summary:

- West Region - higher dominance of Transport, Postal & Warehousing services, 56% of all recent (2000 to 2009) land consumption for this industry type across the Industrial Nodes was located in the West Node;
- North Region - a relative concentration of both Manufacturing and Construction services;
- South Region - a relative concentration of both Manufacturing and Construction services; and
- East and Inner Region - a relative concentration of Professional, Scientific and Technical services.

The West, North and South Regions (inclusive of their respective Nodes) have an even representation of Wholesale Trade premises.

### Industrial Zone Types

Analysis of the zone type by industry type, particularly for recent land consumption, indicates that generally there is no direct influence or linkage to the industrial use. Rather, it appears to be a function of the existing distribution of zone types. This observation has been supported via numerous consultations with local industrial land developers. However, there are exceptions to this observation which is outlined below.

#### Industrial 1 (IN1Z)

Across metropolitan Melbourne, 58% of all recently constructed premises on industrial land was on land zoned Industrial 1 (IN1Z). In terms of net land area consumed (ha), Industrial 1 zoned land represented 38% of the total consumption and 51% of the total occupied zoned land stocks.

Of all the industry types that have been recently constructed there is relatively a uniform pattern in terms of the proportional consumption of Industrial 1 zoned (IN1Z) land. Industrial users range from Manufacturing to Administrative & Support services.

#### Business 3 zoned (B3Z)

Business 3 zoned (B3Z) land is the next major zone type in terms of the quantum of recently constructed premises on industrial land - representing 19% of all recent construction activity. In terms of net land area consumed (ha), Business 3 zoned land represented 11% of the total consumption and 11% of the total occupied zoned land stocks.



There is strong evidence that indicates Business 3 zoned land in terms of industry composition is the zone type preferred for ‘non-core or traditional’ industrial land users such as Retail Trade, Financial & Insurance Services, Education & Training, Health Care & Social Assistance and Professional & Scientific Services.

### **Industrial 3 (IN3Z)**

Across metropolitan Melbourne, 12% of all recently constructed premises on industrial land was on land zoned Industrial 3 (IN3Z). In terms of net land area consumed (ha), Industrial 3 zoned land represented 10% of the total consumption and 11% of the total occupied zoned land stocks.

Recent industry uses on Industrial 3 (IN3Z) zoned land are predominantly Wholesale Trade, Construction and Manufacturing. This trend simply reflects the majority of total new construction type trends.

### **Industrial 2 (IN2Z)**

The Industrial 2 (IN2Z) zone has traditionally been applied to allow industries that require separation due to their off-site impacts (e.g. offensive industries). Across metropolitan Melbourne, 9% of all recently constructed premises on industrial land was on land zoned Industrial 2 (IN2Z). In terms of net land area consumed (ha), Industrial 2 zoned land represented 28% of the total consumption and 26% of the total occupied zoned land stocks.

In terms of industry uses, recent consumption of this zone type is distributed relatively evenly compared to the total distribution of industry types, specifically Manufacturing, Wholesale Trade, Transport & Warehousing and Rental, Hiring & Real Estate Services. Manufacturing uses is not over-represented in terms of recent consumption of Industrial 2 (IN2Z) zoned land.

Based on recent consumption of Industrial 2 (IN2Z) zoned land the zone type appears to be utilised as a general industrial type zone, with limited recent application of ‘noxious’ type industrial uses.

Based on the spread of business uses of recently consumed industrial land industrial and anecdotal evidence from the development industry it is apparent that industrial zone types have limited influence on the specific business type use. However, it is evident that Business 3 (B3Z) zoned land supports non-core/traditional industrial uses such as business type services. Similarly, anecdotal evidence from the development industry indicates that Business 3 zoned land relative to other zone types is sold at ‘premium’ prices due to relative scarcity and ‘higher order’ uses.

The up-take of the Industrial 1 and 3 zones are utilised as a general industrial type zone, i.e. even spread of industry types. Similarly it is evident that the take-up of Industrial 2 zone land is used for general industrial purposes.

After the analysis of existing zoned stock and recent consumption (area and business premises) it is recommended that across the industrial nodes that, at the minimum, 10% of existing and future unzoned (land designated for employment purposes) be zoned Business 3 (B3Z). It is suggested that this proportion should be up to 20% of the total future stocks due to macro trends in the industrial sector of increased technology based industries requiring business type support services and increased employees. This additional buffer would also cater for likely increased demand levels from industrial/commercial land supply pressures within the established urban area.

The quantum/proportion of future IN2 zoned land specifically for the use of ‘noxious’ industries is seen as a strategic decision. There is limited recent construction of noxious type industries and the take-up of this zone type has been for general industrial uses.



### Lot Size Requirements

The existing lot size distribution pattern is largely a function of historic sub-division activity and the demand for certain lot sizes to meet specific business requirements. Relative to residential land, industrial land has a wide variance in terms of lot sizes, ranging from small to large lot sizes. Previous experience in terms of establishing future lot size requirements is highly speculative, lot size requirements are highly dependent on future industrial uses and changing industry structures will alter site area needs. For example the recent trend of warehousing and transport services requiring large allotments to meet business requirements.

The vast majority (80% of all business uses) of recent industrial land consumption was for lots sized less than 5,000 sqm. However, in terms of the total net area consumed this lot size cohort consumed 31% of the total net industrial land consumption. Whereas;

- 6.5% of all recent industrial land users/premises was on lots 0.5 to 1 ha in size (11% of total net land area consumed);
- 12.9% of all recent industrial land users/premises was on lots 1 to 5 ha in size (36% of total net land area consumed); and
- 0.7% (41 premises) of all recent industrial land users/premises was on lots greater than 5 ha in size (22% of total net land area consumed).

The predominant industry types that have recently consumed large lots (greater than 5 ha) include:

- Manufacturing;
- Wholesale Trade; and
- Financial & Insurance Services.

It is recommended that the lot size distribution within unzoned/future industrial areas of metropolitan Melbourne is 'driven' by market demands at the point of subdivision. Furthermore it is recommended to facilitate this outcome that land included for future industrial land stocks is relatively flat, diverse ownership structure and is characterised by relatively large 'parent' parcels.

### Non-Traditional Industrial Users

Analysis of the industry use in terms of recent industrial land consumption highlights that there is a significant proportion that can be described as non-core or non-traditional industrial uses. Traditional or core industry uses include: Manufacturing, Wholesale Trade, Transport & Warehousing and Construction. Non-core industry users include retail trade, Professional, Scientific & Technical Services, Financial & Insurance Services, Education & Training and Health Care etc.

This trend is also illustrated with metropolitan Perth and is highlighted from their Industrial Land Use Survey - 1997. The growth of non-traditional uses within industrial areas is primarily due to land availability and relatively cheaper land/lease costs compared to prime commercial areas.

In terms of recent construction of premises on industrial land, 55% were traditional/core users as mentioned above. In terms of net land area, these premises accounted for 54% of the net land area consumed. The average land requirements by non-core industry types (recently consumed) across metropolitan Melbourne include:

- Retail Trade - 4,000sqm;
- Professional & Scientific Services - 4,900sqm;
- Financial & Insurance Services - 9,600sqm;



- Administrative Services - 3,950sqm;
- Accommodation & Food Services - 4,200sqm;
- Health Care & Social Assistance - 6,700sqm;
- Arts & Recreation Services - 4,450sqm; and
- Information Media & Telecommunications - 2,700sqm.

Based on both the volume of non-core industrial users relative to the proportion of net land consumption there appears limited scope for a major shift in locational demand to or adjacent to activity centres. This is primarily due to relative costs of land and the lack of availability of large tracts of land within established activity centre locations. However, there appears scope to potentially encourage non-core industrial users such as financial, education, administrative type users that require relatively large land parcels to newly established/greenfield type activity centres.

This shift in demand could be accommodated within Business Park type estates that have access to public transport that supports higher density employment uses.



## 2.0 INTRODUCTION

Spatial Economics has been commissioned by the Growth Area Authority (GAA) to investigate the distribution, zone and use of industrial land for the metropolitan area of Melbourne. Currently the Urban Development Program (UDP) tracks the location and consumption of individual industrial lots. The UDP does not identify the type of industry that is located on these individual lots.

The GAA is seeking to understand the distribution and use of industrial land by the type of use to better inform decisions in the quantum and location of future industrial land. Currently the GAA is preparing Growth Area Framework Plans that will include the identification of locations for industrial and employment uses of land.

The UDP identifies the location and consumption of employment land. To identify the use of the land, Spatial Economics has cross-tabulated the land parcels from the UDP with industry types using the Australian Business Register (ABR). This gives a comprehensive understanding of the location and consumption of industrially zoned land by the type of industry that is located on the site. The type of industry is identified using 1-digit ANZSIC codes.

The report presents the data in various forms: first investigating the supply and consumption of industrial land across metropolitan Melbourne and in the Industrial Nodes. The type of industries is shown for both supply and consumption. The data also provides information on the number and size of lots (stock and consumption). With this data, it is possible to investigate issues including which industries use large lots and the distribution of specific types of industries.

Due to privacy issues, the data has been aggregated to an LGA and Industrial Node level.

## 3.0 METHOD, APPROACH & DATA SOURCES

Spatial Economics has used two main data sources: the industrial component of the UDP and the ABR.

The Urban Development Program provides an annual analysis of demand and supply of industrial land for metropolitan Melbourne. The UDP monitors industrial land and identifies for all land parcels whether it is occupied or vacant. This has been done since 1995, however we have used the period 2000 -2009 for the purposes of this exercise due to the availability of data. The industrial UDP is a census in that all industrial land is covered within the metropolitan region (zoned and unzoned).

For the purposes of the UDP, the following zones are included within the scope of industrial use:

- Airport Business;
- Special Use Zone (SUZ) - selected;
- Comprehensive Development Zone (CDZ) - selected;
- Business 3 Zone (B3Z);
- Industrial 1 Zone (IN1Z);
- Industrial 2 Zone (IN2Z); and
- Industrial 3 Zone (IN3Z).

The Australian Business Register is the central collection, storage and verification system for basic business identity information from all entities with an ABN. When an organisation applies for and receives their ABN, the business details from their application become part of the ABR.



As part of the information stored within the ABR is the ANZSIC code identifying the type of business that is registered for that address. The Australian and New Zealand Standard Industrial Classification (ANZSIC) have jointly been developed by the Australian Bureau of Statistics (ABS) and Statistics New Zealand (Statistics NZ). An individual business entity is assigned to an industry based on its predominant activity. The term 'business entity' is used in its widest sense to include any organization undertaking productive activities, including companies, non-profit Organizations, government departments and enterprises.

A drawback to using the ABR is that the ANZSIC identifies the predominant activity of a corporation and not the specific use of a particular parcel of land. Not every entity is entitled to or has an ABN and hence on the ABR but are restricted to individuals, hobbyists and small operators earning less than \$75,000 pa.

The ANZSIC system identifies each enterprise by a 4-digit classification. This classification exists within a hierarchy that results in 19 broad category divisions as presented below (1 digit ANSIC Codes). The following report utilises only one digit ANSIC classifications.

**Table One: ANZSIC 1 Digit Industry Divisions**

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**ANZSIC 2006 DIVISIONS**

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AGRICULTURE, FORESTRY AND FISHING  
MINING  
MANUFACTURING  
ELECTRICITY, GAS, WATER AND WASTE SERVICES  
CONSTRUCTION  
WHOLESALE TRADE  
RETAIL TRADE  
ACCOMMODATION AND FOOD SERVICES  
TRANSPORT, POSTAL AND WAREHOUSING  
INFORMATION MEDIA AND TELECOMMUNICATIONS  
FINANCIAL AND INSURANCE SERVICES  
RENTAL, HIRING AND REAL ESTATE SERVICES  
PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES  
ADMINISTRATIVE AND SUPPORT SERVICES  
PUBLIC ADMINISTRATION AND SAFETY  
EDUCATION AND TRAINING  
HEALTH CARE AND SOCIAL ASSISTANCE  
ARTS AND RECREATION SERVICES  
OTHER SERVICES

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The UDP data is publicly available; however there are strict constraints on the use of the ABR data. Spatial Economics has accessed the data through the Spatial Analysis and Research unit (SAR) of the Department of Planning and Community Development. Spatial Economics was allowed access to the data through site visits to SARs offices and was not allowed to directly interrogate the data. A program was developed that joined the UDP and ABR database to populate the location of industrial land with the relevant 1 digit ANZSIC codes. This process was performed at an individual lot/address. But to ensure privacy was protected, the data was aggregated to LGA or Industrial Node level.

The analysis identified/matched 45,240 individual business premises located on zoned industrial land across metropolitan Melbourne, approximately 4,500 occupied industrial lots did not have industry type information.



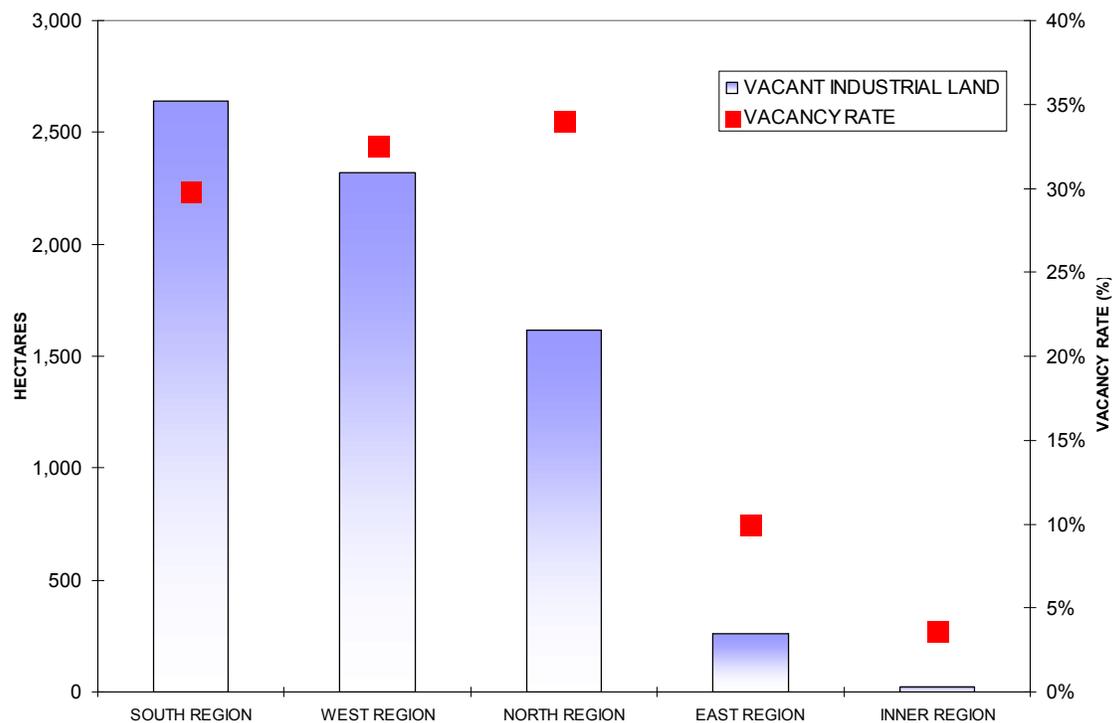
## 4.0 SUPPLY OF INDUSTRIAL LAND – METROPOLITAN MELBOURNE

Section Four of the following report provides a brief summary of the overall supply and demand for industrial land across metropolitan Melbourne and the Industrial Nodes. The information is sourced from the 2009 Urban Development Program Annual Report undertaken by the Department of Planning and Community Development. The information is included so as to provide a total picture of land stocks and consumption.

Across metropolitan Melbourne as at 2009, there was a total zoned industrial land stock of approximately 6,900 ha. The South, West and North Regions is the location of the majority of vacant land stocks, with limited vacant industrial land located within the Inner and East Regions - correspondingly they have relatively low land vacancy rates at 4% and 10% respectively. The North, South and West Regions have similar land vacancy rates ranging from 30 to 34%,

Graph One summarises the stock of zoned industrial land and the corresponding land vacancy rate by Planning Region as at 2009.

**Graph One: Stock of Zoned Vacant Industrial Land (ha) by Region, 2009**



## 4.1 SUPPLY OF INDUSTRIAL LAND – INDUSTRIAL NODES

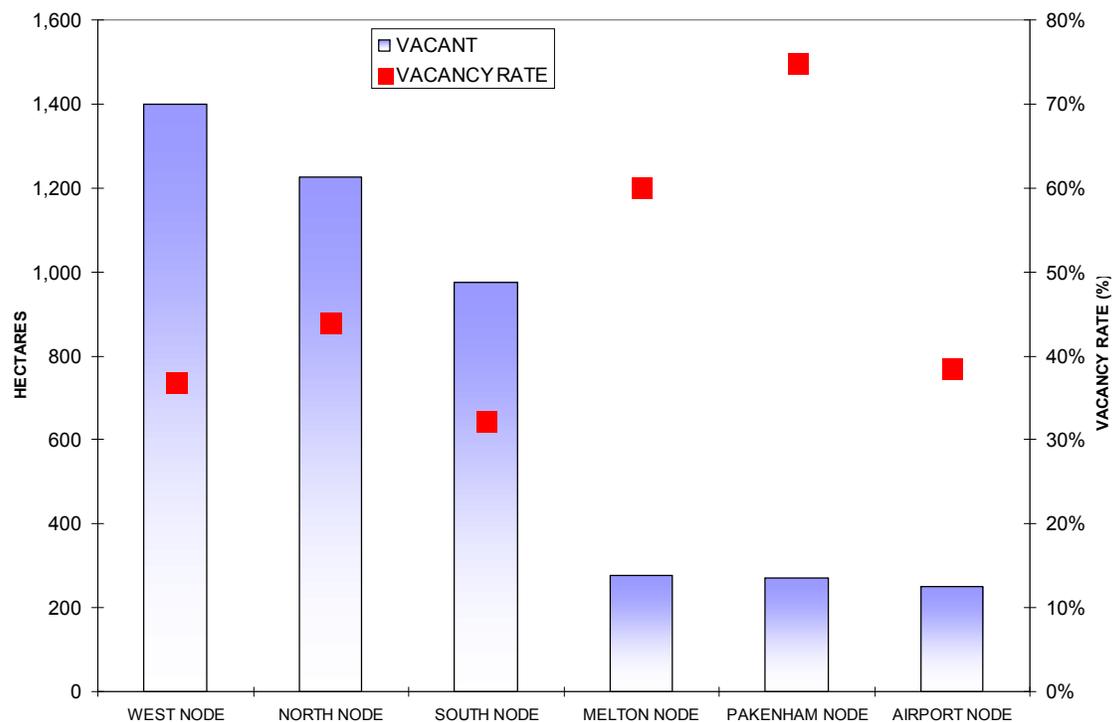
Across the Industrial Nodes as at 2009, there was a total zoned industrial land stock of approximately 4,400 ha, representing 64% of Melbourne’s vacant zoned industrial land stocks. The West, North and South, Nodes is the location of the majority of vacant land stocks, with relatively limited vacant industrial land located within the Melton, Pakenham and Airport Nodes.

The zoned vacant industrial land vacancy rates range from 32% (West Node) to 75% (Pakenham Node)



Graph Two summarises the stock of zoned industrial land and the corresponding land vacancy rate by Industrial Node as at 2009.

**Graph Two: Stock of Zoned Vacant Industrial Land (ha) by Industrial Node, 2009**



## 4.2 CONSUMPTION OF INDUSTRIAL LAND – METROPOLITAN MELBOURNE

The UDP–Industrial Land Database has data dating back to 1995 for metropolitan Melbourne, and 1990 for selected industrial nodes. This time series data is used to measure the uptake or consumption of industrial land. Since 1995, the consumption of industrial land in metropolitan Melbourne has remained relatively stable at approximately 300 hectares each year. However, Graph Three shows that the annual level of consumption is variable and can change markedly from year to year. The variable nature of industrial land development is due to the diverse nature of the industrial land product. Unlike residential development, where lots typically range in size from 300 m<sup>2</sup> to 1,000 m<sup>2</sup>, the size of industrial lots consumed can vary from a few hundred square meters to tens of hectares. So the difference between the levels of consumption from one year to another is determined by a small number of large developments.

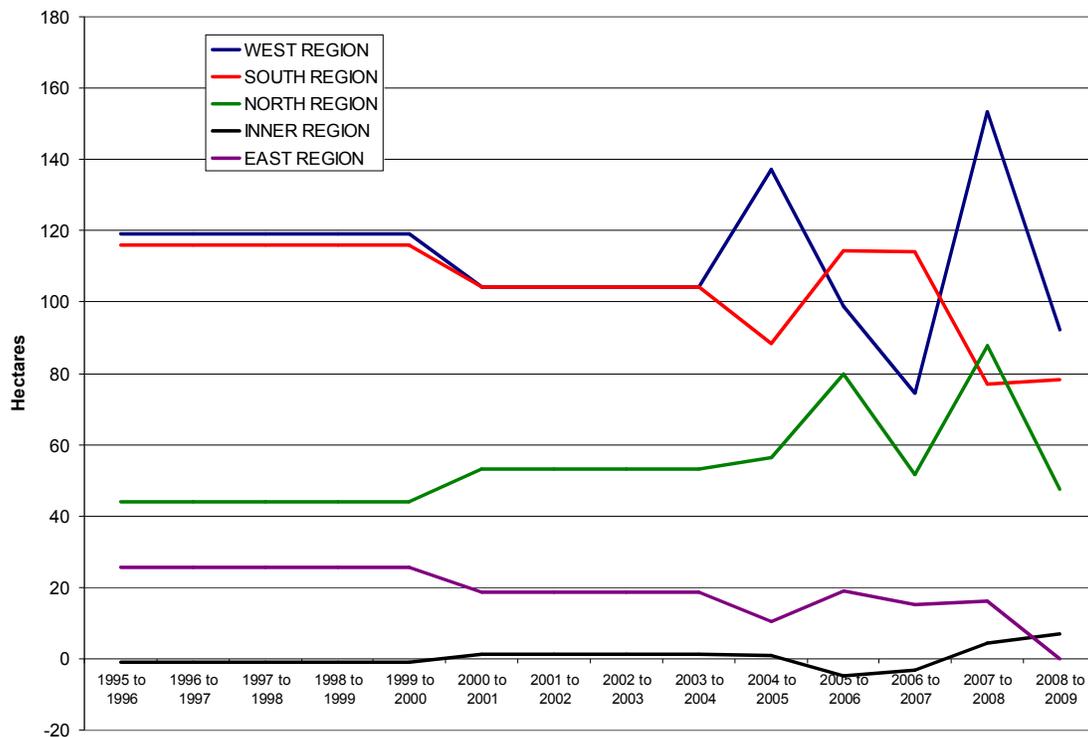
Consumption for 2008 to 2009 is significantly lower than the long-term average from 2004 to 2009. This is probably due in part to the global financial crisis, and the cyclic nature of industrial development where the value of approvals for warehouses and factories in metropolitan Melbourne declined after reaching a peak in 2006.

Industrial land development is not evenly distributed across the metropolitan area, but is concentrated in the municipalities of Brimbank, Greater Dandenong, Hume, Whittlesea and Wyndham. In addition, some areas are undergoing recycling of industrial land, with structures being demolished and replaced by new industrial buildings. This type of development typically occurs in inner and middle municipalities such as Maroondah and Darebin among others<sup>4</sup>.

<sup>4</sup> Source: 2009 Urban Development Program Annual Report



**Graph Three: Annual Net Consumption of Industrial Land by Region, 1995 to 2009**



### 4.3 CONSUMPTION OF INDUSTRIAL LAND – INDUSTRIAL NODES

Historically, the consumption of industrial land in metropolitan Melbourne has stood at approximately 300 hectares each year. However, the distribution of this consumption changes over time due mainly to economic cycles and changing land requirements for changing industry types. Between 2004 and 2009, levels of consumption in the industrial nodes averaged 230 hectares per annum. An increasing share of industrial land consumption has been located within the industrial nodes to the extent that they currently account for just over 80% of metropolitan industrial land consumption. Historically, the industrial Nodes share of total metropolitan industrial land consumption includes:

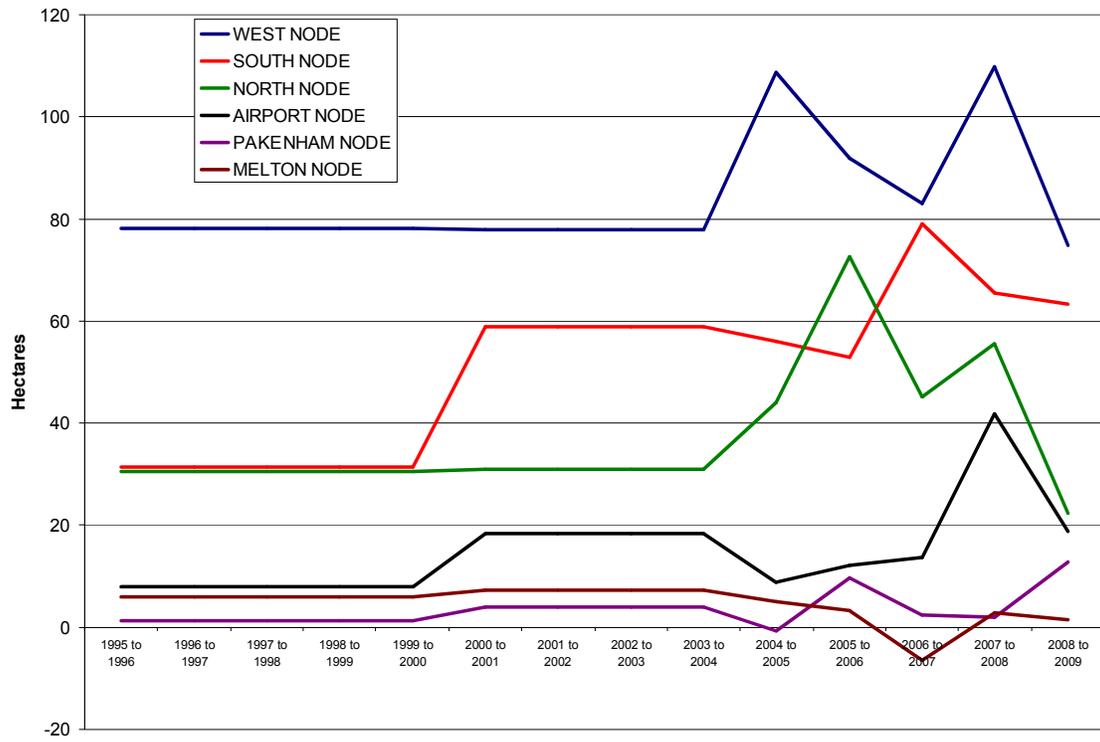
- 1995 to 2000 – 51% of all industrial land consumption across metropolitan Melbourne was in the Industrial Nodes; and
- 2000 to 2004 – 70% of all industrial land consumption across metropolitan Melbourne was in the Industrial Nodes.

Figure 34 shows the level of consumption by individual industrial nodes over-time, illustrating the variability of consumption from year to year from 1995 to 2009 (note from 1995 to 2000 are averages). The West Industrial Node has had the highest levels of consumption of all the industrial nodes although it experienced a significant decline in the period from 2008 to 2009 compared to the previous year. All the industrial nodes, except for the Pakenham Node, have experienced some level of decreased activity compared to the period from 2007 to 2008 particularly in the West and North Industrial Nodes<sup>5</sup>.

<sup>5</sup> Source: 2009 Urban Development Program Annual Report



**Graph Four: Annual Net Consumption of Industrial Land by Node, 1995 to 2009**



## 5.0 INDUSTRY TYPES ON EXISTING ZONED INDUSTRIAL LAND

Analysis has been undertaken to establish the industry type for the existing stock of zoned industrial land across metropolitan Melbourne as at 2009. The information is summarised at an LGA and Industrial Node level. Graph Five summarises the distribution of industrial premises by industry type across metropolitan Melbourne.

As at 2009, there were approximately 45,000 individual business premises on industrial zoned land. The analysis indicates that there are numerous business enterprises located on industrial zoned land that are not 'traditionally' perceived as industrial uses, such as retail trade, administrative services, arts & recreation etc.

The top 50% (in terms of the number of premises) of industry types that occupy zoned industrial land across metropolitan Melbourne include:

- Manufacturing - 7,900 premises (17% total premises);
- Wholesale trade - 5,700 premises (13% total premises);
- Rental, hiring & real estate services - 5,200 premises (11% total premises); and
- Construction - 4,900 premises (11% total premises).

Across metropolitan Melbourne there was at 2009, approximately 1,700 Transport, Postal and Warehousing premises. This equates to 4% of all business premises located on industrial land.

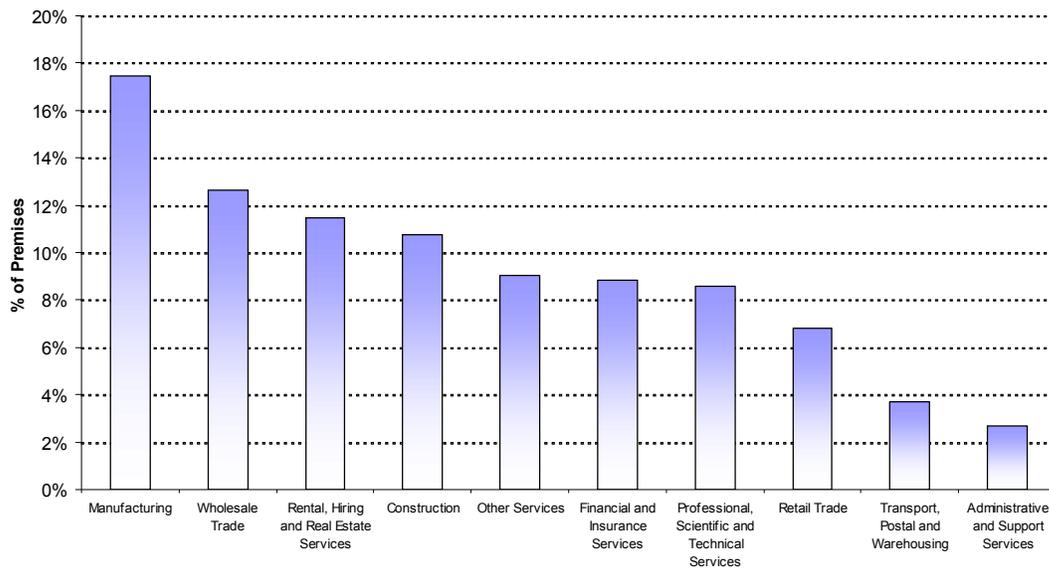
Maps 1, 2 and 3 spatially represent the concentrations of existing industrial zoned land by selected industry types across metropolitan Melbourne, industry types visually represented include:

- Manufacturing;
- Wholesale Trade; and
- Transport, Postal & Warehousing.

Specifically, the maps illustrate the percentage distribution of the selected industry type (number of premises) by local government area located on zoned industrial land.



**Graph Five: Proportional Distribution of Industrial Premises by Industry Type - metropolitan Melbourne, 2009**



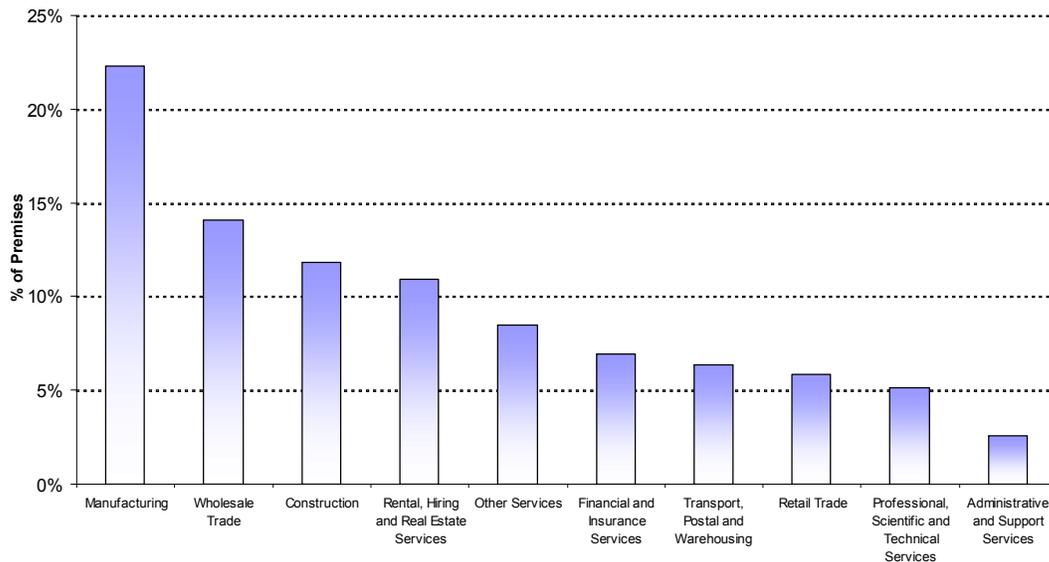
Graph Six summarises the quantum of industrial premises by industry type across the industrial Nodes. Relative to metropolitan Melbourne, the industry structure within the Industrial Nodes has a higher dominance of Manufacturing and Wholesale trade services. The top 50% of industry types that occupy zoned industrial land across metropolitan Melbourne include:

- Manufacturing - 2,200 premises (22% total premises);
- Wholesale trade - 1,400 premises (14% total premises); and
- Rental, hiring & real estate services - 1,100 premises (12% total premises).

Across the Industrial Nodes there was at 2009, approximately 622 Transport, postal and warehousing premises (36% of metro Melbourne's total). This equates to 8% of all business premises located on industrial land within the nodes.



**Graph Six: Proportional Distribution of Industrial Premises by Industry Type - Industrial Nodes, 2009**



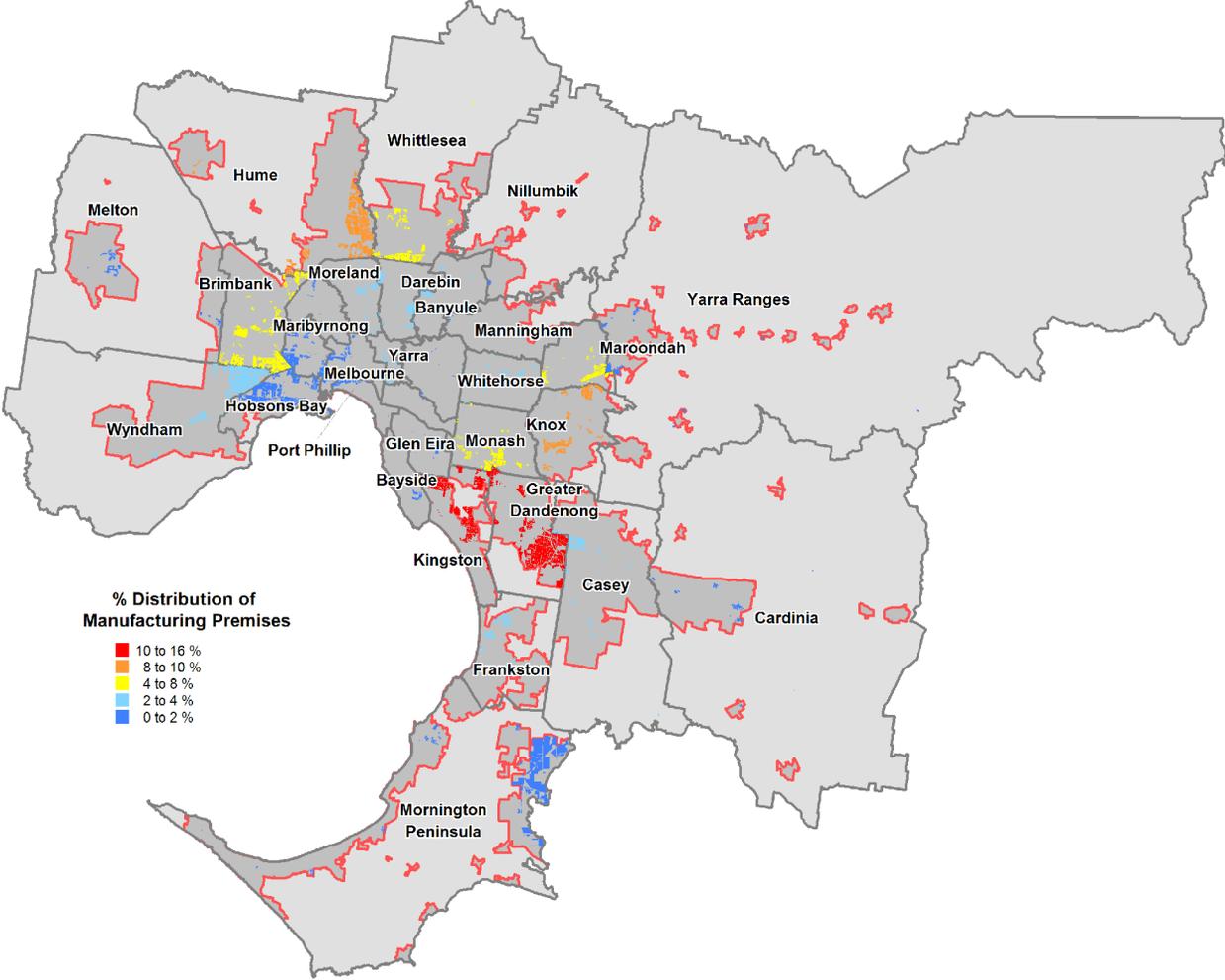
The major Industrial Nodes (West, North and South) in terms of existing types of industrial premises illustrate broadly similar compositions and concentrations of industry types. The top four industry types that are common in terms of proportional distribution within each node are:

1. Manufacturing;
2. Wholesale trade;
3. Construction; and
4. Rental, hiring & real estate services.

However, The North and South Industrial Nodes have higher concentrations of Manufacturing premises compared to the West, Wholesale trade premises are concentrated in the West Node and Construction premises higher concentrations within the North and South Nodes. Relative to the other nodes, the West Node has higher concentrations of Transport, postal and warehousing premises.

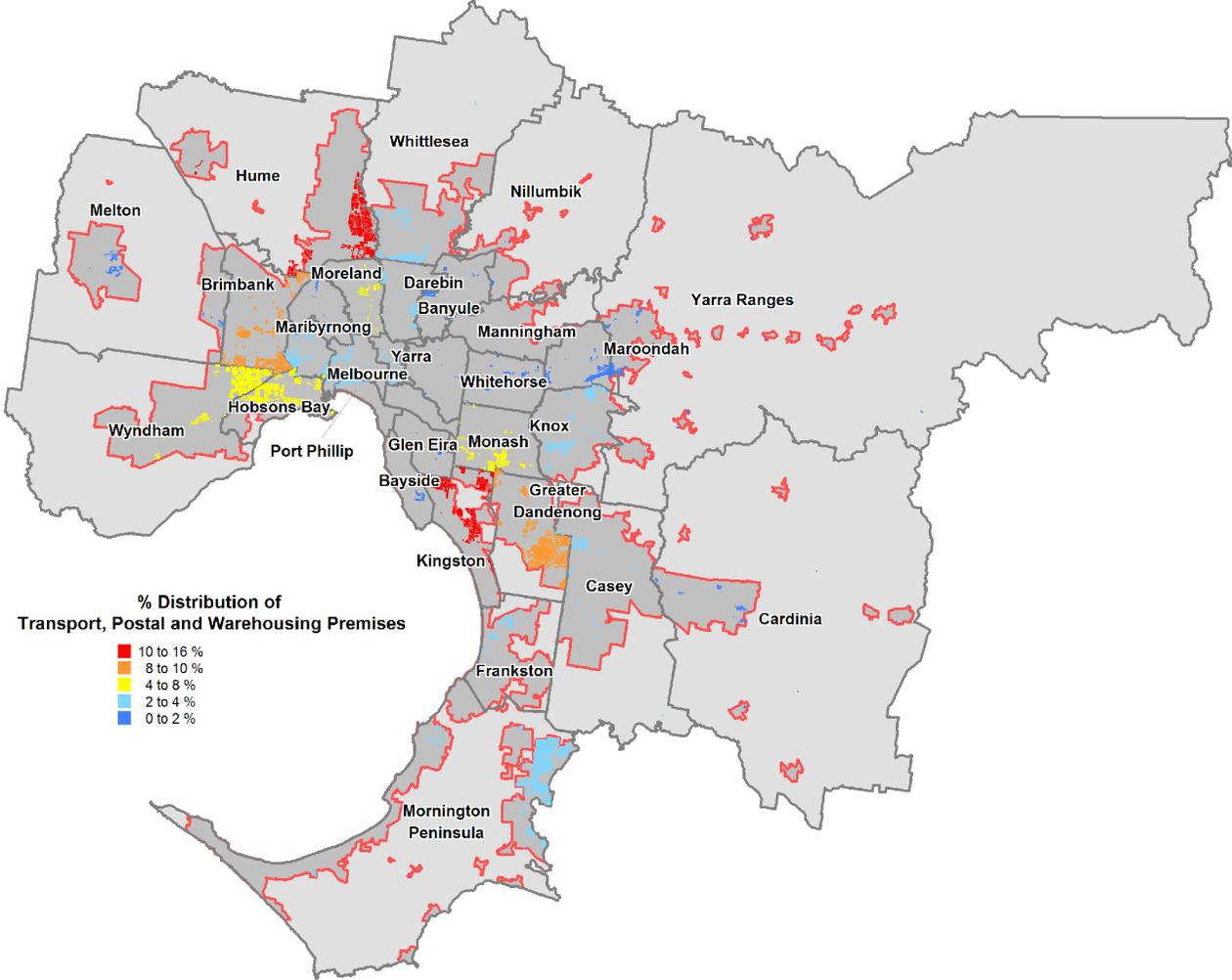


Map One: Proportional Distribution of Manufacturing Premises on Existing Industrial Zoned Land, 2009





Map Three: Proportional Distribution of Transport, Postal & Warehousing Premises on Existing Industrial Zoned Land, 2009

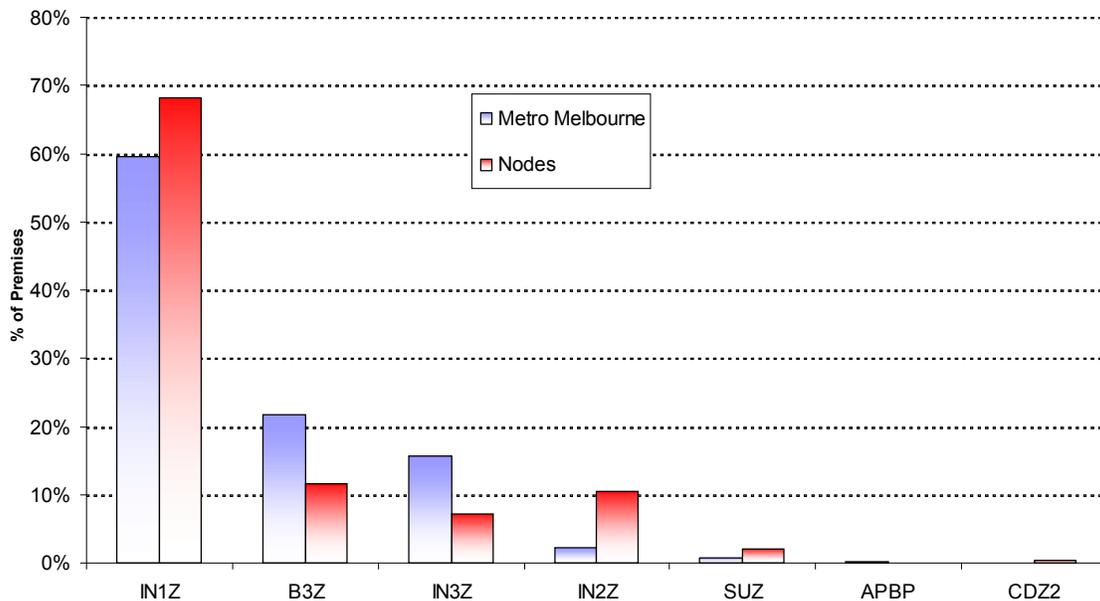


## 5.1 ZONE TYPE BY INDUSTRY TYPE

All industrial land stocks have been cross-tabulated with land use zone and industry types as at 2009. Graph Seven summarises the zone types of all occupied (ABN data) industrial lots across metropolitan Melbourne and within the Industrial Nodes.

The vast majority (59%) of occupied industrial lots across metropolitan Melbourne was on land zoned Industrial 1 (IN1Z), 22% Business 3 (B3Z), 16% Industrial 3 (IN3Z) and 2% Industrial 2 (IN2Z).

**Graph Seven:** Proportion Distribution of Industry Types on Industrial Land by Zone Type, 2009



Analysis of the 'extracted' industry type data, zoning information and existing stock of industrial land does not illustrate any major trends in terms of industry types and zone type. It appears that industry and zone type is largely a function of the available land stocks. However, there is a clear relationship with Business 3 zoned (B3Z) land and the following industry types:

- Rental, hiring & real estate services;
- Professional, scientific & technical services;
- Financial & insurance services; and
- Transport, postal & warehousing.

**Table Two: Proportional Distribution of Zone Types by Industry Type for Total Occupied Industrial Land Stocks, 2009**

Zone Type	Manufacturing	Wholesale Trade	Rental, Hiring and Real Estate Services	Construction	Financial and Insurance Services	Professional, Scientific and Technical Services	Retail Trade	Transport, Postal and Warehousing
IN1Z	71%	63%	58%	62%	55%	48%	56%	55%
B3Z	12%	19%	22%	19%	28%	37%	23%	22%
IN3Z	14%	14%	16%	17%	13%	13%	19%	15%
IN2Z	3%	4%	2%	1%	3%	1%	1%	6%
SUZ4	0%	0%	0%	0%	1%	0%	0%	2%
SUZ1	0%	0%	0%	1%	0%	0%	0%	0%
APBP	0%	0%	0%	0%	0%	0%	0%	1%
CDZ2	0%	0%	0%	0%	0%	0%	0%	0%
SUZ3	0%	0%	0%	0%	0%	0%	0%	0%
SUZ5	0%	0%	0%	0%	0%	0%	0%	0%
<b>Metro Melb</b>	<b>7,893</b>	<b>5,729</b>	<b>5,198</b>	<b>4,876</b>	<b>3,995</b>	<b>3,884</b>	<b>3,083</b>	<b>1,668</b>

## 5.2 LOT SIZE BY INDUSTRY TYPE

Spatial Economics have ‘cross-tabulated’ all industrial zoned lot stock with the ABN/ANZSIC code data and the existing lot size. The information can be used to inform the composition of lot size requirements by industry type and location. Graph Eight summarises selected lot size cohorts for all industrial land stocks with an identified industry type as at 2009.

In 2009 there were approximately 45,000 identified business premises on industrial zoned land across metropolitan Melbourne. Of these premises, 21% were located within the existing Industrial Nodes.

Approximately 48% of the existing occupied lot stock was less than 1,000sqm in size, compared to 35% inside the nodes. Whereas, 33% of the existing occupied lot stock across Melbourne was sized from 1,000 to 5,000 sqm compared to 40% within the Nodes.

The most frequent lot size cohort of the existing occupied stock within the Industrial Nodes was 0.1 to 0.5 ha (40%), compared to less than 0.1 ha outside of the nodes (48%). This trend is largely expected, as the Industrial Nodes are the location of the majority of industrial broadacre land supply and the established urban area is relatively characterised by existing lot sizes and price pressures for densification and optimisation of the use of existing land stocks.



**Graph Eight: Proportional Distribution of all Industry Types by Lot Size, 2009**

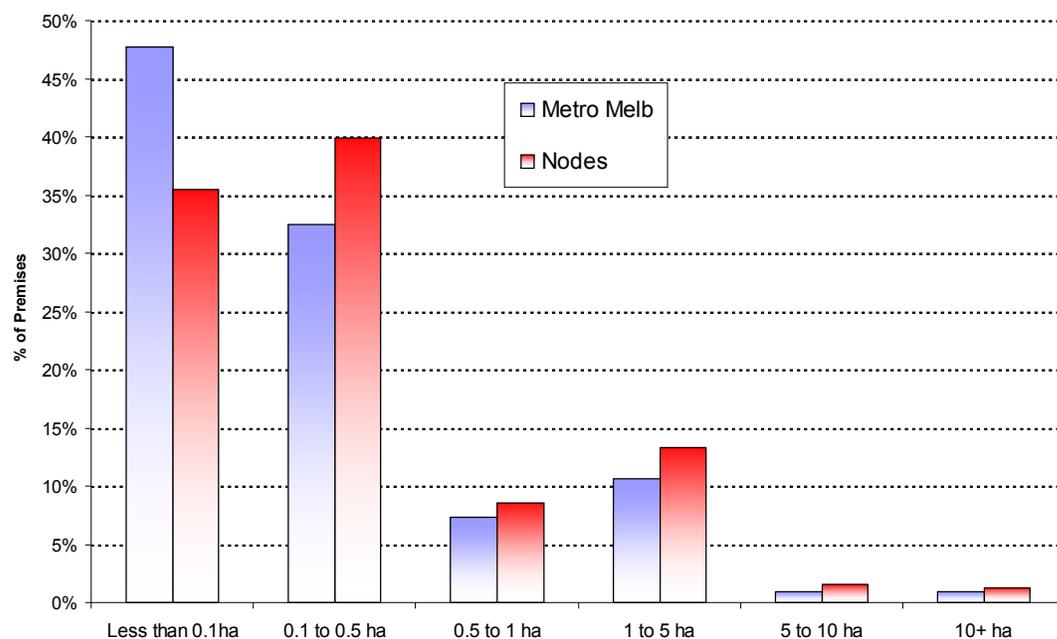


Table Three summarises for ‘core’ industry types the lot size cohorts of the existing stock as at 2009. Further detail for every industry type is contained within the attached data appendices.

As at 2009 there was approximately 7,900 individual industrial lots occupied for manufacturing premises, 28% were located within the Industrial Nodes. The vast majority of these lots used for manufacturing premises were on allotments sized less than 5,000sqm (77% within nodes, 82% metropolitan Melbourne). In terms of larger allotments (greater than 5 ha) 2% of the existing lot stock for the purpose of manufacturing premises were greater than 5 ha across metropolitan Melbourne and 4% within the Nodes.

As at 2009 there was approximately 5,700 individual industrial lots occupied for wholesale trade premises, 24% were located within the Industrial Nodes. The vast majority of these lots used for wholesaling trade premises were on allotments sized less than 5,000sqm (79% across metropolitan Melbourne).

**Table Three: Proportional Distribution of Lot sizes by Selected Industry Types, 2009**

Lot Size Cohort	Manufacturing		Wholesale Trade		Transport, Postal and Warehousing	
	Metro Melb	Nodes	Metro Melb	Nodes	Metro Melb	Nodes
Less than 0.1ha	45%	34%	43%	32%	35%	25%
0.1 to 0.5 ha	37%	43%	36%	43%	32%	38%
0.5 to 1 ha	7%	8%	9%	9%	12%	11%
1 to 5 ha	9%	11%	11%	13%	15%	21%
5 to 10 ha	1%	2%	1%	1%	2%	3%
10+ ha	1%	2%	1%	1%	3%	1%
<b>No. of Premises</b>	<b>7,893</b>	<b>2,177</b>	<b>5,729</b>	<b>1,374</b>	<b>1,668</b>	<b>622</b>

The industry type - Transport, Postal and Warehousing comparatively in terms of existing lot size profiles utilise larger allotments i.e. over 5,000sqm. However, the vast majority of



lots used for this purpose were sized less than 5,000sqm (67%) across metropolitan Melbourne.

### 5.2.1 LARGE INDUSTRIAL LAND USERS

Analysis has been undertaken to establish the quantum and industry types that occupy large lots (greater than 5 ha) on zoned industrial land across metropolitan Melbourne. The results are summarised at a LGA and Node level. As at 2009, there were 835 industrial premises that occupied lots greater than 5 ha, 48% were 5 to 10 ha and 52% over 10 ha. Large lots with an identified industrial premise represents 2% of all identified industrial users across metropolitan Melbourne but 35% of the total zoned industrial land stocks.

The industry types that occupy the majority of large lots across Melbourne include:

- Manufacturing - 152 premises;
- Financial & insurance services - 144 premises;
- Rental, hiring & real estate services - 98 premises;
- Transport, postal & warehousing - 88 premises; and
- Wholesale trade - 77 premises.

### 5.3 LAND REQUIREMENTS BY INDUSTRY TYPE

Analysis has been undertaken to establish the total net are of land occupying industrial land with an identified business premise across metropolitan Melbourne, as at 2009. In total approximately 31,000 ha of industrial zoned land is occupied by an identified industry type.

The major industrial land occupiers include:

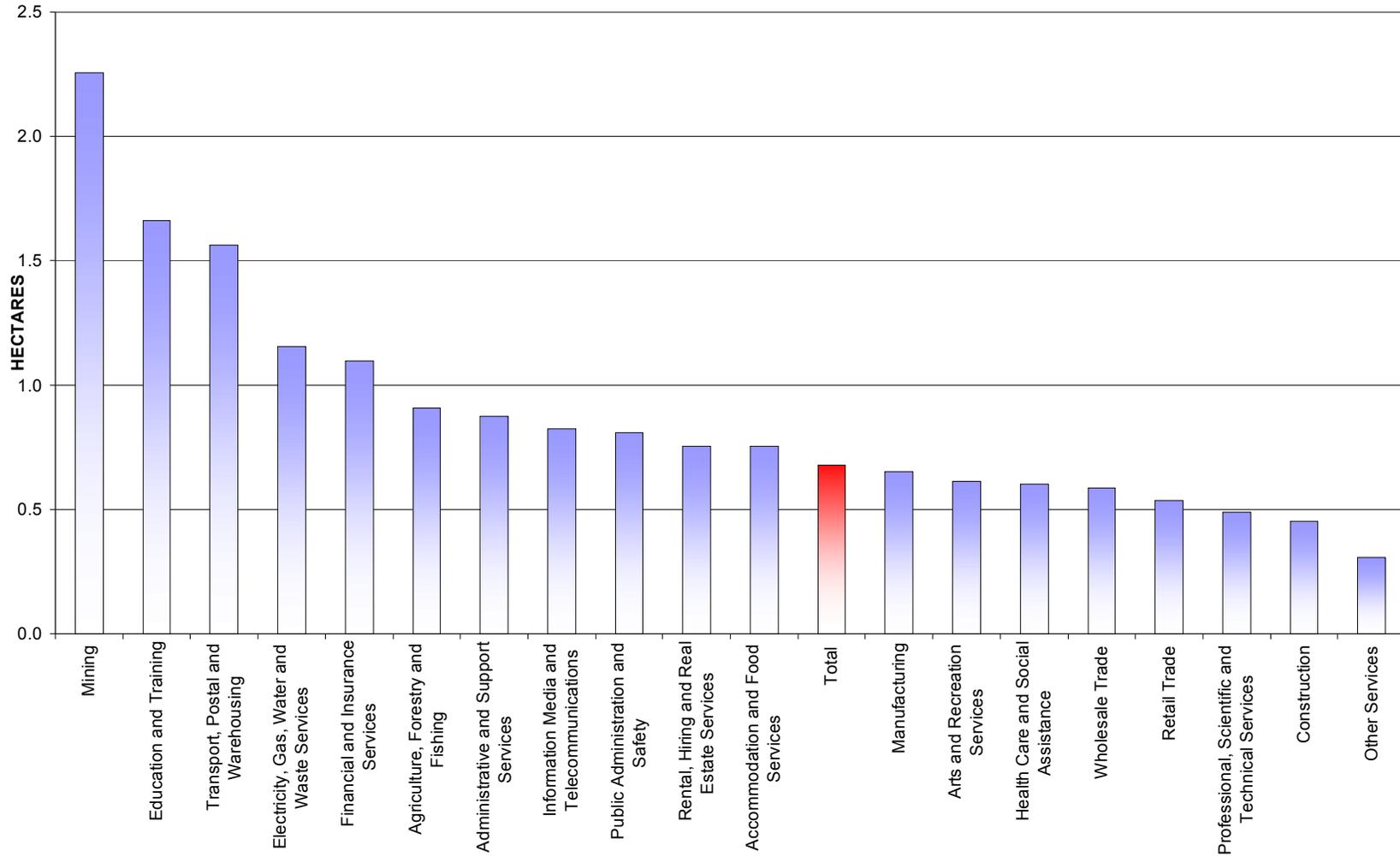
- Manufacturing - 5,140 ha or 17% of occupied industrial land;
- Financial & insurance services - 4,400 ha or 14% of occupied industrial land;
- Rental, hiring, & real estate services - 3,940 ha or 13% of occupied industrial land;
- Wholesale trade - 3,360 ha or 11% of occupied industrial land;
- Transport, postal & warehousing - 2,600 ha or 9% of occupied industrial land; and
- Construction - 2,200 ha or 7% of occupied industrial land.

Graph Nine summarises all industry types across metropolitan Melbourne that occupy zoned industrial land in terms of their average land size occupancy. The average land area for the major industry types include:

- Transport, postal & warehousing - 1.6 ha;
- Financial & insurance services - 1.1 ha;
- Rental, hiring, & real estate services - 0.8 ha;
- Manufacturing - 0.7 ha;
- Wholesale trade - 0.6 ha; and
- Construction - 0.5 ha.



Graph Nine: Average Land Area by Industry Type - metro Melbourne, 2009



## 6.0 CONSUMPTION OF INDUSTRIAL LAND BY INDUSTRY TYPE

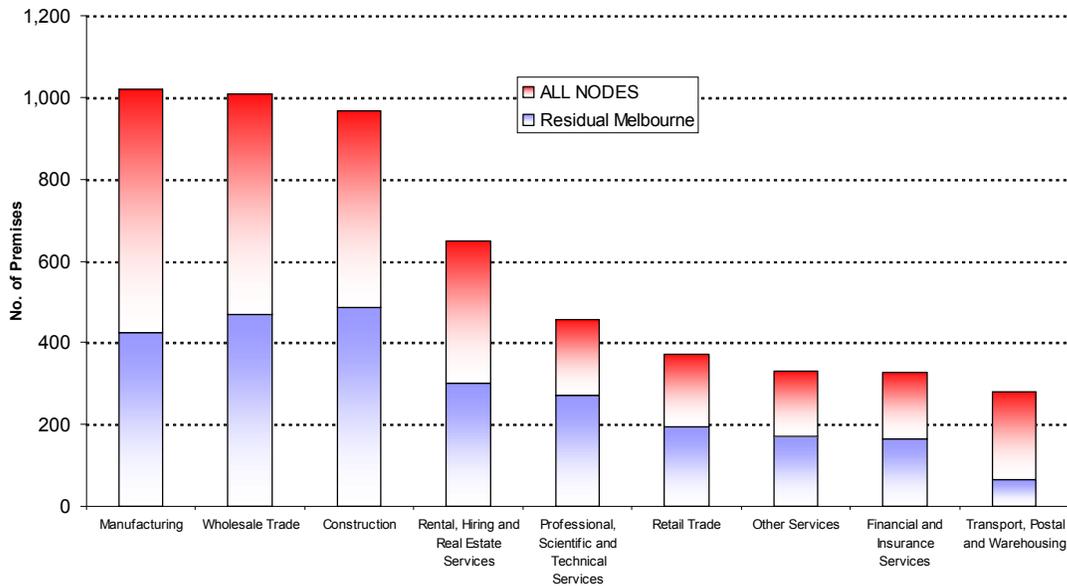
Spatial Economics have undertaken GIS analysis to cross-tabulate recently consumed industrial land (2000 to 2009) across metropolitan Melbourne with ABN/ANZSIC information. The result of this undertaking is a snap-shot of industry types across recently consumed industrial land. The results are presented and summarised at both an LGA and Industrial Node level. Graph Ten summarises the count of recently constructed industrial premises by ‘selected’ industrial types across metropolitan Melbourne.

From 2000 to 2009 there was approximately 5,900 business premises constructed on industrial land across metropolitan Melbourne, 53% of which were located within the Industrial Nodes. In terms of the top five industry types that have recently been constructed on industrial land across metropolitan Melbourne include:

- Manufacturing - 1,020 premises (58% located within the nodes);
- Wholesale Trade - 1,009 premises (53% located within the nodes);
- Construction - 966 premises (50% located within the nodes);
- Rental, hiring & real estate services - 648 premises (53% located within the nodes); and
- Professional, scientific & technical services- 456 premises (40% located within the nodes).

From 2000 to 2009 there was 280 premises constructed on industrial land for the purpose of transport, postal and warehousing services.

**Graph Ten: Number of Recently Consumed Industrial Lots by Industry Type, 2000 to 2009**



The industry types of Transport, postal, warehousing and Manufacturing in terms of recent construction are relatively concentrated within the Industrial Nodes compared to all other industry types. Approximately 76% of all recently constructed Transport, postal, warehousing premises were located within the nodes compared to 58% of all manufacturing premises.

Table Four summarises the number and distribution of selected industry types that were recently constructed within the Industrial Nodes. Similarly Maps 4, 5 and 7 spatially represent the concentrations of recently constructed industrial land by selected industry types across metropolitan Melbourne, industry types visually represented include:

- Manufacturing;
- Wholesale trade; and
- Transport, postal & warehousing.

Specifically, the maps illustrate the percentage distribution of the selected industry type (number of premises) by local government area located on zoned industrial land.

The major Industrial Nodes (West, North and South) in terms of recent construction of industrial premises illustrate similar compositions and concentrations of industry types. The top four industry types that are common in terms of proportional distribution within each node are:

1. Manufacturing;
2. Wholesale trade;
3. Construction; and
4. Rental, hiring & real estate services.

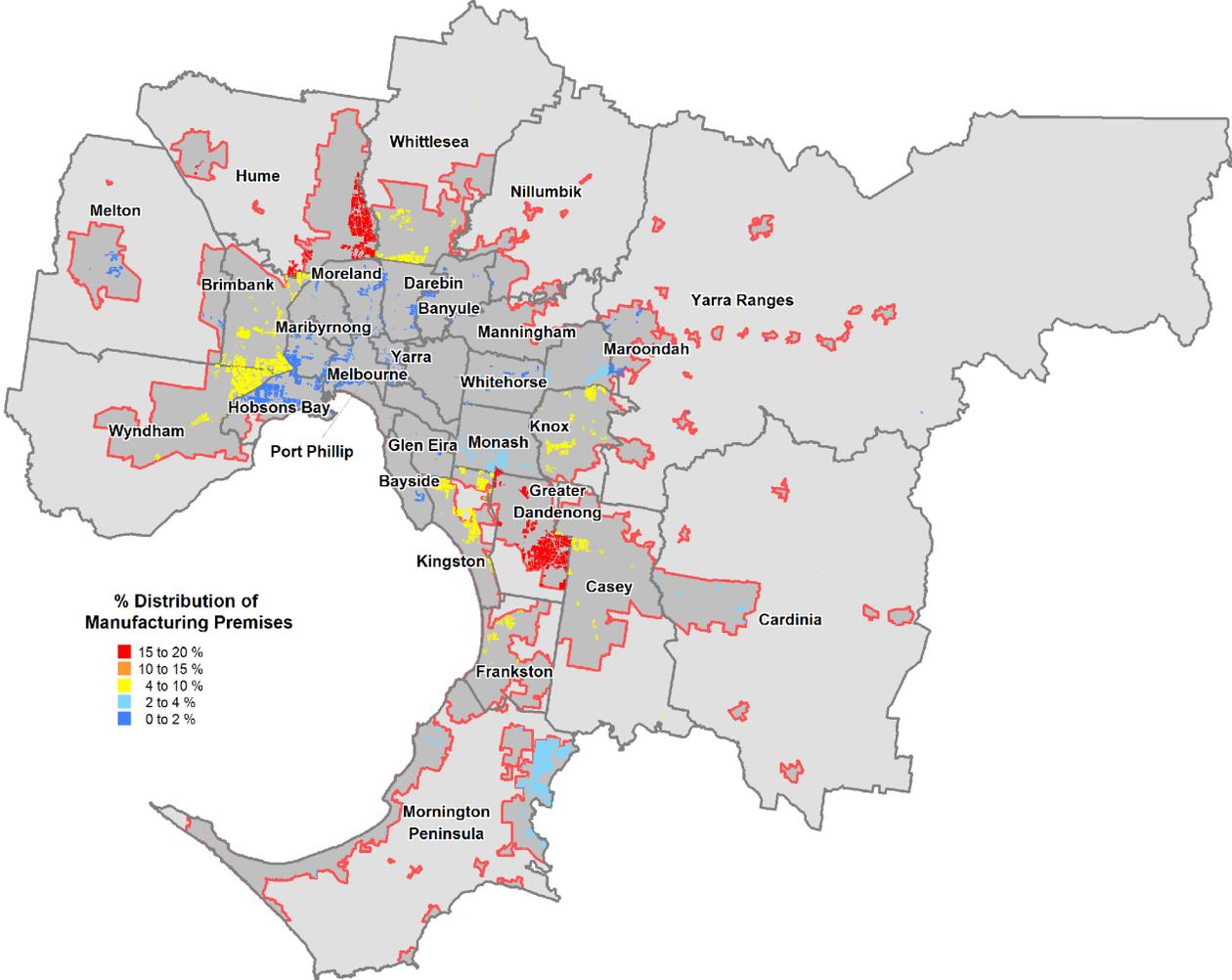
However, The North and South Industrial Nodes have higher concentrations of Manufacturing premises compared to the West, Wholesale trade premises are relatively uniform and Construction premises higher concentrations within the North Node. Relative to the other nodes, the South Node has higher concentrations of Rental, hiring & real estate services, whilst the West Node has higher concentrations of Transport, postal and warehousing premises.

**Table Four:** Number of Recently Consumed Industrial Land/Premises for Selected Industry Types by Industrial Node, 2000 to 2009

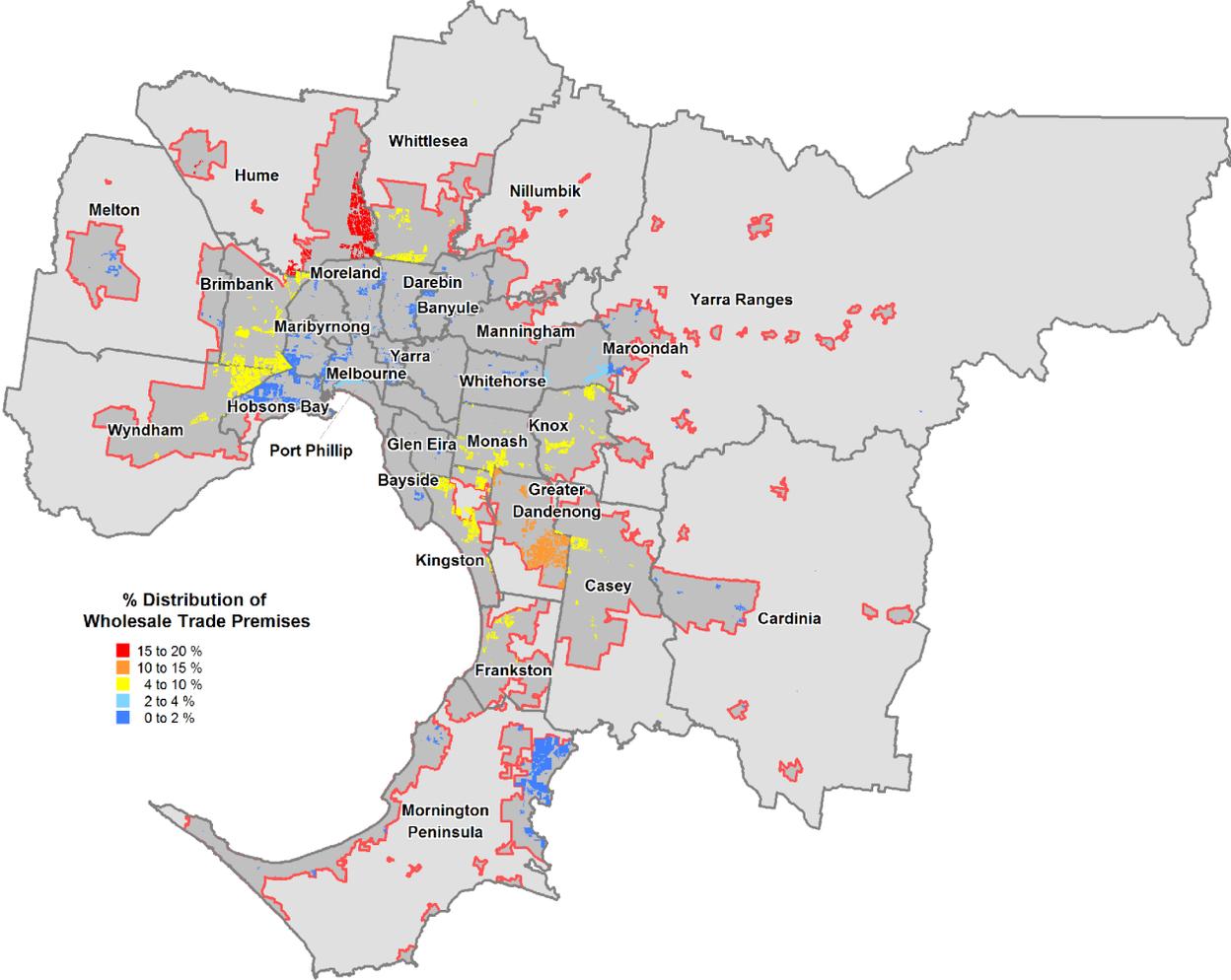
<b>Node</b>	<b>Manufacturing</b>	<b>Wholesale Trade</b>	<b>Construction</b>	<b>Rental, Hiring and Real Estate Services</b>	<b>Transport, Postal and Warehousing</b>	<b>Professional, Scientific and Technical Services</b>	<b>Retail Trade</b>	<b>Financial and Insurance Services</b>
Airport	37	73	57	45	53	29	20	23
Melton	8	5	11	7	1	0	4	0
North	214	150	165	77	43	39	48	37
Pakenham	20	7	22	13	10	5	4	0
South	231	200	172	145	54	66	70	58
West	85	104	53	59	53	45	32	42
<b>ALL NODES</b>	<b>595</b>	<b>539</b>	<b>480</b>	<b>346</b>	<b>214</b>	<b>184</b>	<b>178</b>	<b>160</b>



Map Four: Proportional Distribution of the Construction of Manufacturing Premises on Existing Industrial Zoned Land, 2000 to 2009



Map Five: Proportional Distribution of the Construction of Wholesale Trade Premises on Existing Industrial Zoned Land, 2000 to 2009



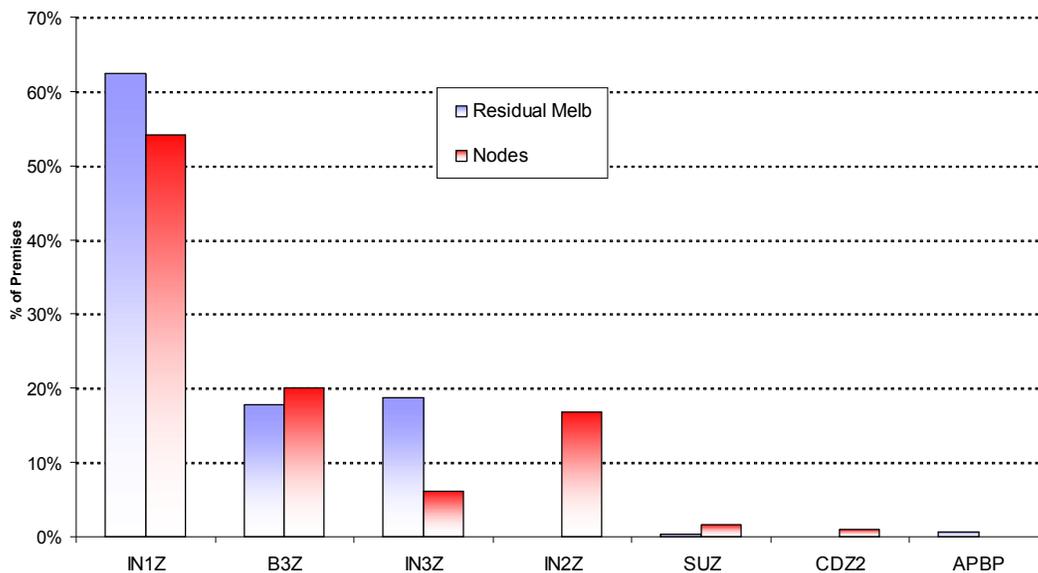


## 6.1 CONSUMPTION OF INDUSTRIAL LAND BY ZONING AND INDUSTRY TYPE

Recently consumed industrial land stocks by industry type have been cross-tabulated with land use zone types. Graph Eleven summarises the zone types of recently consumed (2000 to 2009) industrial land within and outside of the Industrial Nodes.

The vast majority (58%) of recently constructed industrial premises was on land zoned Industrial 1 (IN1Z), 19% Business 3 (B3Z), 12% Industrial 3 (IN3Z) and 9% Industrial 2 (IN2Z). All Industrial 2 (IN2Z) zoned consumed land was within the Industrial Nodes.

**Graph Eleven:** Distribution of Recently Consumed Industrial Lots by Zone Type, 2000 to 2009



Analysis of the 'extracted' industry type data, zoning information and existing stock of industrial land does not illustrate any major trends in terms of industry types and zone type. It appears that industry and zone type is largely a function of the available land stocks. However, there is a clear relationship with Business 3 zoned (B3Z) land and the following industry types:

- Rental, hiring & real estate services;
- Professional, scientific & technical services;
- Financial & insurance services; and
- Transport, postal & warehousing.

Although, these industry types have higher incidence of Industrial 1 zoning (IN1Z). The 2009 Urban Development Program: Annual Report contains information that indicates that there is approximately 14 years supply of Business 3 zoned (B3Z) land across metropolitan Melbourne and 12 years within the Industrial Nodes.

Adequacy by zone types (years supply) include:

- Industrial 1 - 16 years across metropolitan Melbourne (17 years within the Industrial Nodes);
- Industrial 2 - 4 years across metropolitan Melbourne (4 years within the Industrial Nodes); and

- Industrial 3 -3 years across metropolitan Melbourne (12 years within the Industrial Nodes).

**Table Five:** Proportional Distribution of Zone Types by Industry Type for Recently Constructed Industrial Premises, 2000 to 2009

Zone Type	Manufacturing	Wholesale Trade	Construction	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Financial and Insurance Services	Transport, Postal and Warehousing
IN1Z	66%	57%	66%	58%	52%	47%	47%
B3Z	13%	20%	15%	21%	26%	29%	24%
IN3Z	10%	11%	12%	10%	11%	10%	10%
IN2Z	10%	11%	4%	8%	9%	14%	17%
SUZ4	0%	1%	1%	1%	1%	1%	1%
CDZ2	1%	1%	0%	1%	0%	0%	0%
APBP	0%	0%	0%	0%	0%	0%	0%
SUZ1	0%	0%	0%	0%	0%	0%	0%
<b>Metro Melb</b>	<b>1,020</b>	<b>1,009</b>	<b>966</b>	<b>648</b>	<b>456</b>	<b>326</b>	<b>280</b>

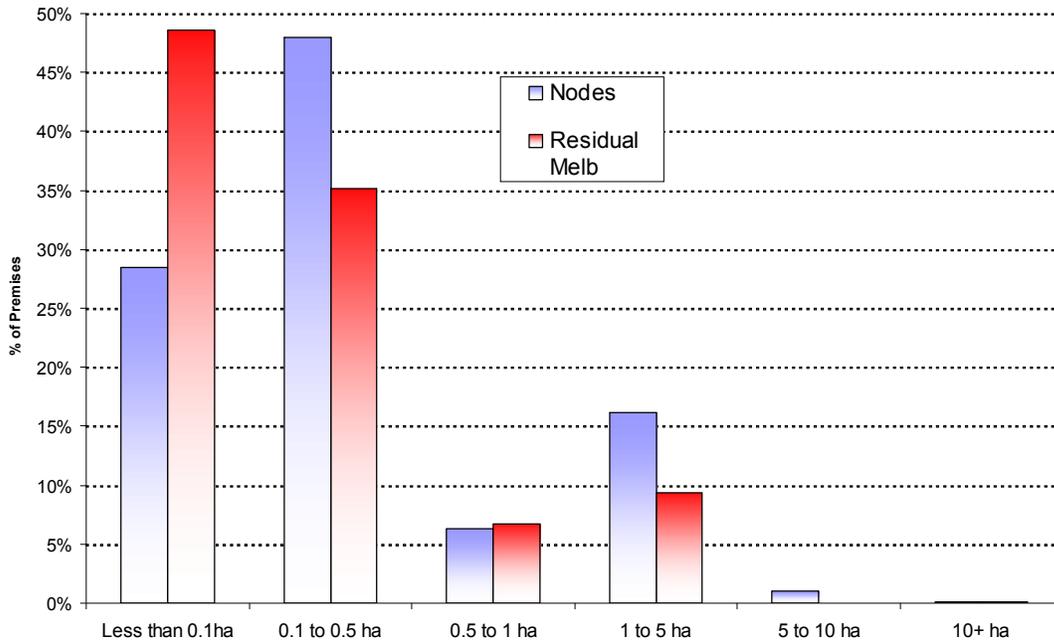
## 6.2 CONSUMPTION OF INDUSTRIAL LAND BY LOT SIZE AND INDUSTRY TYPE

Spatial Economics have ‘cross-tabulated’ all industrial lots that have been recently consumed (2000 to 2009) with the ABN/ANZSIC code data and the existing lot size. The information can be used to inform the composition of lot size requirements by industry type and location. Graph Twelve summarises selected lot size cohorts for all recently consumed industrial land stocks for the Industrial Nodes and residual metropolitan Melbourne.

From 2000 to 2009, approximately 5,900 industrial lots were consumed (i.e. changed from vacant to occupied) across metropolitan Melbourne. Of these lots, 52% were consumed within the existing Industrial Nodes. Generally, industrial land consumed within the Industrial Nodes are larger compared to lots outside of the nodes.



**Graph Twelve: Distribution of Industrial Land Consumption by Lot Size, 2000 to 2009**



Approximately 28% of all lots consumed within the nodes were less than 0.1 ha, compared to 49% outside of the nodes. Whereas, 16% of all lots consumed within the nodes were 1 to 5 ha in size compared to 9% outside of the nodes. The most frequent lot size consumed within the Industrial Nodes was 0.1 to 0.5 ha (48%), compared to less than 0.1 ha outside of the nodes (49%). This trend is largely expected, as the Industrial Nodes are the location of the majority of industrial broadhectare land supply and the established urban area is relatively characterised by existing lot sizes and price pressures for densification and optimisation of the use of existing land stocks.

Table Six summarises for ‘selected’ industry types the lot size cohorts for recently consumed industrial land. Further detail for every industry type is contained within the attached data appendices.

From 2000 to 2009 there was approximately 1,020 individual industrial lots consumed for manufacturing premises, 58% were located within the Industrial Nodes. The vast majority of these lots used for manufacturing premises were on allotments sized less than 5,000sqm (78% within nodes, 82% outside). In terms of larger allotments (greater than 5 ha) 2% of recently consumed lots for the purpose of manufacturing premises were greater than 5ha within the industrial nodes and 0% outside.

From 2000 to 2009 there was approximately 1,010 individual industrial lots consumed for wholesaling trade premises, 53% were located within the Industrial Nodes. The vast majority of these lots used for wholesaling trade premises were on allotments sized less than 5,000sqm (77% within nodes, 80% outside).



**Table Six: Lot Size Cohort by ‘Selected’ Industry Types for Recently Consumed Industrial Land, 2000 to 2009**

Lot Size Cohort	Manufacturing		Wholesale Trade		Transport, Postal and Warehousing	
	Residual Melb	Nodes	Residual Melb	Nodes	Residual Melb	Nodes
Less than 0.1ha	41%	26%	45%	25%	42%	19%
0.1 to 0.5 ha	41%	53%	35%	52%	42%	47%
0.5 to 1 ha	7%	8%	7%	7%	8%	7%
1 to 5 ha	10%	12%	12%	15%	8%	25%
5 to 10 ha	0%	2%	0%	1%	0%	1%
10+ ha	0%	0%	0%	0%	0%	0%
<b>No. of Premises</b>	<b>425</b>	<b>595</b>	<b>470</b>	<b>539</b>	<b>66</b>	<b>214</b>

The industry type - Transport, Postal and Warehousing comparatively in terms of recent consumption utilises larger allotments (1 to 5 ha) within the Industrial Nodes - 25% or 53 lots. However, the vast majority of lots consumed for this industrial purpose were sized less than 5,000sqm (92%) across metropolitan Melbourne.

### 6.2.1 LARGE INDUSTRIAL LAND USERS

Analysis has been undertaken to quantify and identify the industry type for the recent consumption of industrial land across metropolitan Melbourne for ‘large’ industrial land users. Recent consumption refers to any zoned industrial land that has changed status from vacant to occupied from 2000 to 2009. A large industrial land user is defined as the allotment being greater than five hectares.

From 2000 to 2009 there has been a total of 41 lots that have occupied industrial land allotments greater than five hectares, 33 of which are from 5 to 10 ha and 8 greater than 10 ha. This level of consumption represents 0.7% of the total industrial lot consumption as measured from 2000 to 2009.

The industry types that have most frequently consumed large industrial allotments from 2000 to 2009 include:

- Manufacturing (11 premises);
- Wholesale Trade (9 premises);
- Financial & Insurance Services (7 premises); and
- Construction Services (4 premises).

### 6.3 LAND REQUIREMENTS – RECENT CONSUMPTION

Analysis has been undertaken to establish the total net area of industrial land consumed by industry type from 2000 to 2009. Graph Thirteen summarises the total net area consumed by ‘selected’ industry types within the Industrial Nodes. Further information by LGA and individual nodes is contained within the data appendices.

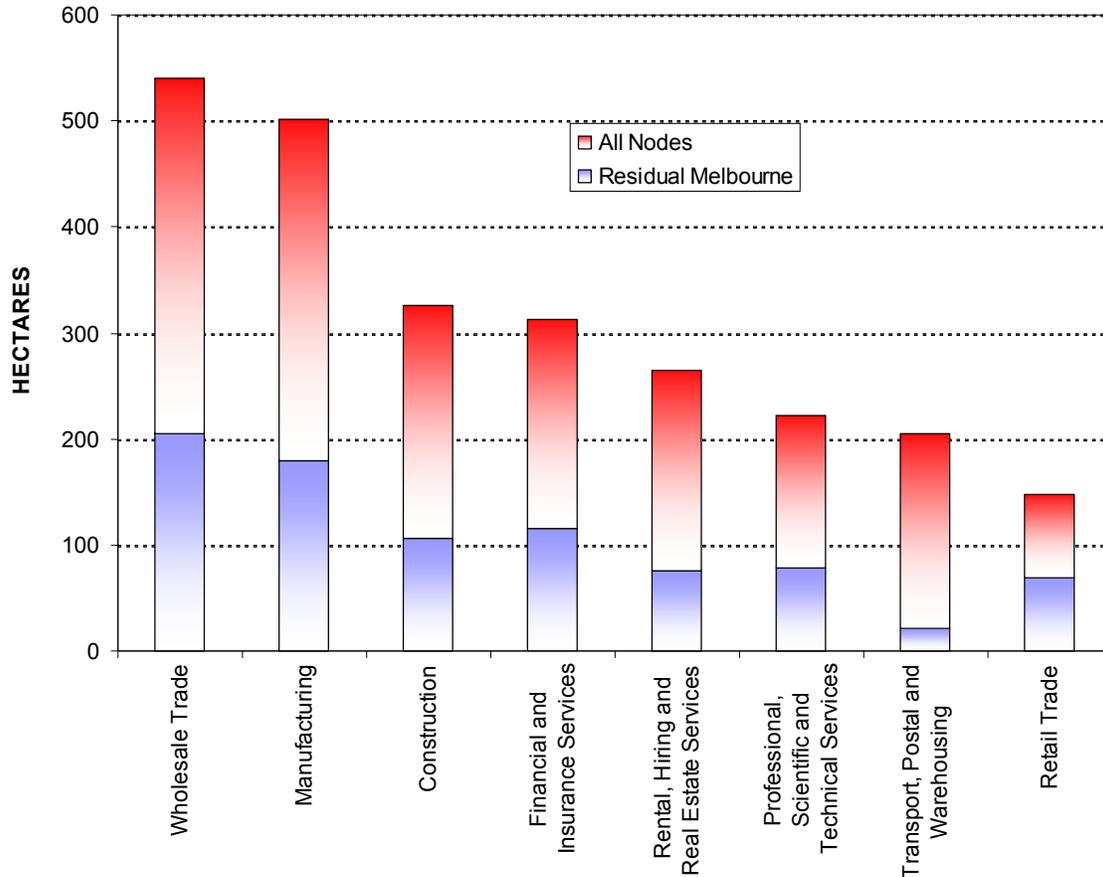
From 2000 to 2009 a total net area (with identified premises) of approximately 1,900 ha were consumed within the industrial nodes and 1,000 ha outside of the nodes in metropolitan Melbourne. Approximately 50% of the total net area consumed was within three industry types namely (Nodes and metro Melb):

- Wholesale Trade (19% or 540 ha - metro Melbourne);
- Manufacturing (17% or 501 ha - metro Melbourne); and
- Construction (11% or 326 ha - metro Melbourne).



Transport, postal & warehousing consumed 205 ha of industrial from 2000 to 2009, representing 10% of land consumption within the Nodes and 7% across metropolitan Melbourne.

**Graph Thirteen: Total Net Area Consumed by Industry Type - metro Melbourne, 2000 to 2009**

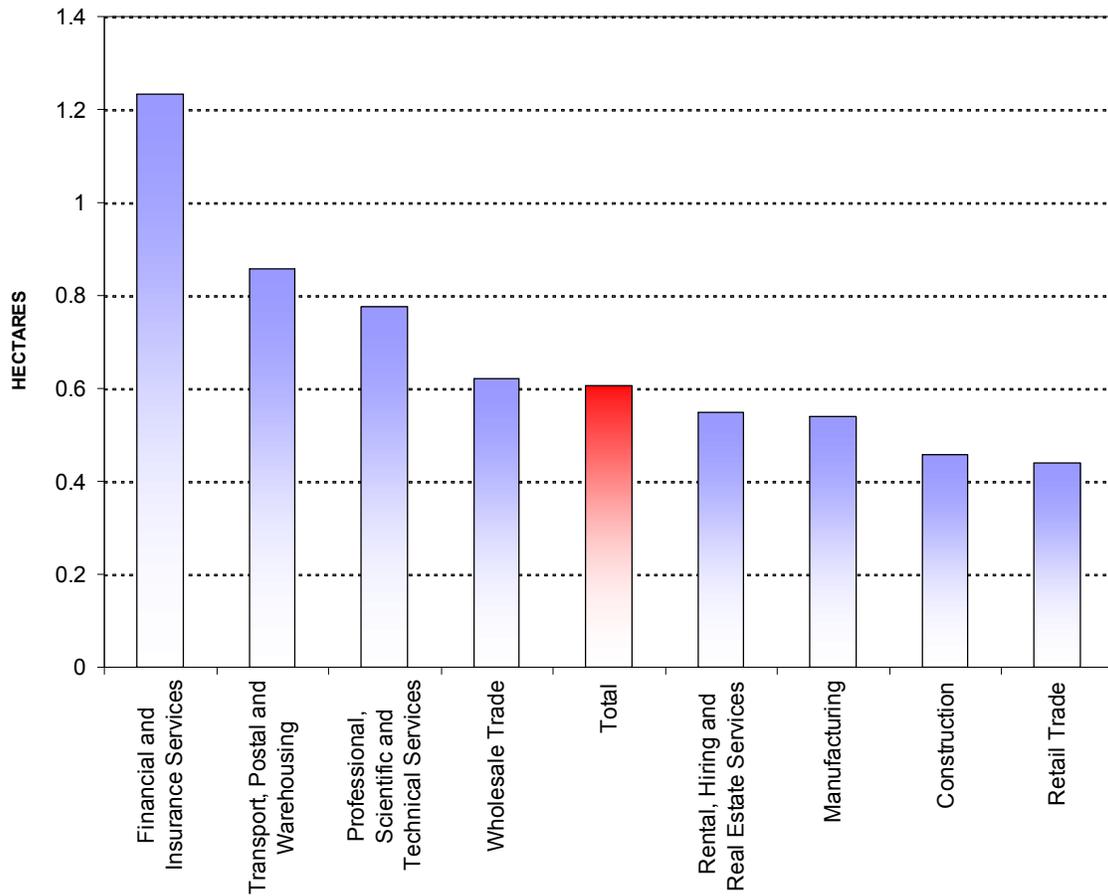


Graph Fourteen summarises the average land area consumed (2000 to 2009) by ‘selected’ industry types within the industrial nodes. Within the Industrial Nodes, the average land area consumed by industry type ranges from 1.2 ha for Financial & business services to 3,110 sqm for Public Administration & Safety. In total the average net area consumed by all industrial premises within the industrial nodes was approximately 6,000sqm. The average net land area consumed for the major industry types includes:

- Manufacturing - 5,400sqm;
- Construction - 4,400sqm;
- Wholesale Trade - 6,200sqm;
- Rental, hiring & real estate services - 5,500sqm; and
- Transport, postal & warehousing - 8,600sqm.



**Graph Fourteen: Average Net Land Size by Industry Type for Recently Consumed Industrial Land - Industrial Nodes, 2000 to 2006**



## 7.0 APPENDICES

Please refer to separate pdf and/or Excel files



**Table 5:** Stock of Industrial Land by LGA and Node, 2009

<b>LGA</b>	<b>OCCUPIED</b>	<b>VACANT</b>	<b>TOTAL</b>	<b>VACANCY RATE</b>
BRIMBANK	1,491	651	<b>2,142</b>	30%
HOBSONS BAY	1,216	442	<b>1,657</b>	27%
MARIBYRNONG	536	32	<b>567</b>	6%
MELTON	240	621	<b>860</b>	72%
MOONEE VALLEY	55	0	<b>55</b>	1%
WYNDHAM	1,264	573	<b>1,837</b>	31%
<b>WEST REGION</b>	<b>4,801</b>	<b>2,319</b>	<b>7,120</b>	<b>33%</b>
BANYULE	121	4	<b>124</b>	3%
DAREBIN	287	19	<b>305</b>	6%
HUME	1,757	1,259	<b>3,016</b>	42%
MORELAND	270	13	<b>284</b>	5%
NILLUMBIK	30	0	<b>30</b>	0%
WHITTLESEA	669	322	<b>991</b>	32%
<b>NORTH REGION</b>	<b>3,134</b>	<b>1,617</b>	<b>4,751</b>	<b>34%</b>
BAYSIDE	76	5	<b>81</b>	6%
CARDINIA	170	295	<b>465</b>	63%
CASEY	370	77	<b>447</b>	17%
FRANKSTON	272	105	<b>377</b>	28%
GLEN EIRA	36	0	<b>36</b>	1%
GREATER DANDENONG	1,979	920	<b>2,899</b>	32%
KINGSTON	1,190	119	<b>1,309</b>	9%
MORNINGTON PENINSULA	2,113	1,117	<b>3,230</b>	35%
<b>SOUTH REGION</b>	<b>6,205</b>	<b>2,638</b>	<b>8,843</b>	<b>30%</b>
BOROONDARA	19	0	<b>19</b>	0%
KNOX	712	98	<b>810</b>	12%
MANNINGHAM	16	0	<b>17</b>	2%
MAROONDAH	381	80	<b>461</b>	17%
MONASH	705	27	<b>732</b>	4%
STONNINGTON	4	0	<b>4</b>	0%
WHITEHORSE	190	7	<b>197</b>	3%
YARRA RANGES	293	46	<b>339</b>	13%
<b>EAST REGION</b>	<b>2,320</b>	<b>257</b>	<b>2,577</b>	<b>10%</b>
MELBOURNE	336	18	<b>354</b>	5%
PORT PHILLIP	161	3	<b>164</b>	2%
YARRA	138	2	<b>141</b>	2%
<b>INNER REGION</b>	<b>635</b>	<b>24</b>	<b>659</b>	<b>4%</b>
<b>METRO MELBOURNE</b>	<b>17,095</b>	<b>6,855</b>	<b>23,950</b>	<b>29%</b>

<b>NODE</b>	<b>OCCUPIED</b>	<b>VACANT</b>	<b>TOTAL</b>	<b>VACANCY RATE</b>
WEST NODE	2,407	1,400	<b>3,807</b>	37%
MELTON NODE	183	276	<b>459</b>	60%
AIRPORT NODE	401	250	<b>651</b>	38%
NORTH NODE	1,569	1,227	<b>2,795</b>	44%
SOUTH NODE	2,054	975	<b>3,030</b>	32%
PAKENHAM NODE	92	272	<b>363</b>	75%
<b>ALL NODES</b>	<b>6,705</b>	<b>4,400</b>	<b>11,105</b>	<b>40%</b>

Source: Department of Planning and Community Development. 2009. Urban Development Program

Table 11a: Net Area Occupied by Industry Type by LGA (ha), 2009

LGA/Region	Agriculture, Forestry and Fishing	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Accommodation and Food Services	Transport, Postal and Warehousing	Information Media and Telecommunications	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Administrative and Support Services	Public Administration and Safety	Education and Training	Health Care and Social Assistance	Arts and Recreation Services	Other Services	Total
Brimbank	13	9	407	2	191	277	86	49	131	13	270	270	133	44	6	13	1	21	95	2,031
Hobsons Bay	6	0	335	14	214	172	17	142	166	6	71	119	69	223	1	4	4	5	105	1,672
Maribyrnong	4	1	127	14	52	99	49	5	129	9	152	108	41	55	34	9	4	12	35	939
Melton	1	0	38	5	24	29	29	2	7	0	13	17	4	3	1	2	0	0	16	191
Moonee Valley	0	0	10	1	3	7	4	1	1	0	7	13	3	0	0	0	0	0	6	57
Wyndham	16	3	335	28	51	283	107	17	105	1	253	220	75	37	0	28	0	9	84	1,650
<b>West Region</b>	<b>41</b>	<b>12</b>	<b>1,252</b>	<b>64</b>	<b>535</b>	<b>867</b>	<b>292</b>	<b>216</b>	<b>539</b>	<b>28</b>	<b>766</b>	<b>747</b>	<b>325</b>	<b>362</b>	<b>42</b>	<b>56</b>	<b>9</b>	<b>48</b>	<b>342</b>	<b>6,541</b>
Banyule	2	0	26	0	16	25	9	4	2	1	18	20	10	4	0	1	0	1	10	149
Darebin	1	2	70	0	34	55	57	9	8	2	84	77	24	13	1	3	4	8	19	467
Hume	17	19	312	13	129	155	89	65	207	10	141	159	50	50	2	4	75	26	85	1,608
Moreland	1	0	81	0	19	31	14	6	6	1	40	29	16	4	1	8	2	8	31	298
Nillumbik	1	0	3	0	6	2	3	5	0	0	3	2	5	0	1	1	2	2	6	43
Whittlesea	5	1	165	8	64	100	88	13	19	4	96	61	35	34	1	3	21	17	43	777
<b>North Region</b>	<b>26</b>	<b>22</b>	<b>657</b>	<b>21</b>	<b>269</b>	<b>367</b>	<b>260</b>	<b>102</b>	<b>242</b>	<b>19</b>	<b>383</b>	<b>348</b>	<b>139</b>	<b>105</b>	<b>6</b>	<b>19</b>	<b>105</b>	<b>61</b>	<b>193</b>	<b>3,341</b>
Bayside	3	0	18	0	12	18	9	0	5	1	15	18	12	4	1	1	2	0	10	129
Cardinia	2	1	19	0	16	4	6	0	11	0	7	5	6	1	0	1	0	1	7	86
Casey	2	2	96	4	79	84	54	9	22	3	62	75	34	15	2	3	1	8	22	576
Frankston	5	0	40	5	48	27	14	4	13	0	22	35	17	19	1	1	1	8	17	276
Glen Eira	0	0	61	0	32	53	37	0	2	14	40	19	38	16	0	14	9	14	17	366
Greater Dandenong	25	8	662	43	132	303	91	22	146	8	240	168	169	37	1	2	5	13	72	2,146
Kingston	59	54	1,093	27	274	657	170	158	1,255	169	1,535	1,681	275	221	62	385	8	122	188	8,392
Mornington Peninsula	79	0	71	4	138	19	34	17	60	8	28	27	31	26	1	22	9	58	45	676
Stonnington	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
<b>South Region</b>	<b>175</b>	<b>65</b>	<b>2,060</b>	<b>83</b>	<b>731</b>	<b>1,165</b>	<b>415</b>	<b>211</b>	<b>1,515</b>	<b>203</b>	<b>1,947</b>	<b>2,028</b>	<b>583</b>	<b>339</b>	<b>67</b>	<b>427</b>	<b>36</b>	<b>223</b>	<b>378</b>	<b>12,651</b>
Boroondara	10	0	4	1	7	9	7	2	1	2	20	11	23	5	0	1	5	3	5	116
Knox	10	11	313	0	96	170	68	8	22	15	177	97	115	45	1	2	4	22	52	1,228
Manningham	0	0	4	0	1	1	1	0	0	0	1	1	1	0	0	0	0	0	1	11
Maroondah	25	4	216	2	100	102	226	15	14	1	108	83	40	28	1	8	1	17	91	1,082
Monash	65	6	300	61	224	395	232	53	84	48	616	300	313	95	4	15	26	17	77	2,931
Whitehorse	1	0	54	0	17	41	14	1	7	10	64	46	20	2	2	2	3	3	20	308
Yarra Ranges	9	0	75	0	45	51	29	7	17	0	41	24	21	5	0	0	4	12	9	349
<b>East Region</b>	<b>119</b>	<b>21</b>	<b>965</b>	<b>64</b>	<b>490</b>	<b>770</b>	<b>576</b>	<b>87</b>	<b>147</b>	<b>76</b>	<b>1,027</b>	<b>562</b>	<b>532</b>	<b>180</b>	<b>8</b>	<b>28</b>	<b>44</b>	<b>74</b>	<b>256</b>	<b>6,024</b>
Melbourne	15	2	151	1	116	107	45	10	44	14	144	100	151	37	0	14	21	20	47	1,039
Port Phillip	6	0	28	0	31	37	28	8	113	24	81	101	96	38	9	2	4	22	19	647
Yarra	1	0	24	2	25	48	39	8	8	10	40	44	68	14	1	4	4	9	11	360
<b>Inner Region</b>	<b>22</b>	<b>2</b>	<b>203</b>	<b>4</b>	<b>172</b>	<b>191</b>	<b>112</b>	<b>25</b>	<b>165</b>	<b>48</b>	<b>265</b>	<b>245</b>	<b>315</b>	<b>89</b>	<b>11</b>	<b>20</b>	<b>30</b>	<b>51</b>	<b>77</b>	<b>2,046</b>
<b>Metro Melbourne</b>	<b>383</b>	<b>122</b>	<b>5,137</b>	<b>236</b>	<b>2,196</b>	<b>3,359</b>	<b>1,655</b>	<b>641</b>	<b>2,607</b>	<b>373</b>	<b>4,388</b>	<b>3,931</b>	<b>1,894</b>	<b>1,074</b>	<b>133</b>	<b>550</b>	<b>223</b>	<b>457</b>	<b>1,246</b>	<b>30,604</b>

**Table 17:** Count of Consumed Industrial Land Stocks by Business Type and Lot Size - metro Melbourne (no. of premises), 2000 to 2009

<b>Lot Size Cohort</b>	<b>Agriculture, Forestry and Fishing</b>	<b>Mining</b>	<b>Manufacturing</b>	<b>Electricity, Gas, Water and Waste Services</b>	<b>Construction</b>	<b>Wholesale Trade</b>	<b>Retail Trade</b>	<b>Accommodation and Food Services</b>	<b>Transport, Postal and Warehousing</b>	<b>Information Media and Telecommunications</b>	<b>Financial and Insurance Services</b>	<b>Rental, Hiring and Real Estate Services</b>	<b>Professional, Scientific and Technical Services</b>	<b>Administrative and Support Services</b>	<b>Public Administration and Safety</b>	<b>Education and Training</b>	<b>Health Care and Social Assistance</b>	<b>Arts and Recreation Services</b>	<b>Other Services</b>	<b>Total</b>
Less than 0.1ha	7	0	328	11	459	347	156	30	69	12	80	247	201	70	7	16	13	23	167	<b>2,243</b>
0.1 to 0.5 ha	20	2	487	13	362	445	153	21	129	17	136	272	187	56	11	8	11	23	119	<b>2,472</b>
0.5 to 1 ha	0	2	79	1	57	72	12	11	21	3	14	55	26	7	1	2	1	6	14	<b>384</b>
1 to 5 ha	17	1	115	18	84	136	50	9	58	1	89	73	40	16	1	1	16	8	28	<b>761</b>
5 to 10 ha	1	0	10	0	4	5	1	0	3	0	5	1	1	1	0	0	0	0	1	<b>33</b>
10+ ha	0	0	1	0	0	4	0	0	0	0	2	0	1	0	0	0	0	0	0	<b>8</b>
<b>Metro Melbourne</b>	<b>45</b>	<b>5</b>	<b>1,020</b>	<b>43</b>	<b>966</b>	<b>1,009</b>	<b>372</b>	<b>71</b>	<b>280</b>	<b>33</b>	<b>326</b>	<b>648</b>	<b>456</b>	<b>150</b>	<b>20</b>	<b>27</b>	<b>41</b>	<b>60</b>	<b>329</b>	<b>5,901</b>

Source: Department of Planning and Community Development. 2009.

Australian Business Register and Spatial Economics

**APPENDICE PART ONE: INDUSTRIAL LAND STOCKS  
AND CONSUMPTION**

**Table 1: Industrial Land Consumption (ha) by LGA, 1995 to 2009**

<b>LGA</b>	<b>1995 to 2000</b>	<b>2000 to 2004</b>	<b>2004 to 2009</b>	<b>2004 to 2005</b>	<b>2005 to 2006</b>	<b>2006 to 2007</b>	<b>2007 to 2008</b>	<b>2008 to 2009</b>
BRIMBANK	44.4	43.9	44.4	28.9	38.7	25.6	82.1	47.0
HOBSONS BAY	29.6	9.5	13.2	29.3	10.3	15.1	7.8	3.6
MARIBYRNONG	3.4	2.6	-2.1	0.6	-24.2	5.4	5.3	2.5
MELTON	9.0	9.1	2.9	8.6	6.8	-9.3	6.8	1.4
MOONEE VALLEY	0.4	0.0	0.2	0.8	0.4	0.0	-0.7	0.7
WYNDHAM	32.3	39.1	52.5	68.9	66.8	37.7	52.1	37.0
<b>WEST REGION</b>	<b>119.1</b>	<b>104.2</b>	<b>111.2</b>	<b>137.1</b>	<b>98.7</b>	<b>74.4</b>	<b>153.3</b>	<b>92.3</b>
BANYULE	0.3	-0.1	0.1	1.3	-0.9	-1.0	0.5	0.4
DAREBIN	1.5	-0.4	-0.5	-1.4	1.5	0.8	0.7	-4.0
HUME	29.4	49.3	51.4	45.4	76.5	39.6	63.1	32.4
MORELAND	0.3	0.3	0.7	0.9	-2.8	-2.0	0.7	6.8
NILLUMBIK	0.3	0.1	0.3	0.8	-0.3	1.0	0.3	0.0
WHITTLESEA	12.3	4.1	12.6	9.3	5.9	13.4	22.6	12.0
<b>NORTH REGION</b>	<b>44.1</b>	<b>53.4</b>	<b>64.7</b>	<b>56.3</b>	<b>79.9</b>	<b>51.8</b>	<b>87.8</b>	<b>47.6</b>
BAYSIDE	-0.8	0.2	-0.2	0.4	1.2	-1.0	-2.7	1.2
CARDINIA	1.6	6.7	5.4	-0.6	10.0	2.8	3.8	11.2
CASEY	11.3	8.3	12.2	10.3	8.7	18.8	11.4	11.6
FRANKSTON	8.1	7.2	7.2	10.1	15.5	10.5	3.6	-3.9
GLEN EIRA	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1
G' DANDENONG	26.2	54.2	50.7	40.3	45.5	62.0	51.6	54.2
KINGSTON	20.8	10.0	11.1	15.0	14.0	14.6	10.6	1.4
M' PENINSULA	49.0	17.7	8.0	12.8	19.5	6.5	-1.3	2.5
<b>SOUTH REGION</b>	<b>116.1</b>	<b>104.3</b>	<b>94.4</b>	<b>88.3</b>	<b>114.4</b>	<b>114.2</b>	<b>76.9</b>	<b>78.2</b>
BOROONDARA	-0.3	0.3	0.1	0.3	0.0	0.0	0.0	0.0
KNOX	12.5	6.5	8.2	2.9	10.8	6.6	15.3	5.2
MANNINGHAM	0.2	0.1	0.0	0.3	0.0	0.0	0.0	-0.1
MAROONDAH	5.5	8.0	1.0	4.5	3.5	3.5	1.7	-7.9
MONASH	2.1	0.2	0.9	2.9	5.6	-1.1	-0.7	-2.3
STONNINGTON	0.0	0.0	0.0	-0.2	0.0	0.2	-0.3	0.3
WHITEHORSE	2.2	0.9	0.2	0.0	-2.3	1.3	-0.5	2.5
YARRA RANGES	3.6	2.7	1.8	-0.3	1.5	4.5	0.6	2.5
<b>EAST REGION</b>	<b>25.8</b>	<b>18.7</b>	<b>12.1</b>	<b>10.4</b>	<b>19.1</b>	<b>15.1</b>	<b>16.1</b>	<b>0.0</b>
MELBOURNE	-0.6	-1.7	0.8	3.6	-5.5	-4.4	5.6	4.6
PORT PHILLIP	-0.8	3.4	-0.1	-2.9	-1.1	1.3	-0.3	2.6
YARRA	0.6	-0.6	0.2	0.1	2.0	0.0	-0.8	-0.3
<b>INNER REGION</b>	<b>-0.9</b>	<b>1.1</b>	<b>0.9</b>	<b>0.8</b>	<b>-4.7</b>	<b>-3.2</b>	<b>4.5</b>	<b>6.9</b>
<b>METRO MELBOURNE</b>	<b>304.1</b>	<b>281.6</b>	<b>283.2</b>	<b>292.9</b>	<b>307.4</b>	<b>252.3</b>	<b>338.7</b>	<b>224.9</b>

Source: Department of Planning and Community Development. 2009. Urban Development Program

**Table 2: Industrial Land Consumption (ha) by Industrial Node, 1995 to 2009**

<b>NODE</b>	<b>1990 to 1995</b>	<b>1995 to 2000</b>	<b>2000 to 2004</b>	<b>2004 to 2009</b>		<b>2004 to 2005</b>	<b>2005 to 2006</b>	<b>2006 to 2007</b>	<b>2007 to 2008</b>	<b>2008 to 2009</b>
WEST NODE	23	78	78	94		109	92	83	110	75
MELTON NODE		6	7	1		5	3	-6	3	2
AIRPORT NODE	1	8	18	19		9	12	14	42	19
NORTH NODE	9	30	31	48		44	73	45	55	22
SOUTH NODE	23	31	59	63		56	53	79	66	63
PAKENHAM NODE		1	4	5		-1	10	2	2	13
<b>ALL NODES</b>	<b>88</b>	<b>155</b>	<b>197</b>	<b>230</b>		<b>222</b>	<b>242</b>	<b>217</b>	<b>277</b>	<b>193</b>

Source: Department of Planning and Community Development. 2009. Urban Development Program

**Table 3: Average Annual Industrial Land Consumption (ha) by LGA, and Zone Type 2004 to 2009**

LGA	Ind 1	Ind 2	Ind 3	Bus 3	Special Use	Comp Dev't	Airport Business Park	Total
BRIMBANK	15.0	23.0	4.2	2.3	0.0	0.0	0.0	44.4
HOBSONS BAY	1.4	0.0	-1.4	0.0	13.2	0.0	0.0	13.2
MARIBYRNONG	-1.9	0.0	0.1	-0.3	0.0	0.0	0.0	-2.1
MELTON	1.2	0.0	1.6	0.0	0.0	0.0	0.0	2.9
MOONEE VALLEY	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
WYNDHAM	1.3	38.6	12.6	0.0	0.0	0.0	0.0	52.5
<b>WEST REGION</b>	<b>17.1</b>	<b>61.6</b>	<b>17.3</b>	<b>2.0</b>	<b>13.2</b>	<b>0.0</b>	<b>0.0</b>	<b>111.2</b>
BANYULE	0.1	0.0	-0.1	0.1	0.0	0.0	0.0	0.1
DAREBIN	0.0	0.0	-0.5	0.0	0.0	0.0	0.0	-0.5
HUME	33.0	0.0	2.7	6.1	0.0	0.0	9.6	51.4
MORELAND	1.0	0.0	-0.3	0.0	0.0	0.0	0.0	0.7
NILLUMBIK	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3
WHITTLESEA	3.5	0.0	0.6	2.9	0.0	5.7	0.0	12.6
<b>NORTH REGION</b>	<b>37.5</b>	<b>0.0</b>	<b>2.8</b>	<b>9.1</b>	<b>0.0</b>	<b>5.7</b>	<b>9.6</b>	<b>64.7</b>
BAYSIDE	0.0	0.0	0.0	-0.2	0.0	0.0	0.0	-0.2
CARDINIA	5.4	0.0	0.0	0.0	0.0	0.0	0.0	5.4
CASEY	8.5	0.0	0.2	3.4	0.0	0.0	0.0	12.2
FRANKSTON	7.2	0.0	0.0	0.0	0.0	0.0	0.0	7.2
GLEN EIRA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
G' DANDENONG	18.8	17.3	3.4	11.2	0.0	0.0	0.0	50.7
KINGSTON	5.7	0.0	0.0	2.2	0.0	0.0	3.5	11.4
M' PENINSULA	0.0	0.0	3.4	0.0	4.7	0.0	0.0	8.0
<b>SOUTH REGION</b>	<b>45.7</b>	<b>17.3</b>	<b>7.0</b>	<b>16.6</b>	<b>4.7</b>	<b>0.0</b>	<b>3.5</b>	<b>94.7</b>
BOROONDARA	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
KNOX	5.4	0.0	0.0	2.8	0.0	0.0	0.0	8.2
MANNINGHAM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAROONDAH	1.0	0.0	0.1	0.0	0.0	0.0	0.0	1.0
MONASH	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.9
STONNINGTON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WHITEHORSE	-0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.2
YARRA RANGES	1.7	0.0	-0.2	0.3	0.0	0.0	0.0	1.8
<b>EAST REGION</b>	<b>8.0</b>	<b>0.0</b>	<b>0.2</b>	<b>4.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>12.1</b>
MELBOURNE	0.7	0.0	0.0	0.1	0.0	0.0	0.0	0.8
PORT PHILLIP	-0.1	0.0	0.0	0.1	0.0	0.0	0.0	-0.1
YARRA	0.0	0.0	0.3	-0.2	0.0	0.0	0.0	0.2
<b>INNER REGION</b>	<b>0.6</b>	<b>0.0</b>	<b>0.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>
<b>METRO MELB</b>	<b>108.8</b>	<b>78.9</b>	<b>27.6</b>	<b>31.6</b>	<b>17.8</b>	<b>5.7</b>	<b>13.1</b>	<b>283.5</b>

Source: Department of Planning and Community Development. 2009. Urban Development Program

**Table 4:** Average Annual Industrial Land Consumption (ha) by Industrial Node, and Zone Type 2004 to 2009

<b>NODE</b>	<b>Industrial 1</b>	<b>Industrial 2</b>	<b>Industrial 3</b>	<b>Business 3</b>	<b>Special Use</b>	<b>Comprehensive Development</b>	<b>Airport Business Park</b>	<b>Total</b>
WEST NODE	8	62	11	0	13	0	0	<b>94</b>
MELTON NODE	1	0	0	0	0	0	0	<b>1</b>
AIRPORT NODE	4	0	0	5	0	0	10	<b>19</b>
NORTH NODE	35	0	4	4	0	6	0	<b>48</b>
SOUTH NODE	28	17	4	15	0	0	0	<b>63</b>
PAKENHAM NODE	5	0	0	0	0	0	0	<b>5</b>
<b>ALL NODES</b>	<b>82</b>	<b>79</b>	<b>18</b>	<b>23</b>	<b>13</b>	<b>6</b>	<b>10</b>	<b>230</b>

Source: Department of Planning and Community Development. 2009. Urban Development Program

**Table 5: Stock of Industrial Land by LGA and Node, 2009**

<b>LGA</b>	<b>OCCUPIED</b>	<b>VACANT</b>	<b>TOTAL</b>	<b>VACANCY RATE</b>
BRIMBANK	1,491	651	<b>2,142</b>	30%
HOBSONS BAY	1,216	442	<b>1,657</b>	27%
MARIBYRNONG	536	32	<b>567</b>	6%
MELTON	240	621	<b>860</b>	72%
MOONEE VALLEY	55	0	<b>55</b>	1%
WYNDHAM	1,264	573	<b>1,837</b>	31%
<b>WEST REGION</b>	<b>4,801</b>	<b>2,319</b>	<b>7,120</b>	<b>33%</b>
BANYULE	121	4	<b>124</b>	3%
DAREBIN	287	19	<b>305</b>	6%
HUME	1,757	1,259	<b>3,016</b>	42%
MORELAND	270	13	<b>284</b>	5%
NILLUMBIK	30	0	<b>30</b>	0%
WHITTLESEA	669	322	<b>991</b>	32%
<b>NORTH REGION</b>	<b>3,134</b>	<b>1,617</b>	<b>4,751</b>	<b>34%</b>
BAYSIDE	76	5	<b>81</b>	6%
CARDINIA	170	295	<b>465</b>	63%
CASEY	370	77	<b>447</b>	17%
FRANKSTON	272	105	<b>377</b>	28%
GLEN EIRA	36	0	<b>36</b>	1%
GREATER DANDENONG	1,979	920	<b>2,899</b>	32%
KINGSTON	1,190	119	<b>1,309</b>	9%
MORNINGTON PENINSULA	2,113	1,117	<b>3,230</b>	35%
<b>SOUTH REGION</b>	<b>6,205</b>	<b>2,638</b>	<b>8,843</b>	<b>30%</b>
BOROONDARA	19	0	<b>19</b>	0%
KNOX	712	98	<b>810</b>	12%
MANNINGHAM	16	0	<b>17</b>	2%
MAROONDAH	381	80	<b>461</b>	17%
MONASH	705	27	<b>732</b>	4%
STONNINGTON	4	0	<b>4</b>	0%
WHITEHORSE	190	7	<b>197</b>	3%
YARRA RANGES	293	46	<b>339</b>	13%
<b>EAST REGION</b>	<b>2,320</b>	<b>257</b>	<b>2,577</b>	<b>10%</b>
MELBOURNE	336	18	<b>354</b>	5%
PORT PHILLIP	161	3	<b>164</b>	2%
YARRA	138	2	<b>141</b>	2%
<b>INNER REGION</b>	<b>635</b>	<b>24</b>	<b>659</b>	<b>4%</b>
<b>METRO MELBOURNE</b>	<b>17,095</b>	<b>6,855</b>	<b>23,950</b>	<b>29%</b>

<b>NODE</b>	<b>OCCUPIED</b>	<b>VACANT</b>	<b>TOTAL</b>	<b>VACANCY RATE</b>
WEST NODE	2,407	1,400	<b>3,807</b>	37%
MELTON NODE	183	276	<b>459</b>	60%
AIRPORT NODE	401	250	<b>651</b>	38%
NORTH NODE	1,569	1,227	<b>2,795</b>	44%
SOUTH NODE	2,054	975	<b>3,030</b>	32%
PAKENHAM NODE	92	272	<b>363</b>	75%
<b>ALL NODES</b>	<b>6,705</b>	<b>4,400</b>	<b>11,105</b>	<b>40%</b>

**APPENDICE PART TWO: INDUSTRIAL LAND STOCKS BY  
BUSINESS TYPE**

**Table 6: Occupied Industrial Land Stocks by Business Type and LGA (no. of premises), 2009**

LGA	Agriculture, Forestry and Fishing	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Accommodation and Food Services	Transport, Postal and Warehousing	Information Media and Telecommunication	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Administrative and Support Services	Public Administration and Safety	Education and Training	Health Care and Social Assistance	Arts and Recreation Services	Other Services	Total
BRIMBANK	21	2	405	8	285	311	109	38	144	5	162	227	107	53	10	8	4	12	221	2,132
HOBSONS BAY	9	0	137	12	125	87	47	13	68	6	69	167	73	26	4	6	4	11	75	939
MARIBYRNONG	11	1	144	2	54	121	79	16	45	6	83	112	52	49	8	9	6	24	82	904
MELTON	3	0	46	2	35	29	38	2	14	0	7	24	6	8	3	4	0	1	45	267
MOONEE VALLEY	2	0	74	4	36	36	25	5	10	0	34	54	24	5	3	3	3	4	71	393
WYNDHAM	11	3	166	9	145	150	95	23	68	4	86	134	71	27	2	7	3	12	113	1,129
<b>WEST REGION</b>	<b>57</b>	<b>6</b>	<b>972</b>	<b>37</b>	<b>680</b>	<b>734</b>	<b>393</b>	<b>97</b>	<b>349</b>	<b>21</b>	<b>441</b>	<b>718</b>	<b>333</b>	<b>168</b>	<b>30</b>	<b>37</b>	<b>20</b>	<b>64</b>	<b>607</b>	<b>5,764</b>
BANYULE	6	2	160	5	107	74	57	23	17	7	67	96	56	12	5	5	9	4	106	818
DAREBIN	5	1	269	1	130	205	127	59	38	9	189	232	78	36	3	8	17	38	126	1,571
HUME	24	5	652	23	380	392	183	65	269	17	195	338	151	101	8	17	14	31	317	3,182
MORELAND	11	0	287	2	153	191	123	58	70	19	149	173	126	40	7	25	29	74	203	1,740
NILLUMBIK	5	0	28	2	47	14	20	7	2	0	16	27	22	8	2	7	6	8	31	252
WHITTLESEA	10	2	442	10	237	248	144	33	40	4	124	181	91	38	9	12	26	19	177	1,847
<b>NORTH REGION</b>	<b>61</b>	<b>10</b>	<b>1,838</b>	<b>43</b>	<b>1,054</b>	<b>1,124</b>	<b>654</b>	<b>245</b>	<b>436</b>	<b>56</b>	<b>740</b>	<b>1,047</b>	<b>524</b>	<b>235</b>	<b>34</b>	<b>74</b>	<b>101</b>	<b>174</b>	<b>960</b>	<b>9,410</b>
BAYSIDE	3	0	67	1	49	42	29	3	16	3	45	53	43	9	4	7	4	3	37	418
CARDINIA	4	1	43	2	49	17	20	3	19	0	13	19	18	2	0	3	1	2	33	249
CASEY	5	1	248	3	228	183	127	17	46	6	75	192	83	30	6	15	7	13	130	1,415
FRANKSTON	11	1	293	3	248	151	83	26	35	3	107	169	92	30	9	9	9	16	168	1,463
GLEN EIRA	1	0	27	0	20	26	21	2	6	4	25	24	32	10	0	4	7	5	24	238
G' DANDENONG	18	12	1,033	20	390	591	254	63	144	10	297	431	200	78	8	12	8	34	358	3,961
KINGSTON	29	3	981	29	492	771	322	98	195	35	490	564	351	128	8	31	21	62	435	5,045
M' PENINSULA	17	0	141	8	156	57	83	18	35	3	38	65	64	20	3	11	4	22	149	894
<b>SOUTH REGION</b>	<b>88</b>	<b>18</b>	<b>2,833</b>	<b>66</b>	<b>1,632</b>	<b>1,838</b>	<b>939</b>	<b>230</b>	<b>496</b>	<b>64</b>	<b>1,090</b>	<b>1,517</b>	<b>883</b>	<b>307</b>	<b>38</b>	<b>92</b>	<b>61</b>	<b>157</b>	<b>1,334</b>	<b>13,683</b>
BOROONDARA	52	1	35	3	61	56	53	19	10	14	137	94	158	31	3	9	37	18	44	835
KNOX	25	2	736	6	290	395	170	28	34	11	233	330	197	62	3	12	17	30	285	2,866
MANNINGHAM	2	0	17	0	14	12	7	2	2	1	10	12	11	0	0	1	0	0	15	106
MAROONDAH	14	5	325	5	179	187	94	18	27	5	129	182	96	34	5	10	9	13	176	1,513
MONASH	64	5	438	30	317	504	225	33	126	47	442	366	369	119	11	24	22	29	178	3,349
STONNINGTON	0	0	5	1	3	2	1	0	1	0	4	5	4	1	0	0	1	1	4	33
WHITEHORSE	4	1	169	2	110	199	86	11	21	24	117	154	104	20	5	7	9	13	145	1,201
YARRA RANGES	7	1	104	1	63	58	39	9	14	0	35	40	29	5	0	1	1	4	61	472
<b>EAST REGION</b>	<b>168</b>	<b>15</b>	<b>1,829</b>	<b>48</b>	<b>1,037</b>	<b>1,413</b>	<b>675</b>	<b>120</b>	<b>235</b>	<b>102</b>	<b>1,107</b>	<b>1,183</b>	<b>968</b>	<b>272</b>	<b>27</b>	<b>64</b>	<b>96</b>	<b>108</b>	<b>908</b>	<b>10,375</b>
MELBOURNE	15	1	85	3	68	113	55	17	38	24	107	118	196	39	4	11	15	28	43	980
PORT PHILLIP	12	1	99	3	141	147	97	63	62	83	215	210	328	85	12	12	27	53	101	1,751
YARRA	21	3	237	4	264	360	270	79	52	104	295	405	652	122	19	41	51	164	134	3,277
<b>INNER REGION</b>	<b>48</b>	<b>5</b>	<b>421</b>	<b>10</b>	<b>473</b>	<b>620</b>	<b>422</b>	<b>159</b>	<b>152</b>	<b>211</b>	<b>617</b>	<b>733</b>	<b>1,176</b>	<b>246</b>	<b>35</b>	<b>64</b>	<b>93</b>	<b>245</b>	<b>278</b>	<b>6,008</b>
<b>Metro Melbourne</b>	<b>422</b>	<b>54</b>	<b>7,893</b>	<b>204</b>	<b>4,876</b>	<b>5,729</b>	<b>3,083</b>	<b>851</b>	<b>1,668</b>	<b>454</b>	<b>3,995</b>	<b>5,198</b>	<b>3,884</b>	<b>1,228</b>	<b>164</b>	<b>331</b>	<b>371</b>	<b>748</b>	<b>4,087</b>	<b>45,240</b>

**Table 7: Occupied Industrial Land Stocks by Business Type and Industrial Node (no. of premises), 2009**

<b>Node</b>	<b>Agriculture, Forestry and Fishing</b>	<b>Mining</b>	<b>Manufacturing</b>	<b>Electricity, Gas, Water and Waste Services</b>	<b>Construction</b>	<b>Wholesale Trade</b>	<b>Retail Trade</b>	<b>Accommodation and Food Services</b>	<b>Transport, Postal and Warehousing</b>	<b>Information Media and Telecommunications</b>	<b>Financial and Insurance Services</b>	<b>Rental, Hiring and Real Estate Services</b>	<b>Professional, Scientific and Technical Services</b>	<b>Administrative and Support Services</b>	<b>Public Administration and Safety</b>	<b>Education and Training</b>	<b>Health Care and Social Assistance</b>	<b>Arts and Recreation Services</b>	<b>Other Services</b>	<b>Total</b>
Airport	19	0	173	3	157	204	57	26	161	9	96	145	86	36	4	10	10	11	91	<b>1,298</b>
Melton	2	0	32	2	21	18	21	1	9	0	5	17	3	5	2	2	0	1	35	<b>176</b>
North	2	3	593	22	319	287	136	52	149	6	141	228	93	81	7	9	18	23	238	<b>2,407</b>
Pakenham	2	0	31	2	31	8	13	1	13	0	5	15	9	0	0	2	1	1	16	<b>150</b>
South	17	8	1,140	21	525	644	297	69	165	13	312	527	243	92	13	21	10	40	387	<b>4,544</b>
West	17	4	208	10	100	213	45	21	125	4	120	133	69	40	3	6	1	6	59	<b>1,184</b>
<b>ALL NODES</b>	<b>59</b>	<b>15</b>	<b>2,177</b>	<b>60</b>	<b>1,153</b>	<b>1,374</b>	<b>569</b>	<b>170</b>	<b>622</b>	<b>32</b>	<b>679</b>	<b>1,065</b>	<b>503</b>	<b>254</b>	<b>29</b>	<b>50</b>	<b>40</b>	<b>82</b>	<b>826</b>	<b>9,759</b>

Source: Department of Planning and Community Development. 2009.  
Australian Business Register and Spatial Economics

**Table 8:** Occupied Industrial Land Stocks by Business Type and Zone Type - metro Melbourne (no. of premises), 2009

Zone Type	Agriculture, Forestry and Fishing	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Accommodation and Food Services	Transport, Postal and Warehousing	Information Media and Telecommunications	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Administrative and Support Services	Public Administration and Safety	Education and Training	Health Care and Social Assistance	Arts and Recreation Services	Other Services	Total
IN1Z	183	29	5,612	123	3,005	3,611	1,740	457	916	176	2,209	3,025	1,869	651	88	141	115	327	2,628	<b>26,905</b>
B3Z	152	15	923	43	916	1,078	707	199	359	216	1,118	1,167	1,440	355	51	105	184	232	571	<b>9,831</b>
IN3Z	59	6	1,073	25	829	792	584	177	248	57	529	844	490	174	22	71	69	172	836	<b>7,057</b>
IN2Z	15	3	215	10	73	203	45	10	97	1	107	112	58	33	3	3	1	4	36	<b>1,029</b>
SUZ4	3	0	24	3	23	27	2	4	27	1	23	22	14	2	0	3	0	1	8	<b>187</b>
SUZ1	9	0	11	0	27	1	2	2	7	0	4	5	8	6	0	2	1	8	6	<b>99</b>
APBP	1	1	17	0	2	8	1	2	14	3	5	14	4	2	0	6	0	4	2	<b>86</b>
CDZ2	0	0	11	0	1	6	2	0	0	0	0	7	1	3	0	0	1	0	0	<b>32</b>
SUZ3	0	0	6	0	0	3	0	0	0	0	0	2	0	2	0	0	0	0	0	<b>13</b>
SUZ5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>1</b>
<b>Metro Melbourne</b>	<b>422</b>	<b>54</b>	<b>7,893</b>	<b>204</b>	<b>4,876</b>	<b>5,729</b>	<b>3,083</b>	<b>851</b>	<b>1,668</b>	<b>454</b>	<b>3,995</b>	<b>5,198</b>	<b>3,884</b>	<b>1,228</b>	<b>164</b>	<b>331</b>	<b>371</b>	<b>748</b>	<b>4,087</b>	<b>45,240</b>

Source: Department of Planning and Community Development. 2009.  
Australian Business Register and Spatial Economics

**Table 9:** Occupied Industrial Land Stocks by Business Type and Zone Type - Industrial Nodes (no. of premises), 2009

Zone Type	Agriculture, Forestry and Fishing	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Accommodation and Food Services	Transport, Postal and Warehousing	Information Media and Telecommunications	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Administrative and Support Services	Public Administration and Safety	Education and Training	Health Care and Social Assistance	Arts and Recreation Services	Other Services	Total
SUZ3	0	0	6	0	0	3	0	0	0	0	0	2	0	2	0	0	0	0	0	13
CDZ2	0	0	11	0	1	6	2	0	0	0	0	7	1	3	0	0	1	0	0	32
SUZ4	3	0	24	3	23	27	2	4	27	1	23	22	14	2	0	3	0	1	8	187
IN3Z	2	1	125	4	89	77	43	14	63	8	34	69	35	23	0	8	13	11	89	708
IN2Z	15	3	215	10	72	202	45	10	97	1	106	112	58	33	3	3	1	4	36	1,026
B3Z	12	1	163	1	134	171	58	21	137	6	87	139	68	33	1	7	8	10	80	1,137
IN1Z	27	10	1,633	42	834	888	419	121	298	16	429	714	327	158	25	29	17	56	613	6,656
<b>ALL NODES</b>	<b>59</b>	<b>15</b>	<b>2,177</b>	<b>60</b>	<b>1,153</b>	<b>1,374</b>	<b>569</b>	<b>170</b>	<b>622</b>	<b>32</b>	<b>679</b>	<b>1,065</b>	<b>503</b>	<b>254</b>	<b>29</b>	<b>50</b>	<b>40</b>	<b>82</b>	<b>826</b>	<b>9,759</b>

Source: Department of Planning and Community Development. 2009.  
Australian Business Register and Spatial Economics

**Table 10:** Occupied Industrial Land Stocks by Business Type and Lot Size - metro Melbourne (no. of premises), 2009

Lot Size Cohort	Agriculture, Forestry and Fishing	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Accommodation and Food Services	Transport, Postal and Warehousing	Information Media and Telecommunications	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Administrative and Support Services	Public Administration and Safety	Education and Training	Health Care and Social Assistance	Arts and Recreation Services	Other Services	Total
Less than 0.1ha	142	8	3,552	64	2,615	2,483	1,491	496	584	244	1,385	2,370	2,089	573	94	182	209	433	2,596	<b>21,610</b>
0.1 to 0.5 ha	142	17	2,911	63	1,468	2,042	1,009	215	542	131	1,438	1,776	1,104	367	41	80	95	169	1,100	<b>14,710</b>
0.5 to 1 ha	31	13	546	19	295	496	201	54	203	30	384	382	275	97	14	21	20	50	170	<b>3,301</b>
1 to 5 ha	95	12	732	50	453	631	343	69	251	33	644	572	370	166	11	33	43	82	194	<b>4,784</b>
5 to 10 ha	8	1	83	4	22	42	18	6	33	11	66	30	26	14	0	5	3	10	15	<b>397</b>
10+ ha	4	3	69	4	23	35	21	11	55	5	78	68	20	11	4	10	1	4	12	<b>438</b>
<b>Metro Melbourne</b>	<b>422</b>	<b>54</b>	<b>7,893</b>	<b>204</b>	<b>4,876</b>	<b>5,729</b>	<b>3,083</b>	<b>851</b>	<b>1,668</b>	<b>454</b>	<b>3,995</b>	<b>5,198</b>	<b>3,884</b>	<b>1,228</b>	<b>164</b>	<b>331</b>	<b>371</b>	<b>748</b>	<b>4,087</b>	<b>45,240</b>

Source: Department of Planning and Community Development. 2009.  
Australian Business Register and Spatial Economics

**Table 11: Occupied Industrial Land Stocks by Business Type and Lot Size - Industrial Nodes (no. of premises), 2009**

<b>Lot Size Cohort</b>	<b>Agriculture, Forestry and Fishing</b>	<b>Mining</b>	<b>Manufacturing</b>	<b>Electricity, Gas, Water and Waste Services</b>	<b>Construction</b>	<b>Wholesale Trade</b>	<b>Retail Trade</b>	<b>Accommodation and Food Services</b>	<b>Transport, Postal and Warehousing</b>	<b>Information Media and Telecommunications</b>	<b>Financial and Insurance Services</b>	<b>Rental, Hiring and Real Estate Services</b>	<b>Professional, Scientific and Technical Services</b>	<b>Administrative and Support Services</b>	<b>Public Administration and Safety</b>	<b>Education and Training</b>	<b>Health Care and Social Assistance</b>	<b>Arts and Recreation Services</b>	<b>Other Services</b>	<b>Total</b>
Less than 0.1ha	18	0	739	14	477	445	236	70	158	12	123	363	181	88	10	25	11	31	462	<b>3,463</b>
0.1 to 0.5 ha	15	3	942	21	447	584	220	57	239	11	284	430	199	91	17	19	15	27	275	<b>3,896</b>
0.5 to 1 ha	5	7	177	6	76	130	44	16	69	3	84	103	46	27	1	3	0	8	34	<b>839</b>
1 to 5 ha	19	4	249	14	140	180	59	19	130	3	158	149	60	37	1	2	13	14	44	<b>1,295</b>
5 to 10 ha	2	1	33	2	6	19	5	3	20	2	19	12	7	7	0	0	0	2	8	<b>148</b>
10+ ha	0	0	37	3	7	16	5	5	6	1	11	8	10	4	0	1	1	0	3	<b>118</b>
<b>ALL NODES</b>	<b>59</b>	<b>15</b>	<b>2,177</b>	<b>60</b>	<b>1,153</b>	<b>1,374</b>	<b>569</b>	<b>170</b>	<b>622</b>	<b>32</b>	<b>679</b>	<b>1,065</b>	<b>503</b>	<b>254</b>	<b>29</b>	<b>50</b>	<b>40</b>	<b>82</b>	<b>826</b>	<b>9,759</b>

Source: Department of Planning and Community Development. 2009.  
Australian Business Register and Spatial Economics

**Table 11a:** Net Area Occupied by Industry Type by LGA (ha), 2009

LG/Region	Agriculture, Forestry and Fishing	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Accommodation and Food Services	Transport, Postal and Warehousing	Information Media and Telecommunications	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Administrative and Support Services	Public Administration and Safety	Education and Training	Health Care and Social Assistance	Arts and Recreation Services	Other Services	Total
Brimbank	13	9	407	2	191	277	86	49	131	13	270	270	133	44	6	13	1	21	95	2,031
Hobsons Bay	6	0	335	14	214	172	17	142	166	6	71	119	69	223	1	4	4	5	105	1,672
Maribyrnong	4	1	127	14	52	99	49	5	129	9	152	108	41	55	34	9	4	12	35	939
Melton	1	0	38	5	24	29	29	2	7	0	13	17	4	3	1	2	0	0	16	191
Moonee Valley	0	0	10	1	3	7	4	1	1	0	7	13	3	0	0	0	0	0	6	57
Wyndham	16	3	335	28	51	283	107	17	105	1	253	220	75	37	0	28	0	9	84	1,650
<b>West Region</b>	<b>41</b>	<b>12</b>	<b>1,252</b>	<b>64</b>	<b>535</b>	<b>867</b>	<b>292</b>	<b>216</b>	<b>539</b>	<b>28</b>	<b>766</b>	<b>747</b>	<b>325</b>	<b>362</b>	<b>42</b>	<b>56</b>	<b>9</b>	<b>48</b>	<b>342</b>	<b>6,541</b>
Banyule	2	0	26	0	16	25	9	4	2	1	18	20	10	4	0	1	0	1	10	149
Darebin	1	2	70	0	34	55	57	9	8	2	84	77	24	13	1	3	4	8	19	467
Hume	17	19	312	13	129	155	89	65	207	10	141	159	50	50	2	4	75	26	85	1,608
Moreland	1	0	81	0	19	31	14	6	6	1	40	29	16	4	1	8	2	8	31	298
Nillumbik	1	0	3	0	6	2	3	5	0	0	3	2	5	0	1	1	2	2	6	43
Whittlesea	5	1	165	8	64	100	88	13	19	4	96	61	35	34	1	3	21	17	43	777
<b>North Region</b>	<b>26</b>	<b>22</b>	<b>657</b>	<b>21</b>	<b>269</b>	<b>367</b>	<b>260</b>	<b>102</b>	<b>242</b>	<b>19</b>	<b>383</b>	<b>348</b>	<b>139</b>	<b>105</b>	<b>6</b>	<b>19</b>	<b>105</b>	<b>61</b>	<b>193</b>	<b>3,341</b>
Bayside	3	0	18	0	12	18	9	0	5	1	15	18	12	4	1	1	2	0	10	129
Cardinia	2	1	19	0	16	4	6	0	11	0	7	5	6	1	0	1	0	1	7	86
Casey	2	2	96	4	79	84	54	9	22	3	62	75	34	15	2	3	1	8	22	576
Frankston	5	0	40	5	48	27	14	4	13	0	22	35	17	19	1	1	1	8	17	276
Glen Eira	0	0	61	0	32	53	37	0	2	14	40	19	38	16	0	14	9	14	17	366
Greater Dandenong	25	8	662	43	132	303	91	22	146	8	240	168	169	37	1	2	5	13	72	2,146
Kingston	59	54	1,093	27	274	657	170	158	1,255	169	1,535	1,681	275	221	62	385	8	122	188	8,392
Mornington Peninsula	79	0	71	4	138	19	34	17	60	8	28	27	31	26	1	22	9	58	45	676
Stonnington	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
<b>South Region</b>	<b>175</b>	<b>65</b>	<b>2,060</b>	<b>83</b>	<b>731</b>	<b>1,165</b>	<b>415</b>	<b>211</b>	<b>1,515</b>	<b>203</b>	<b>1,947</b>	<b>2,028</b>	<b>583</b>	<b>339</b>	<b>67</b>	<b>427</b>	<b>36</b>	<b>223</b>	<b>378</b>	<b>12,651</b>
Boroondara	10	0	4	1	7	9	7	2	1	2	20	11	23	5	0	1	5	3	5	116
Knox	10	11	313	0	96	170	68	8	22	15	177	97	115	45	1	2	4	22	52	1,228
Manningham	0	0	4	0	1	1	1	0	0	0	1	1	1	0	0	0	0	0	1	11
Maroondah	25	4	216	2	100	102	226	15	14	1	108	83	40	28	1	8	1	17	91	1,082
Monash	65	6	300	61	224	395	232	53	84	48	616	300	313	95	4	15	26	17	77	2,931
Whitehorse	1	0	54	0	17	41	14	1	7	10	64	46	20	2	2	2	3	3	20	308
Yarra Ranges	9	0	75	0	45	51	29	7	17	0	41	24	21	5	0	0	4	12	9	349
<b>East Region</b>	<b>119</b>	<b>21</b>	<b>965</b>	<b>64</b>	<b>490</b>	<b>770</b>	<b>576</b>	<b>87</b>	<b>147</b>	<b>76</b>	<b>1,027</b>	<b>562</b>	<b>532</b>	<b>180</b>	<b>8</b>	<b>28</b>	<b>44</b>	<b>74</b>	<b>256</b>	<b>6,024</b>
Melbourne	15	2	151	1	116	107	45	10	44	14	144	100	151	37	0	14	21	20	47	1,039
Port Phillip	6	0	28	0	31	37	28	8	113	24	81	101	96	38	9	2	4	22	19	647
Yarra	1	0	24	2	25	48	39	8	8	10	40	44	68	14	1	4	4	9	11	360
<b>Inner Region</b>	<b>22</b>	<b>2</b>	<b>203</b>	<b>4</b>	<b>172</b>	<b>191</b>	<b>112</b>	<b>25</b>	<b>165</b>	<b>48</b>	<b>265</b>	<b>245</b>	<b>315</b>	<b>89</b>	<b>11</b>	<b>20</b>	<b>30</b>	<b>51</b>	<b>77</b>	<b>2,046</b>
<b>Metro Melbourne</b>	<b>383</b>	<b>122</b>	<b>5,137</b>	<b>236</b>	<b>2,196</b>	<b>3,359</b>	<b>1,655</b>	<b>641</b>	<b>2,607</b>	<b>373</b>	<b>4,388</b>	<b>3,931</b>	<b>1,894</b>	<b>1,074</b>	<b>133</b>	<b>550</b>	<b>223</b>	<b>457</b>	<b>1,246</b>	<b>30,604</b>

**Table 11b:** Net Area Occupied by Industry Type by Node (ha), 2009

<b>NODE</b>	<b>Agriculture, Forestry and Fishing</b>	<b>Mining</b>	<b>Manufacturing</b>	<b>Electricity, Gas, Water and Waste Services</b>	<b>Construction</b>	<b>Wholesale Trade</b>	<b>Retail Trade</b>	<b>Accommodation and Food Services</b>	<b>Transport, Postal and Warehousing</b>	<b>Information Media and Telecommunications</b>	<b>Financial and Insurance Services</b>	<b>Rental, Hiring and Real Estate Services</b>	<b>Professional, Scientific and Technical Services</b>	<b>Administrative and Support Services</b>	<b>Public Administration and Safety</b>	<b>Education and Training</b>	<b>Health Care and Social Assistance</b>	<b>Arts and Recreation Services</b>	<b>Other Services</b>	<b>Total</b>
Airport	17	0	205	1	118	127	29	26	53	15	60	65	105	7	1	1	2	2	20	<b>853</b>
Melton	0	0	34	5	18	24	22	2	3	0	12	15	2	2	1	0	0	0	14	<b>154</b>
North	0	3	318	12	115	124	111	53	169	8	162	129	42	57	2	3	87	25	79	<b>1,501</b>
Pakenham	1	0	14	0	5	1	4	0	8	0	3	3	2	0	0	0	0	0	2	<b>43</b>
South	23	7	693	47	190	329	117	30	151	10	269	214	188	46	3	4	4	19	80	<b>2,424</b>
West	27	12	676	40	214	494	33	153	281	4	362	300	125	264	1	27	4	9	155	<b>3,181</b>
<b>All Nodes</b>	<b>68</b>	<b>21</b>	<b>1,940</b>	<b>105</b>	<b>660</b>	<b>1,099</b>	<b>316</b>	<b>264</b>	<b>665</b>	<b>36</b>	<b>867</b>	<b>726</b>	<b>465</b>	<b>376</b>	<b>6</b>	<b>36</b>	<b>97</b>	<b>57</b>	<b>351</b>	<b>8,156</b>

Source: Department of Planning and Community Development. 2009.  
Australian Business Register and Spatial Economics

**APPENDICE PART THREE: INDUSTRIAL LAND  
CONSUMPTION BY BUSINESS TYPE, 2000 to 2009**

**Table 13:** Count of Consumed Industrial Land Stocks by Business Type and LGA (no. of premises), 2000 to 2009

LGA	Agriculture, Forestry and Fishing	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Accommodation and Food Services	Transport, Postal and Warehousing	Information Media and Telecommunications	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Administrative and Support Services	Public Administration and Safety	Education and Training	Health Care and Social Assistance	Arts and Recreation Services	Other Services	Total
Brimbank	6	0	88	3	63	99	25	4	50	2	40	48	33	17	3	2	0	3	25	511
Hobsons Bay	1	0	7	3	31	14	4	3	8	3	6	16	13	3	1	1	1	3	7	125
Maribyrnong	1	0	1	0	1	18	5	0	1	0	0	5	0	1	0	0	0	0	5	38
Melton	0	0	14	0	21	13	16	1	3	0	2	12	1	2	2	1	0	0	12	100
Moonee Valley	0	0	0	0	2	0	3	0	0	0	2	0	2	0	0	0	0	0	4	13
Wyndham	1	0	50	1	46	50	33	10	22	1	18	49	29	8	0	0	2	3	25	348
<b>WEST REGION</b>	<b>9</b>	<b>0</b>	<b>160</b>	<b>7</b>	<b>164</b>	<b>194</b>	<b>86</b>	<b>18</b>	<b>84</b>	<b>6</b>	<b>68</b>	<b>130</b>	<b>78</b>	<b>31</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>9</b>	<b>78</b>	<b>1,135</b>
Banyule	1	0	2	0	16	1	3	0	2	1	1	4	7	1	0	1	0	2	1	43
Darebin	0	0	0	0	0	5	1	0	1	0	1	1	2	0	0	0	0	0	1	12
Hume	9	1	200	4	180	182	59	13	75	7	44	98	52	32	4	4	3	6	65	1,038
Moreland	0	0	6	0	11	10	1	0	3	0	0	5	1	0	0	0	0	0	6	43
Nillumbik	0	0	2	0	5	4	2	1	0	0	5	1	4	0	1	0	1	1	1	28
Whittlesea	0	1	77	2	55	56	25	9	8	2	15	36	17	9	0	1	16	7	19	355
<b>NORTH REGION</b>	<b>10</b>	<b>2</b>	<b>287</b>	<b>6</b>	<b>267</b>	<b>258</b>	<b>91</b>	<b>23</b>	<b>89</b>	<b>10</b>	<b>66</b>	<b>145</b>	<b>83</b>	<b>42</b>	<b>5</b>	<b>6</b>	<b>20</b>	<b>16</b>	<b>93</b>	<b>1,519</b>
Bayside	0	0	2	0	1	6	3	0	2	0	0	1	1	0	0	0	1	0	2	19
Cardinia	3	0	23	1	26	9	6	2	10	0	0	14	5	0	0	2	0	0	8	109
Casey	1	1	65	2	93	67	37	4	13	5	15	56	33	10	2	1	4	5	30	444
Frankston	4	0	72	0	102	51	15	3	7	2	11	42	37	8	2	1	3	3	16	379
Glen Eira	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
G' Dandenong	3	2	171	3	88	147	36	3	42	1	44	93	38	17	0	1	1	5	24	719
Kingston	1	0	63	2	52	73	21	4	10	2	24	39	27	13	0	1	4	10	18	364
M' Peninsula	3	0	22	2	41	15	14	1	5	0	3	7	18	6	0	5	1	3	14	160
<b>SOUTH REGION</b>	<b>15</b>	<b>3</b>	<b>418</b>	<b>10</b>	<b>403</b>	<b>368</b>	<b>132</b>	<b>17</b>	<b>89</b>	<b>10</b>	<b>97</b>	<b>253</b>	<b>159</b>	<b>54</b>	<b>4</b>	<b>11</b>	<b>14</b>	<b>26</b>	<b>112</b>	<b>2,195</b>
Boroondara	0	0	2	0	11	11	5	3	2	0	17	16	19	3	0	0	0	0	2	91
Knox	6	0	49	0	22	45	17	3	4	2	8	21	14	5	0	0	0	1	14	211
Manningham	0	0	1	0	2	1	0	0	0	0	0	5	0	0	0	0	0	0	0	9
Maroondah	1	0	38	0	33	31	9	1	1	0	7	14	17	6	1	0	1	2	9	171
Monash	2	0	24	17	15	41	15	0	1	1	29	18	25	3	2	3	2	1	7	206
Whitehorse	0	0	8	0	9	15	3	1	0	0	9	7	6	0	0	1	0	1	1	61
Yarra Ranges	0	0	13	1	14	10	4	2	3	0	5	12	7	1	0	0	0	0	12	84
<b>EAST REGION</b>	<b>9</b>	<b>0</b>	<b>135</b>	<b>18</b>	<b>106</b>	<b>154</b>	<b>53</b>	<b>10</b>	<b>11</b>	<b>3</b>	<b>75</b>	<b>93</b>	<b>88</b>	<b>18</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>5</b>	<b>45</b>	<b>833</b>
Melbourne	0	0	3	0	4	10	3	0	3	2	1	11	16	3	0	1	0	2	0	59
Port Phillip	2	0	16	2	21	24	7	3	4	2	14	12	20	2	2	1	1	1	1	135
Yarra	0	0	1	0	1	1	0	0	0	0	5	4	12	0	0	0	0	1	0	25
<b>INNER REGION</b>	<b>2</b>	<b>0</b>	<b>20</b>	<b>2</b>	<b>26</b>	<b>35</b>	<b>10</b>	<b>3</b>	<b>7</b>	<b>4</b>	<b>20</b>	<b>27</b>	<b>48</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>219</b>
<b>Metro Melb</b>	<b>45</b>	<b>5</b>	<b>1,020</b>	<b>43</b>	<b>966</b>	<b>1,009</b>	<b>372</b>	<b>71</b>	<b>280</b>	<b>33</b>	<b>326</b>	<b>648</b>	<b>456</b>	<b>150</b>	<b>20</b>	<b>27</b>	<b>41</b>	<b>60</b>	<b>329</b>	<b>5,901</b>

**Table 14:** Count of Consumed Industrial Land Stocks by Business Type and Industrial Node, 2000 to 2009

<b>Node</b>	<b>Agriculture, Forestry and Fishing</b>	<b>Mining</b>	<b>Manufacturing</b>	<b>Electricity, Gas, Water and Waste Services</b>	<b>Construction</b>	<b>Wholesale Trade</b>	<b>Retail Trade</b>	<b>Accommodation and Food Services</b>	<b>Transport, Postal and Warehousing</b>	<b>Information Media and Telecommunications</b>	<b>Financial and Insurance Services</b>	<b>Rental, Hiring and Real Estate Services</b>	<b>Professional, Scientific and Technical Services</b>	<b>Administrative and Support Services</b>	<b>Public Administration and Safety</b>	<b>Education and Training</b>	<b>Health Care and Social Assistance</b>	<b>Arts and Recreation Services</b>	<b>Other Services</b>	<b>Total</b>
Airport	10	0	37	1	57	73	20	2	53	5	23	45	29	13	1	1	1	5	20	<b>396</b>
Melton	0	0	8	0	11	5	4	0	1	0	0	7	0	1	1	0	0	0	6	<b>44</b>
North	0	1	214	5	165	150	48	15	43	2	37	77	39	26	3	2	13	9	58	<b>907</b>
Pakenham	2	0	20	1	22	7	4	1	10	0	0	13	5	0	0	2	0	0	4	<b>91</b>
South	4	3	231	5	172	200	70	7	54	6	58	145	66	27	2	2	5	10	50	<b>1,117</b>
West	7	0	85	1	53	104	32	12	53	3	42	59	45	18	3	2	0	2	21	<b>542</b>
<b>ALL NODES</b>	<b>23</b>	<b>4</b>	<b>595</b>	<b>13</b>	<b>480</b>	<b>539</b>	<b>178</b>	<b>37</b>	<b>214</b>	<b>16</b>	<b>160</b>	<b>346</b>	<b>184</b>	<b>85</b>	<b>10</b>	<b>9</b>	<b>19</b>	<b>26</b>	<b>159</b>	<b>3,097</b>

Source: Department of Planning and Community Development. 2009.  
Australian Business Register and Spatial Economics

**Table 15:** Count of Consumed Industrial Land Stocks by Business Type and Zone Type - metro Melbourne (no. of premises), 2000 to 2009

Zone Type	Agriculture, Forestry and Fishing	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Accommodation and Food Services	Transport, Postal and Warehousing	Information Media and Telecommunications	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Administrative and Support Services	Public Administration and Safety	Education and Training	Health Care and Social Assistance	Arts and Recreation Services	Other Services	Total
IN1Z	22	4	670	20	641	571	205	37	132	16	153	375	235	81	12	8	14	32	199	<b>3,427</b>
B3Z	12	1	131	17	149	202	71	14	66	9	93	133	118	30	3	7	12	10	43	<b>1,121</b>
IN3Z	4	0	101	5	116	108	63	11	29	6	31	68	51	19	2	10	14	11	70	<b>719</b>
IN2Z	6	0	98	1	40	111	30	7	47	1	46	53	42	18	3	2	0	3	16	<b>524</b>
SUZ4	1	0	3	0	14	9	1	2	4	1	2	9	5	0	0	0	0	0	0	<b>51</b>
CDZ2	0	0	11	0	1	6	2	0	0	0	0	7	1	2	0	0	1	0	0	<b>31</b>
APBP	0	0	4	0	1	2	0	0	1	0	1	3	2	0	0	0	0	3	1	<b>18</b>
SUZ1	0	0	2	0	4	0	0	0	1	0	0	0	2	0	0	0	0	1	0	<b>10</b>
<b>Metro Melbourne</b>	<b>45</b>	<b>5</b>	<b>1,020</b>	<b>43</b>	<b>966</b>	<b>1,009</b>	<b>372</b>	<b>71</b>	<b>280</b>	<b>33</b>	<b>326</b>	<b>648</b>	<b>456</b>	<b>150</b>	<b>20</b>	<b>27</b>	<b>41</b>	<b>60</b>	<b>329</b>	<b>5,901</b>

Source: Department of Planning and Community Development. 2009.  
Australian Business Register and Spatial Economics

**Table 16:** Count of Consumed Industrial Land Stocks by Business Type and Zone Type - Industrial Nodes (no. of premises), 2000 to 2009

Zone Type	Agriculture, Forestry and Fishing	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Accommodation and Food Services	Transport, Postal and Warehousing	Information Media and Telecommunications	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Administrative and Support Services	Public Administration and Safety	Education and Training	Health Care and Social Assistance	Arts and Recreation Services	Other Services	Total
CDZ2	0	0	11	0	1	6	2	0	0	0	0	7	1	2	0	0	1	0	0	31
SUZ4	1	0	3	0	14	9	1	2	4	1	2	9	5	0	0	0	0	0	0	51
IN3Z	0	0	36	1	17	27	10	4	15	5	6	13	11	5	0	1	10	2	28	191
IN2Z	6	0	98	1	40	110	30	7	47	1	45	53	42	18	3	2	0	3	16	522
B3Z	9	1	84	0	96	114	34	5	57	5	40	80	44	15	1	2	4	6	26	623
IN1Z	7	3	363	11	312	273	101	19	91	4	67	184	81	45	6	4	4	15	89	1,679
<b>ALL NODES</b>	<b>23</b>	<b>4</b>	<b>595</b>	<b>13</b>	<b>480</b>	<b>539</b>	<b>178</b>	<b>37</b>	<b>214</b>	<b>16</b>	<b>160</b>	<b>346</b>	<b>184</b>	<b>85</b>	<b>10</b>	<b>9</b>	<b>19</b>	<b>26</b>	<b>159</b>	<b>3,097</b>

Source: Department of Planning and Community Development. 2009.

Australian Business Register and Spatial Economics

**Table 17:** Count of Consumed Industrial Land Stocks by Business Type and Lot Size - metro Melbourne (no. of premises), 2000 to 2009

Lot Size Cohort	Agriculture, Forestry and Fishing	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Accommodation and Food Services	Transport, Postal and Warehousing	Information Media and Telecommunications	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Administrative and Support Services	Public Administration and Safety	Education and Training	Health Care and Social Assistance	Arts and Recreation Services	Other Services	Total
Less than 0.1ha	7	0	328	11	459	347	156	30	69	12	80	247	201	70	7	16	13	23	167	<b>2,243</b>
0.1 to 0.5 ha	20	2	487	13	362	445	153	21	129	17	136	272	187	56	11	8	11	23	119	<b>2,472</b>
0.5 to 1 ha	0	2	79	1	57	72	12	11	21	3	14	55	26	7	1	2	1	6	14	<b>384</b>
1 to 5 ha	17	1	115	18	84	136	50	9	58	1	89	73	40	16	1	1	16	8	28	<b>761</b>
5 to 10 ha	1	0	10	0	4	5	1	0	3	0	5	1	1	1	0	0	0	0	1	<b>33</b>
10+ ha	0	0	1	0	0	4	0	0	0	0	2	0	1	0	0	0	0	0	0	<b>8</b>
<b>Metro Melbourne</b>	<b>45</b>	<b>5</b>	<b>1,020</b>	<b>43</b>	<b>966</b>	<b>1,009</b>	<b>372</b>	<b>71</b>	<b>280</b>	<b>33</b>	<b>326</b>	<b>648</b>	<b>456</b>	<b>150</b>	<b>20</b>	<b>27</b>	<b>41</b>	<b>60</b>	<b>329</b>	<b>5,901</b>

Source: Department of Planning and Community Development. 2009.  
Australian Business Register and Spatial Economics

**Table 18:** Count of Consumed Industrial Land Stocks by Business Type and Lot Size - Industrial Nodes (no. of premises), 2000 to 2009

Lot Size Cohort	Agriculture, Forestry and Fishing	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Accommodation and Food Services	Transport, Postal and Warehousing	Information Media and Telecommunications	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Administrative and Support Services	Public Administration and Safety	Education and Training	Health Care and Social Assistance	Arts and Recreation Services	Other Services	Total
Less than 0.1ha	3	0	153	5	171	134	62	11	41	4	23	88	61	33	2	4	3	9	73	880
0.1 to 0.5 ha	7	1	313	6	216	281	82	14	101	9	70	170	89	33	7	4	5	12	65	1,485
0.5 to 1 ha	0	2	48	1	24	38	7	4	16	2	5	30	9	4	0	0	0	1	5	196
1 to 5 ha	12	1	71	1	65	79	26	8	53	1	56	57	23	14	1	1	11	4	15	499
5 to 10 ha	1	0	10	0	4	5	1	0	3	0	5	1	1	1	0	0	0	0	1	33
10+ ha	0	0	0	0	0	2	0	0	0	0	1	0	1	0	0	0	0	0	0	4
<b>ALL NODES</b>	<b>23</b>	<b>4</b>	<b>595</b>	<b>13</b>	<b>480</b>	<b>539</b>	<b>178</b>	<b>37</b>	<b>214</b>	<b>16</b>	<b>160</b>	<b>346</b>	<b>184</b>	<b>85</b>	<b>10</b>	<b>9</b>	<b>19</b>	<b>26</b>	<b>159</b>	<b>3,097</b>

Source: Department of Planning and Community Development. 2009.  
Australian Business Register and Spatial Economics

**Table 18a: Net Area Consumed by Industry Type - by LGA (ha), 2000 to 2009**

LG/Region	Agriculture, Forestry and Fishing	Mining	Manufacturing	Electricity, Gas, Water and Waste Services	Construction	Wholesale Trade	Retail Trade	Accommodation and Food Services	Transport, Postal and Warehousing	Information Media and Telecommunications	Financial and Insurance Services	Rental, Hiring and Real Estate Services	Professional, Scientific and Technical Services	Administrative and Support Services	Public Administration and Safety	Education and Training	Health Care and Social Assistance	Arts and Recreation Services	Other Services	Total
Brimbank	9	0	47	1	11	81	16	1	50	0	68	50	11	16	1	1	0	1	18	380
Hobsons Bay	0	0	2	1	29	10	2	4	10	3	4	14	2	0	0	0	0	0	0	82
Maribyrnong	0	0	0	0	0	1	2	0	2	0	0	0	0	0	0	0	0	0	1	6
Melton	0	0	5	0	6	6	5	0	2	0	1	3	0	0	0	1	0	0	2	30
Moonee Valley	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Wyndham	3	0	33	0	8	43	14	6	16	0	29	7	5	4	0	0	0	0	7	176
<b>West Region</b>	<b>12</b>	<b>0</b>	<b>88</b>	<b>2</b>	<b>55</b>	<b>141</b>	<b>39</b>	<b>11</b>	<b>78</b>	<b>4</b>	<b>102</b>	<b>73</b>	<b>18</b>	<b>20</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>29</b>	<b>675</b>
Banyule	0	0	0	0	3	0	0	0	0	0	0	1	1	0	0	1	0	1	1	8
Darebin	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hume	16	1	77	0	64	68	12	3	63	2	51	31	21	5	1	3	1	1	12	429
Moreland	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	4	7
Nillumbik	0	0	1	0	1	0	0	1	0	0	1	1	2	0	1	0	0	0	0	7
Whittlesea	0	0	56	0	15	27	10	3	1	0	13	18	10	10	0	0	18	1	7	188
<b>North Region</b>	<b>16</b>	<b>1</b>	<b>134</b>	<b>1</b>	<b>83</b>	<b>97</b>	<b>22</b>	<b>7</b>	<b>64</b>	<b>2</b>	<b>65</b>	<b>50</b>	<b>34</b>	<b>15</b>	<b>1</b>	<b>3</b>	<b>18</b>	<b>2</b>	<b>23</b>	<b>640</b>
Bayside	0	0	2	0	1	7	3	0	1	0	0	1	1	0	0	0	1	0	2	20
Cardinia	2	0	3	0	4	1	0	0	6	0	0	3	0	0	0	0	0	0	1	22
Casey	1	2	25	3	40	25	18	3	4	1	12	35	18	9	2	0	1	6	7	212
Frankston	1	0	13	0	17	9	1	2	1	0	3	13	7	1	0	0	1	1	2	73
Glen Eira	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G' Dandenong	6	1	94	1	62	98	21	2	36	0	24	45	81	8	0	0	0	3	5	488
Kingston	0	0	25	0	12	34	7	1	5	1	9	13	9	1	0	0	0	10	8	134
M' Peninsula	1	0	3	0	6	2	1	0	3	0	0	1	2	1	0	0	1	2	2	22
<b>South Region</b>	<b>12</b>	<b>3</b>	<b>166</b>	<b>4</b>	<b>142</b>	<b>175</b>	<b>53</b>	<b>8</b>	<b>56</b>	<b>2</b>	<b>48</b>	<b>111</b>	<b>119</b>	<b>19</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>22</b>	<b>26</b>	<b>971</b>
Boroondara	0	0	0	0	1	2	1	1	1	0	2	3	4	1	0	0	0	0	0	16
Knox	4	0	34	0	6	41	4	3	2	0	17	7	4	0	0	0	0	0	7	129
Manningham	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maroondah	0	0	24	0	8	6	2	0	0	0	1	3	4	0	0	0	1	0	1	52
Monash	3	0	43	44	24	69	24	0	3	0	70	9	30	3	0	0	5	0	13	339
Whitehorse	0	0	1	0	1	1	0	0	0	0	2	1	1	0	0	0	0	0	0	8
Yarra Ranges	0	0	6	0	3	1	1	0	0	0	0	2	1	0	0	0	0	0	1	14
<b>East Region</b>	<b>7</b>	<b>0</b>	<b>108</b>	<b>44</b>	<b>42</b>	<b>121</b>	<b>31</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>93</b>	<b>25</b>	<b>43</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>23</b>	<b>559</b>
Melbourne	0	0	1	0	1	3	1	0	0	0	0	3	0	0	0	0	0	0	0	10
Port Phillip	1	0	4	0	3	3	1	1	1	0	4	2	6	0	0	0	0	0	0	28
Yarra	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
<b>Inner Region</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>5</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>8</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>41</b>
<b>Metro Melbourne</b>	<b>47</b>	<b>5</b>	<b>501</b>	<b>50</b>	<b>326</b>	<b>540</b>	<b>148</b>	<b>30</b>	<b>205</b>	<b>9</b>	<b>313</b>	<b>265</b>	<b>222</b>	<b>59</b>	<b>5</b>	<b>6</b>	<b>28</b>	<b>27</b>	<b>102</b>	<b>2,887</b>

**Table 18b:** Net Consumption by Industry Type and Node (ha), 2000 to 2009

<b>NODE</b>	<b>Agriculture, Forestry and Fishing</b>	<b>Mining</b>	<b>Manufacturing</b>	<b>Electricity, Gas, Water and Waste Services</b>	<b>Construction</b>	<b>Wholesale Trade</b>	<b>Retail Trade</b>	<b>Accommodation and Food Services</b>	<b>Transport, Postal and Warehousing</b>	<b>Information Media and Telecommunications</b>	<b>Financial and Insurance Services</b>	<b>Rental, Hiring and Real Estate Services</b>	<b>Professional, Scientific and Technical Services</b>	<b>Administrative and Support Services</b>	<b>Public Administration and Safety</b>	<b>Education and Training</b>	<b>Health Care and Social Assistance</b>	<b>Arts and Recreation Services</b>	<b>Other Services</b>	<b>Total</b>
Airport	16	0	8	1	26	27	5	1	21	2	6	11	12	1	0	0	0	1	6	<b>142</b>
Melton	0	0	4	0	3	2	1	0	0	0	0	2	0	0	0	0	0	0	2	<b>14</b>
North	0	1	116	0	51	62	13	4	50	0	58	34	22	12	1	3	14	1	14	<b>456</b>
Pakenham	1	0	3	0	3	1	0	0	6	0	0	3	0	0	0	0	0	0	0	<b>18</b>
South	8	3	118	3	100	119	39	5	40	1	36	78	99	16	2	0	1	10	11	<b>689</b>
West	12	0	73	0	38	125	20	10	66	4	97	61	10	17	1	1	0	0	21	<b>555</b>
<b>All Nodes</b>	<b>36</b>	<b>4</b>	<b>322</b>	<b>5</b>	<b>220</b>	<b>335</b>	<b>78</b>	<b>20</b>	<b>184</b>	<b>6</b>	<b>197</b>	<b>190</b>	<b>143</b>	<b>46</b>	<b>3</b>	<b>4</b>	<b>16</b>	<b>12</b>	<b>54</b>	<b>1,874</b>

Source: Department of Planning and Community Development. 2009.  
Australian Business Register and Spatial Economics

## **APPENDICE PART FOUR: ANZIC DESRIPTORS**

**Table 19: ANZIC 1 & 2 Digit Descriptors**

**AGRICULTURE, FORESTRY AND FISHING**

- 1 Agriculture
- 2 Aquaculture
- 3 Forestry and Logging
- 4 Fishing, Hunting and Trapping
- 5 Agriculture, Forestry and Fishing Support Services

**MINING**

- 6 Coal Mining
- 7 Oil and Gas Extraction
- 8 Metal Ore Mining
- 9 Non-Metallic Mineral Mining and Quarrying
- 10 Exploration and Other Mining Support Services

**MANUFACTURING**

- 11 Food Product Manufacturing
- 12 Beverage and Tobacco Product Manufacturing
- 13 Textile, Leather, Clothing and Footwear Manufacturing
- 14 Wood Product Manufacturing
- 15 Pulp, Paper and Converted Paper Product Manufacturing
- 16 Printing (including the Reproduction of Recorded Media)
- 17 Petroleum and Coal Product Manufacturing
- 18 Basic Chemical and Chemical Product Manufacturing
- 19 Polymer Product and Rubber Product Manufacturing
- 20 Non-Metallic Mineral Product Manufacturing
- 21 Primary Metal and Metal Product Manufacturing
- 22 Fabricated Metal Product Manufacturing
- 23 Transport Equipment Manufacturing
- 24 Machinery and Equipment Manufacturing
- 25 Furniture and Other Manufacturing

**ELECTRICITY, GAS, WATER AND WASTE SERVICES**

- 26 Electricity Supply
- 27 Gas Supply
- 28 Water Supply, Sewerage and Drainage Services
- 29 Waste Collection, Treatment and Disposal Services

**CONSTRUCTION**

- 30 Building Construction
- 31 Heavy and Civil Engineering Construction
- 32 Construction Services

**WHOLESALE TRADE**

- 33 Basic Material Wholesaling
- 34 Machinery and Equipment Wholesaling
- 35 Motor Vehicle and Motor Vehicle Parts Wholesaling
- 36 Grocery, Liquor and Tobacco Product Wholesaling
- 37 Other Goods Wholesaling
- 38 Commission-Based Wholesaling

**RETAIL TRADE**

- 39 Motor Vehicle and Motor Vehicle Parts Retailing
- 40 Fuel Retailing
- 41 Food Retailing
- 42 Other Store-Based Retailing
- 43 Non-Store Retailing and Retail Commission-Based Buying and/or Selling

**ACCOMMODATION AND FOOD SERVICES**

- 44 Accommodation
- 45 Food and Beverage Services

**TRANSPORT POSTAL AND WAREHOUSING**

- 46 Road Transport
- 47 Rail Transport
- 48 Water Transport
- 49 Air and Space Transport
- 50 Other Transport
- 51 Postal and Courier Pick-up and Delivery Services
- 52 Transport Support Services
- 53 Warehousing and Storage Services

**INFORMATION MEDIA AND TELECOMMUNICATIONS**

- 54 Publishing (except Internet and Music Publishing)
- 55 Motion Picture and Sound Recording Activities
- 56 Broadcasting (except Internet)
- 57 Internet Publishing and Broadcasting
- 58 Telecommunications Services
- 59 Internet Service Providers, Web Search Portals and Data Processing Services
- 60 Library and Other Information Services

**FINANCIAL AND INSURANCE SERVICES**

- 62 Finance
- 63 Insurance and Superannuation Funds
- 64 Auxiliary Finance and Insurance Services

**RENTAL, HIRING AND REAL ESTATE SERVICES**

- 66 Rental and Hiring Services (except Real Estate)
- 67 Property Operators and Real Estate Services

**PROFESSIONAL, SCIENTIFIC AND TECHNICAL SERVICES**

- Professional, Scientific and Technical Services (Except Computer System Design and Related Services)
- 69 Design and Related Services)
- 70 Computer System Design and Related Services

**ADMINISTRATIVE AND SUPPORT SERVICES**

- 72 Administrative Services
- 73 Building Cleaning, Pest Control and Other Support Services

**PUBLIC ADMINISTRATION AND SAFETY**

- 75 Public Administration
- 76 Defence
- 77 Public Order, Safety and Regulatory Services

**EDUCATION AND TRAINING**

- 80 Preschool and School Education
- 81 Tertiary Education
- 82 Adult, Community and Other Education

**HEALTH CARE AND SOCIAL ASSISTANCE**

- 84 Hospitals
- 85 Medical and Other Health Care Services
- 86 Residential Care Services
- 87 Social Assistance Services

**ARTS AND RECREATION SERVICES**

- 89 Heritage Activities
- 90 Creative and Performing Arts Activities
- 91 Sport and Recreation Activities
- 92 Gambling Activities

**OTHER SERVICES**

- 94 Repair and Maintenance
- 95 Personal and Other Services
- Private Households Employing Staff and Undifferentiated Goods- and Service-Producing Activities of Households for Own Use
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