

FINAL SUPPLEMENT TO LIVERPOOL INDUSTRIAL EMPLOYMENT LANDS STUDY

Prepared for:
Liverpool City Council
33 Moore Street,
Liverpool NSW 2170
SYDNEY

by Knight Frank Consulting

CONTENTS

	Page
Table of Figures	3
Executive Summary & Recommendations	4
Background to the Report	6
 1.0 Industrial Market Trends – Sydney & Liverpool	 7
1.1 Trends and Drivers	7
1.2 Liverpool LGA – Key Themes from the 2015 ELDP	8
1.3 Supply Challenges - Services Required	11
 2.0 Current Industrial Land	 12
2.1 Overview of Existing Industrial Zoned Precincts in the Liverpool LGA	13
2.2 Businesses and Jobs within Existing Industrial Precincts	27
2.3 Case Study – Warwick Farm	32
2.4 Case Study – City of Sydney Employment Lands	38
 3.0 Overview of Metropolitan and Sub-Regional Strategic Framework for Industrial Employment Lands in the Liverpool LGA	 42
 4.0 Key Trends in Industrial Building Activity	 48
4.1 Trends in Building Location	48
4.2 Trends in Building Type	51
4.3 Trends in Building Size	53
 5.0 Demand Outlook	 54
5.1 Employment Projections	54
5.2 Land Demand Projections	55
 6.0 What Does This Mean For Existing Employment Land In The LGA?	 57
6.1 Impacts from the Moorebank Intermodal Terminal	58
6.2 Strategic Implications For The Future Industrial Employment Lands In The Liverpool LGA	61

TABLE OF FIGURES

Figure 1. Liverpool LGA Zoned Land Status (Ha) – last five years	8
Figure 2. Liverpool LGA Zoned Land Status (Ha) – last five years, by Precinct	9
Figure 3. Undeveloped and Serviced Land (Ha) – by Precinct, 2008-2014	10
Figure 4. Take-up of Employment Land (Ha) – by Precinct, 2008-2014	10
Figure 5. % of industrial businesses by number of workers, selected SA2 regions, June 2015	27
Figure 6. Field Inspection Photos – Warwick Farm	34
Figure 7. Trucks turning from Warwick Street onto the Hume Highway	37
Figure 8. The Plan for Western Sydney	43
Figure 9. The Western Sydney Infrastructure Plan.	44
Figure 10. Industrial New Supply, by Region and Number of Developments - 2009-11 vs. 2014-16	50
Figure 11. Industrial New Supply, by Region and Total Developed Area (000's m ²) - 2009-11 vs. 2014-16	50
Figure 12. Average Industrial Building Size, Liverpool LGA, 2014-2018+	53
Figure 13. Projected TEU Movements from Port Botany (2014-2030)	59
Table 1. Count of Businesses by industrial industries within selected SA2 regions, June 2015	28
Table 2. Industrial based jobs within selected SA2 regions	29
Table 3. Top ABS Level 3 industrial employment industries by selected SA2 regions	31
Table 4. Current Tenant Mix, Priddle/Scrivener Street Industrial Lands	33
Table 5. Key directions and actions relevant to the future of industrial employment lands in Liverpool	45
Table 6. Value of Industrial Approvals by Type, selected LGAs & Greater Sydney, July 2014-March 2016	51
Table 7. Value of Industrial Approvals by Type, selected Liverpool SA2 Regions, July 2014-March 2016	52
Table 8. Industrial Employment and Land Projections	55
Table 9. Selected Employment Growth Precincts	56
Map 1. Location of Liverpool Zoned Industrial Land	12
Map 2. Existing and Proposed Employment Lands in the Liverpool LGA	13
Map 3. Yarrunga/Prestons Zoning Map	15
Map 4. Moorebank Zoning Map	17
Map 5. Chipping Norton Industrial Zoning Map	19
Map 6. Casula Crossroads Industrial Zoning Map	20
Map 7. Hoxton Park Airport (Len Waters Estate) Industrial Zoning Map	21
Map 8. Warwick Farm Racecourse (Coopers Paddock) Industrial Zoning Map	22
Map 9. Priddle/Scrivener Street (Warwick Farm) Industrial Zoning Map	23
Map 10. Sappho Road (Warwick Farm North) Industrial Zoning Map	24
Map 11. Orange Grove Industrial Zoning Map	25
Map 12. Austral Industrial Zoning Map	26
Map 13. Indicative Subject Lands, Priddle/Scrivener Street (Warwick Farm)	32
Map 14. Place of Residence for Liverpool – Warwick Farm Blue Collar Workers	35
Map 15. City of Sydney Southern Employment Lands, Proposed Zonings	39
Map 16. Industrial Based Employment Gains, 2011-2016	48
Map 17. Industrial Development Activity, 2009-2011	49
Map 18. Industrial Development Activity, 2014-2016	49
Map 19. The draft Broader Western Sydney Employment Area Structure Plan	62
Map 20. The Western Sydney Priority Growth Area	63

EXECUTIVE SUMMARY & RECOMMENDATIONS

Sydney's industrial landscape is rapidly changing, with increased global competition emphasising a requirement for innovation and specialisation in order to establish a competitive niche, which is particularly true for larger industrial users which require scale. Alternatively, continued population growth has created significant demand for localised industrial services including those businesses within the building industry, and maintenance and repairs e.g. auto repairs. The latter is important as almost nine in ten of all industrial businesses within the Liverpool LGA employ less than four workers (including sole trading businesses), meaning they provide the backbone of blue collar jobs within the Liverpool LGA. The key takeout in regards to how Liverpool's existing industrial lands differ from the broader Sydney region is that the bulk of businesses (and hence jobs) service the local population.

Industrial employment lands within the Liverpool LGA are characterised by a wide range of employment and business types. At a high level, there are 44,817 jobs located within the SA2 regions which accommodate existing industrial lands, with manufacturing based employment accounting for 46% of blue collar jobs. This alone puts Liverpool in a unique position as the LGA is reliant on manufacturing based employment (equipment manufacturing, bakery product manufacturing etc.) yet broader indicators suggest a continued decline in manufacturing employment is expected.

At a macro level, this report and Knight Frank's May 2016 Industrial Employment Lands Study report highlights two key emerging themes. They are:

1. The need to release/realise larger tracts of appropriately zoned and serviced employment lands in key precincts, which in turn will capture 'big box' developers and keep occupiers in the Liverpool LGA (as opposed to tenants locating/relocating to Penrith and/or Blacktown LGAs).
2. Rezone and or protect (where appropriate – see section 2.1 for detail on each precinct) existing developed employment lands in the 'eastern' precincts of the Liverpool LGA which caters towards smaller business/industrial user groups which account for the majority of existing industrial businesses within the Liverpool LGA.

Following these two recommendations and as part of the review of key precincts, there is potential for repositioning of some existing industrial areas within the LGA. At the same time, it is recommended that it is important and strategic to clarify the desired future role and character of the individual precincts noting that each has particular local issues and conditions that will influence the manner and extent of future industrial uses. By way of commentary, we note the following:

- A number of the precincts are located in areas that historically were urban fringe areas and now are surrounded and adjoin residential areas. The result appears to be a number of practical limits to their operating and prospects of expansion or intensification. Specifically
 - The mixing of residential and industrial traffic on the local road network
 - The locating of housing on land adjoining industrial and the resulting land use conflict.

The relevant key directions and the strategic drivers as outlined in this report will result in a number of implications for the existing and future industrial employment lands in the Liverpool LGA. Some high level recommendations include but are not limited to:

- A significant opportunity to generate new industrial employment areas in the Bringelly Road Enterprise Corridor alongside the upgrade of Bringelly Road and the Northern Road
- Council should reinforce its position in the continued provision of the original strategic location of employment land on either side of the Western Sydney Airport land to ensure the provision of future industrial employment land for the LGA.
- It is recommended that Council investigate the introduction of development incentives in precincts such as Yarrunga/Prestons, Moorebank, Chipping Norton and the Len Waters Estate for manufacturing, construction and wholesale/logistics industries to recognise the role of the region in these specific industries and to protect these strategically located industrial areas.
- The potential future extension of the Sydney Metro from Bankstown to Liverpool provides an opportunity - the potential for Metro stops provides an opportunity to reposition select industrial precincts to make best use of this heightened accessibility and the principal of intensifying development within a walking distance of such stations (Transit Oriented form of Development).
- The long term locating of new 'heavier' industry, in particular those that maybe characterized as 'offensive or hazardous' maybe more appropriately directed towards areas where they are least constrained by the potential for land use conflict. Specifically, Prestons and Moorebank (being the area to the south of the M5 Motorway) are not close or adjacent to existing residential areas and provide an opportunity to maintain an appropriate and planned buffer.
- The presence of large-box warehousing demand in Prestons, Moorebank and Hoxton Park confirms the strategic location of Liverpool in terms of the M5, M7, future M12 and longer term, the M9 Western Orbital. This is a key comparative advantage for Liverpool and confirms the importance of preserving and consolidating this role for each precinct, noting the practical limits to any expansion of Hoxton Park.
- By reviewing the local planning framework, which considers the rezoning of some industrial zoned land to either a B5 (Business development), B6 (Enterprise Corridor) or B7 (Business Park), the precincts would facilitate greater flexibility in regards to development and user types which could be accommodated.

In considering both the character of the established industrial areas and the emergence of newer more recent areas, and the potential for additional employment areas as a result of new infrastructure, **we would recommend that a review be undertaken of the current industrial zoning framework in order to determine whether it reflects a more contemporary and long term positioning of the role and character of precincts within the LGA.** Specifically and by way of example:

- a) A review as to whether a wider business zone (including B5 - Business development, B6 - Enterprise Corridor or B7 - Business Park zone) is more appropriate for the Sappho Road (Warwick Farm North) industrial area.
- b) A review as to whether the best and highest order employment use for Orange Grove is more business (B5 - Business development, B6 - Enterprise Corridor or B7 - Business Park zone) in

recognition of its proximity to the Liverpool City Centre and hospital, whilst also encouraging the location and retention of viable industrial uses

- c) The further consolidation of the role of Yarrunga/Prestons as a strategic freight, logistics and warehousing hub for Liverpool and Western Sydney.
- d) The potential to encourage the locating of heavier industry that might be characterized as offensive and/or hazardous industries in areas where buffer can be address land use conflicts such Moorebank South and Yarrunga/Prestons.
- e) Examine ways to further encourage and consolidate the established roles of Moorebank, Yarrunga/Prestons and Chipping Norton industrial areas as the major employment generating clusters for the LGA together with adopting measures to promote the locating of certain uses in those precincts that appear to have a comparative advantage for that use. The specific details of those measures is subject to further investigations however in principle recommend that consideration be given to the adopting and/or amending of planning controls that make it “easier” to locate in the precincts of Yarrunga/Prestons and Moorebank where there are larger englobo parcels and existing lots capable of accommodating logistics and warehousing. It is recommended also that the additional measure of say a financial incentive by way of a reduction in Section 94 development contributions be considered provided there is a policy decision made by Council to “subsidise” infrastructure where there is a greater public benefit in supporting local employment. Such financial incentives would need to be investigated to determine the extent to which they would have a real and practical impact on investment decisions to locate within the Liverpool LGA.
- f) The potential to review the zoning at the Priddle/Scrivener Street (Warwick Farm) industrial precinct as vehicle and truck access is constrained (on average, the width of both streets is 11.5m with street parking offered on both sides). Consequently, the inferior truck access to the precinct affects the precincts desirability, while residential and other competing uses to the north support this view (rezoning) given the conflicting land uses.

BACKGROUND TO THE REPORT

The Liverpool City Council is undertaking a review of its current Local Environmental Plan. As part of the review the Council has instructed a number of consultants/advisors to provide detailed background studies which are required to be prepared to inform the review of the plan.

For this report it was noted that the Council would like to expand on the Consultancy Assignment that Knight Frank Consulting delivered in May 2016, noting that the purpose of that study was to focus on larger sites likely to capture activity from institutional groups. It was understood that Liverpool City Council requires a supplement to the previously prepared study, expanding the analysis to cover all industrial employment lands in the Liverpool LGA, including small and medium sized sites. The Supplement Industrial Employment Lands Study is a separate body of work from the initial Study, however draws on a number of similar themes and discussions.

This report has been jointly prepared by Knight Frank Consulting and Knight Frank Town Planning.

1.0 INDUSTRIAL MARKET TRENDS – SYDNEY & LIVERPOOL

1.1 TRENDS AND DRIVERS

A look at emerging trends occurring in industrial land markets across Sydney reveals how the use of industrial land is changing. Increased global competition has emphasised a requirement for innovation and specialisation in order to establish a competitive niche. This has resulted in changes to the way new estates are being planned and positioned, with lots needing to be more flexible and adaptable to tenant needs and requirements. At the other end of the spectrum, it has also been observed that the growth in the requirement for industrial land servicing the needs of local community/trades has also increased. This includes those involved in the building industry, and maintenance and repairs e.g. auto repairs. The latter is crucial for the Liverpool LGA as existing employment lands are dominated by smaller businesses servicing the local population.

Key industrial trends identified across Sydney include:

- More flexible lot sizes, which can accommodate a broader mix of industrial user groups,
- Bigger more efficient warehousing,
- Greater accessibility by road, rail and public transport for both business and employees,
- Convenient location close to growing residential areas and hence access to workforce,
- Greater importance placed on competitive advantage,
- Reduction in cost in order to be more competitive.

For Sydney's South West, leasing activity has been solid over the past two years. Diminishing stock levels and rising rents in established inner ring locations has provided motivation for industrial businesses to relocate to suitable sites in close proximity to major rail and road networks within Sydney's South West. However, this trend has been most prevalent for businesses who service other businesses as opposed to servicing local residents.

In regards to the Liverpool LGA, demand for industrial lands has been strong with the focus being firmly concentrated in Prestons, Moorebank and Chipping Norton, highlighted by the most recent 2015 Employment Lands Development Program Report, which is highlighted in section 1.2.

With almost nine in 10 industrial businesses in Liverpool's existing employment lands employing four or less workers (including sole trading/non employing), demand remains heavily concentrated in small lots, typically sized below 1,500m², while solid demand for smaller strata titled industrial premises exists.

Unlike large industrial precincts located to the north, namely being Eastern Creek and Erskine Park, Liverpool has a large reliance on smaller businesses that provide services to the local population, compared to businesses that mainly deal with other businesses. This makes sense as current employment lands are surrounded by residential uses. These businesses include automotive repairs (including panel beaters), waste management provisions, storage facilities for concrete batching and plant and equipment hire. However, it is important to note that there is also a large presence of larger users currently located in the LGA, with examples including the ALDI distribution centre and Visy.

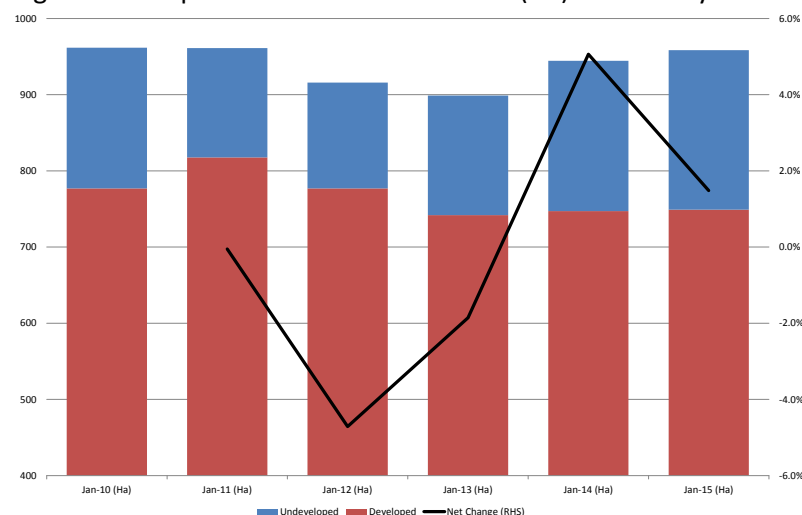
The primary driver for the demand of small lot industrial space has been population growth, as a larger resident base creates additional demand for services. The majority of demand is considered to be from light industries, in that they are less capital intensive, have a lower environmental impact and are consumer oriented businesses. With population growth in South West Sydney expected to outstrip growth across the broader Sydney region, demand for localised services will amplify. Some sectors are highly competitive in the Liverpool LGA where in a substantive way, the high rate of residential building and strong population growth has created significant demand for particular industries, namely being construction and consumer services.

Looking ahead, it is important that the Liverpool LGA's employment lands be preserved in order to capture future market demand. In some cases, given the high provision of light industrial industries, some precincts may require further assessment for rezoning to higher employing business zones which will still facilitate, and accommodate, growth in light industrial businesses. By maintaining employment lands, the current and future needs of local residents will be met.

1.2 LIVERPOOL LGA – KEY THEMES FROM THE 2015 ELDP

As per the 2015 Employment Lands Development Program (ELDP) report, there were 209.4 ha of zoned employment lands within the Liverpool LGA which was yet to be developed, accounting for 6.9% of Sydney's undeveloped zoned industrial employment lands. Based on historical take-up rates, there is theoretically sufficient land for another 14 years and beyond (average of the last seven years).

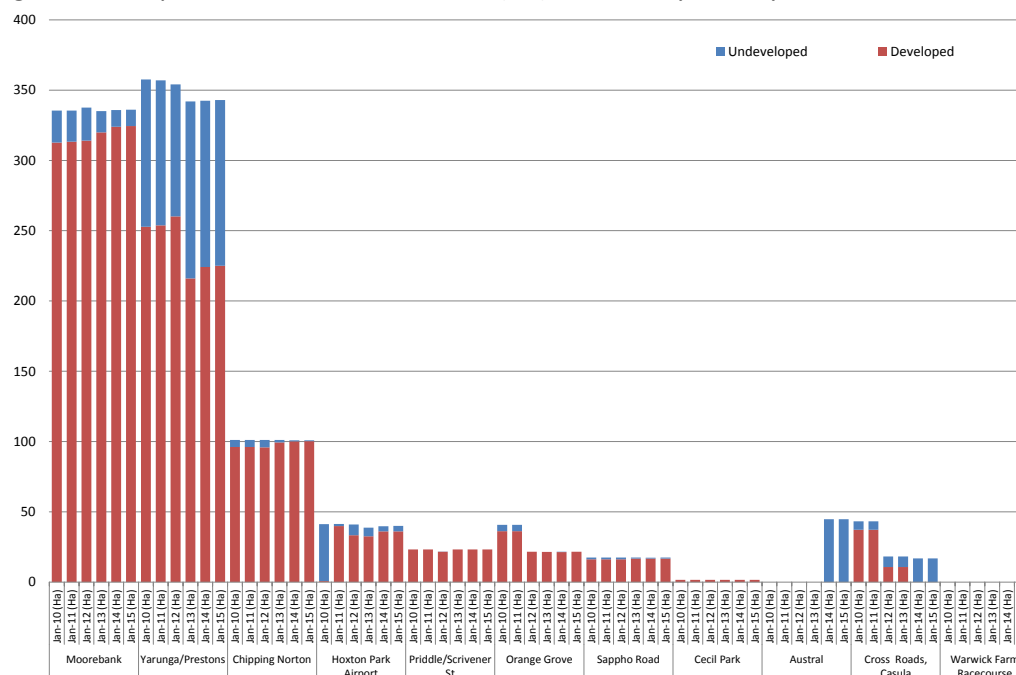
Figure 1. Liverpool LGA Zoned Land Status (Ha) – last five years



Source: Knight Frank Research, Employment Lands Development Program, Department of Planning and Environment

Over half of all undeveloped land zoned as industrial employment land in the Liverpool LGA is located in the Preston's precinct (56.4%, or 118 ha), and a further 21.4% is located in Austral (44.8 ha), as part of the newly rezoned South West Growth Corridor (see Figure 2). An additional, 41.4 ha (19.8%) of undeveloped zoned industrial employment land is split almost evenly between Warwick Farm Racecourse (Coopers Paddock), Cross Roads, Casula and Moorebank. The remaining 2.5% or 5.2 ha of Liverpool LGA's zoned industrial employment land are located amongst Chipping Norton, Hoxton Park Airport (Len Waters Estate) and Sappho Road (Warwick Farm North) precincts.

Figure 2. Liverpool LGA Zoned Land Status (Ha) – last five years, by Precinct



Source: Knight Frank Research, Employment Lands Development Program, Department of Planning and Environment

While there is capacity for future development at selected precincts in the Liverpool LGA, the majority of this land is not serviced which will consequently limit development over the next five years unless adequate land is serviced. The most recent available data from NSW Planning (ELDP, 2015), indicated undeveloped and serviced land within the Liverpool LGA had declined to 41.1 ha (see Figure 3). This figure represents 9.1% of all undeveloped and serviced land across the Sydney Metropolitan region. This Liverpool LGA total represents a 7.6% fall in undeveloped and serviced land compared with 2010, and a 14.2% drop over the most recent year as land uptake has outpaced the rate of new land parcels being serviced.

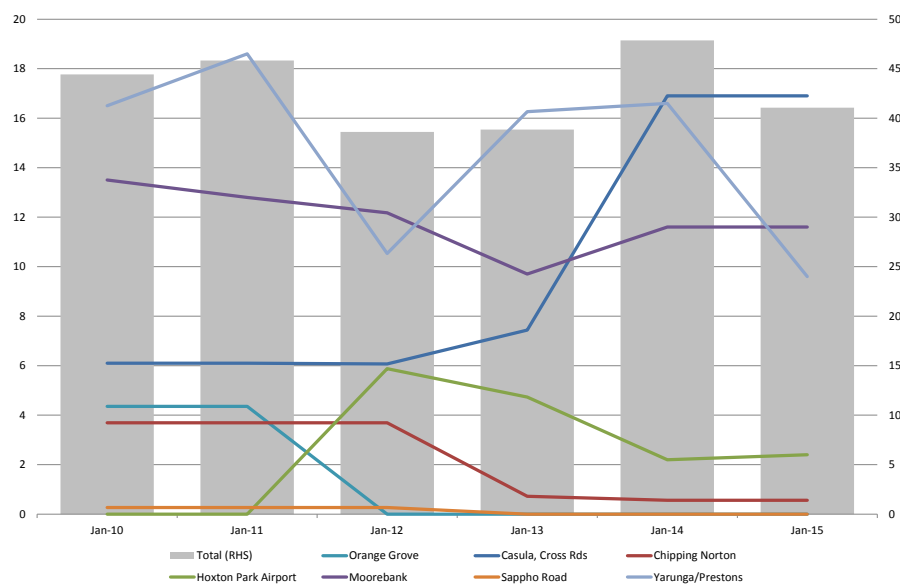
To give some context as to why this amount of serviced land implies a relative shortage of available inventory for imminent development, the average take up of land has been approximately 15 ha per annum since 2008, reflecting a possible 2.8 years of available supply (see Figure 4). Although the average take up of land has fallen to around 5.5 ha per annum over the past four years, which would reflect a possible 7.5 years of available supply. In 2010 take-up of land reached 44.4 ha, which suggests that, the current land availability could be developed in one year. Take-up refers to land that has been consumed by industrial development (i.e. vacant employment lands which have been developed). It is defined as the point at which development has commenced on a site and the site is therefore no longer available for development.

The Government is yet to formally provide a framework on how to service undeveloped land. While institutional developers have a relatively greater capacity to fund this cost, it is a considerable impediment for smaller privates. This is providing institutional developers with the opportunity to control the market share of developments over the next two to three years.

Larger private land holders have the potential to compete in the short term development cycle, however

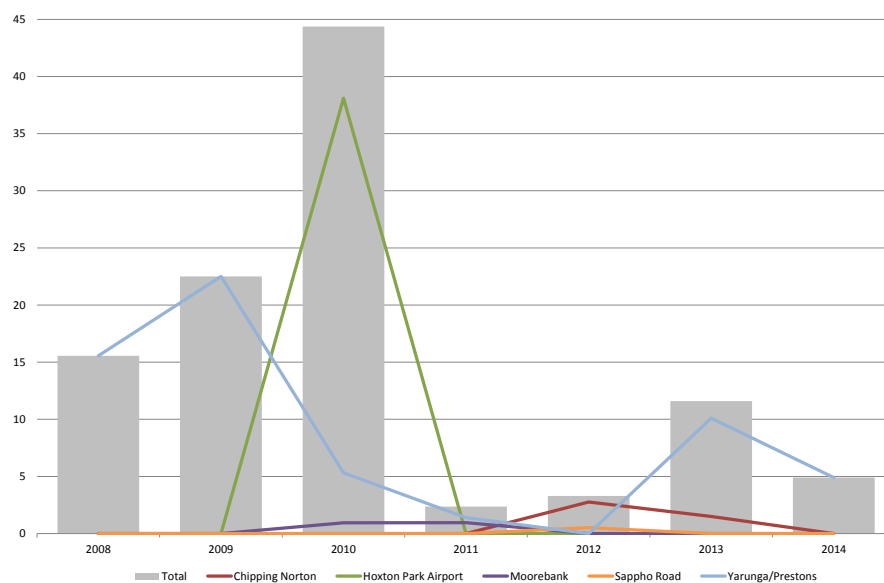
have shown limited urgency to progress the development of land holdings to this point in time. This has been shown by the bulk of development within the Liverpool LGA having been developed by the major institutions over the last 5-10 years.

Figure 3. Undeveloped and Serviced Land (Ha) – by Precinct, 2008-2014



Source: Knight Frank Research, Employment Lands Development Program, Department of Planning and Environment (unpublished data for Chipping Norton, Orange Grove and Sappho Road (Warwick Farm North))

Figure 4. Take-up of Employment Land (Ha) – by Precinct, 2008-2014



Source: Knight Frank Research, Employment Lands Development Program, Department of Planning and Environment (unpublished data for Chipping Norton, Sappho Road (Warwick Farm North))* Take-up analysis only includes lots greater than 100m² and does not include existing lots which were already partially developed. The figures will therefore contain a small under estimation of total take-up.

1.3 SUPPLY CHALLENGES - SERVICES REQUIRED

As mentioned in Knight Frank's May 2016 Industrial Employment Lands Study report for Council, in order to facilitate development, the servicing of undeveloped and zoned land within the Liverpool LGA is required to accommodate short and medium term employment growth. Beyond this, consideration should also be taken for land which is not currently zoned for industrial uses but is likely in the future. Anecdotal evidence from key industrial developers highlighted that the provision of services was key in the development of industrial land. Put simply, **developers require certainty with sites and without servicing being readily available, there is no certainty, particularly in relation to timing.**

In terms of Liverpool City Council's role in the above, the Council has the ability to fast track services. In turn, this will assist in reducing hurdle rates and make development easier and cheaper which in turn will keep gross rents competitive. **The main components of the key services required are electricity, water and sewer.** These are highlighted below.

Electricity Supply

To provide certainty for developers, readily available electricity supply is needed. All businesses who occupy industrial areas are reliant on electricity for operational needs. Proactive forward planning is required as there is a considerable difference between electricity supply for residential uses and industrial uses, given that upgrades are typically required to accommodate usage.

Water and Sewer Supply

Water and sewer supply is an important consideration for industrial users, particularly manufacturers.

Similarly, road infrastructure upgrades and improvements to public transport servicing the Liverpool LGA's industrial areas is also an important consideration. While there are major infrastructure works occurring throughout the Liverpool LGA and South West Sydney, it is recommended that Council engage in discussions with the relevant transport agencies. This includes provisions for additional/improved road access.

2.0 CURRENT INDUSTRIAL LAND

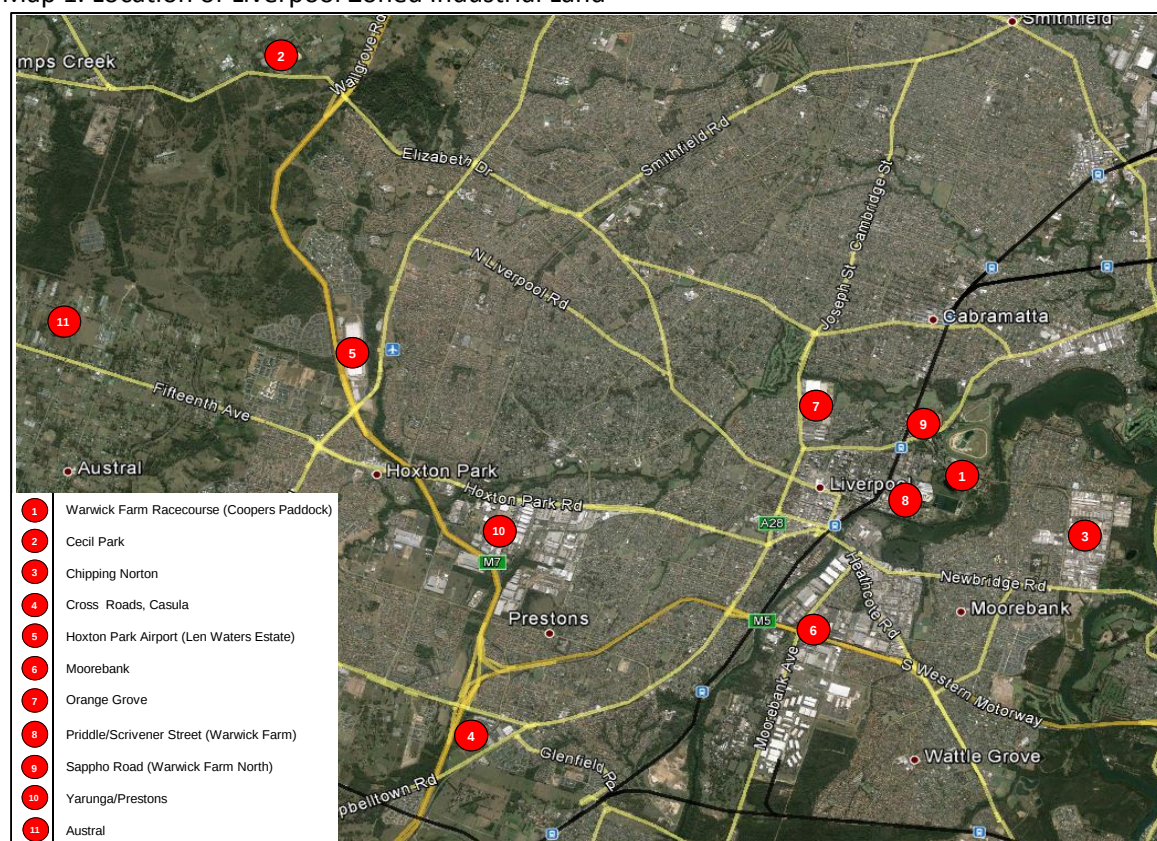
Utilising the industrial precincts identified within the 2015 Employment Lands Development Program (ELDP), there are 11 zoned industrial precincts scattered throughout the Liverpool LGA, all of which vary in size and include a mix of industries. As at January 2015, there were 958.4 ha of zoned industrial employment lands within the LGA, of which 749 ha were developed.

Although fragmented and spread throughout the LGA, the bulk of Liverpool's industrial zoned land is located at either Prestons or Moorebank, collectively accounting for 71% of zoned industrial land within the LGA. Of note, the majority of this land has been developed. With the exception of Chipping Norton (100.9 ha), other industrial precincts within the LGA are relatively small in terms of industrial zoned land (sub 50 ha).

The following precincts were identified as part of the 2015 ELDP:

- Warwick Farm Racecourse (Coopers Paddock) • Austral • Cecil Park* • Chipping Norton
- Cross Roads, Casula • Hoxton Park Airport (Len Waters Estate) • Moorebank
- Orange Grove • Priddle/Scrivener St (Warwick Farm) • Sappho Road (Warwick Farm North)
- Yarrunga/Prestons

Map 1. Location of Liverpool Zoned Industrial Land



Source: Knight Frank Research

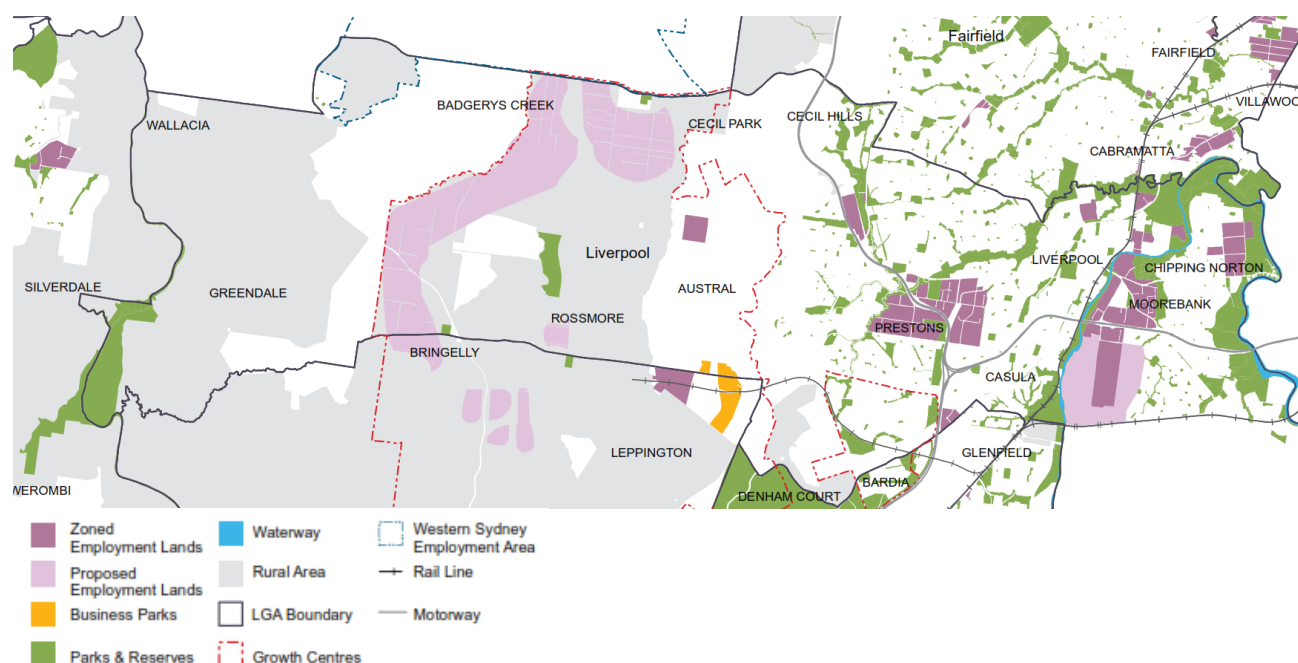
(*note; analysis of Cecil Park has been excluded from this report given its small land use offering of 1.6ha)

2.1 OVERVIEW OF EXISTING INDUSTRIAL ZONED PRECINCTS IN THE LIVERPOOL LGA

The following overview has been prepared based on a review of the current zonings, mix of existing uses and field inspection. For comparative purposes, the industrial precincts have been categorised in the same manner as that adopted by the 2015 Employment Lands Development Program Report (Employment Report) prepared by the Department of Planning and Environment. The overview and description of each precinct is set out below.

Map 2 below illustrates the extent of existing and proposed industrial/employment lands in the Liverpool LGA as per the Employment Report as at January 2015. It is noted however that the map describes areas zoned for industrial purposes and not areas currently used for that purpose. It is noted that for example, Sappho Road (Warwick Farm North) is largely used for automotive sales. Accordingly and whilst the Employment Report is a useful indicator of land supply, it needs to be read in conjunction with the existing land uses suggesting that the figures within that report are a moderate overestimation of the availability of industrial lands in the LGA.

Map 2. Existing and Proposed Employment Lands in the Liverpool LGA



Source: Department of Planning and Environment

2.1.1 YARRUNGA/PRESTONS

The Yarrunga/Prestons Industrial Area is one of the largest industrial areas in the Liverpool LGA. The industrial area is predominantly zoned IN3 Heavy Industrial with an area of land zoned IN2 Light Industrial in the north-eastern sector and areas of land zoned IN1 General Industrial along the southern and south-eastern edge of the industrial area.

The industrial area is well connected in terms of road access. The M7 Motorway Bernera Road interchange is located within the industrial area. The M5/M7 Motorway interchange is located less than 800 metres from the southern edge of the industrial area. The strategic location of this industrial area allows for direct links from the M7 to the Sydney CBD, Port Botany, Sydney Airport, the future Western Sydney Airport at Badgerys Creek, the greater metropolitan region and interstate freeways.

Access to public transport servicing the industrial area is limited. Bus stops along Kurrajong Road, Wonga Road and Hoxton Park Road provide connections to areas such as Liverpool, Casula, Ingleburn, Carnes Hill and West Hoxton.

The industrial area zoned IN1 and IN2 adjoins residential areas zoned R2 Low Density and R3 Medium Density on the southern and eastern edges. An Environmental Management and Special Infrastructure (drainage) and Recreation zones provide a buffer between the IN3 and adjoining R2 residential zone to the west. An R4 High Density residential zone is located adjacent to an IN1 zone at the northern part of the industrial area.

Vehicular access to the surrounding residential areas to the south and east of the site are largely shared with access into and around the industrial area.

Land allotments within the industrial area are fragmented in parts. The size of allotments within the industrial area varies from 1,500 square metres to 28 hectares.

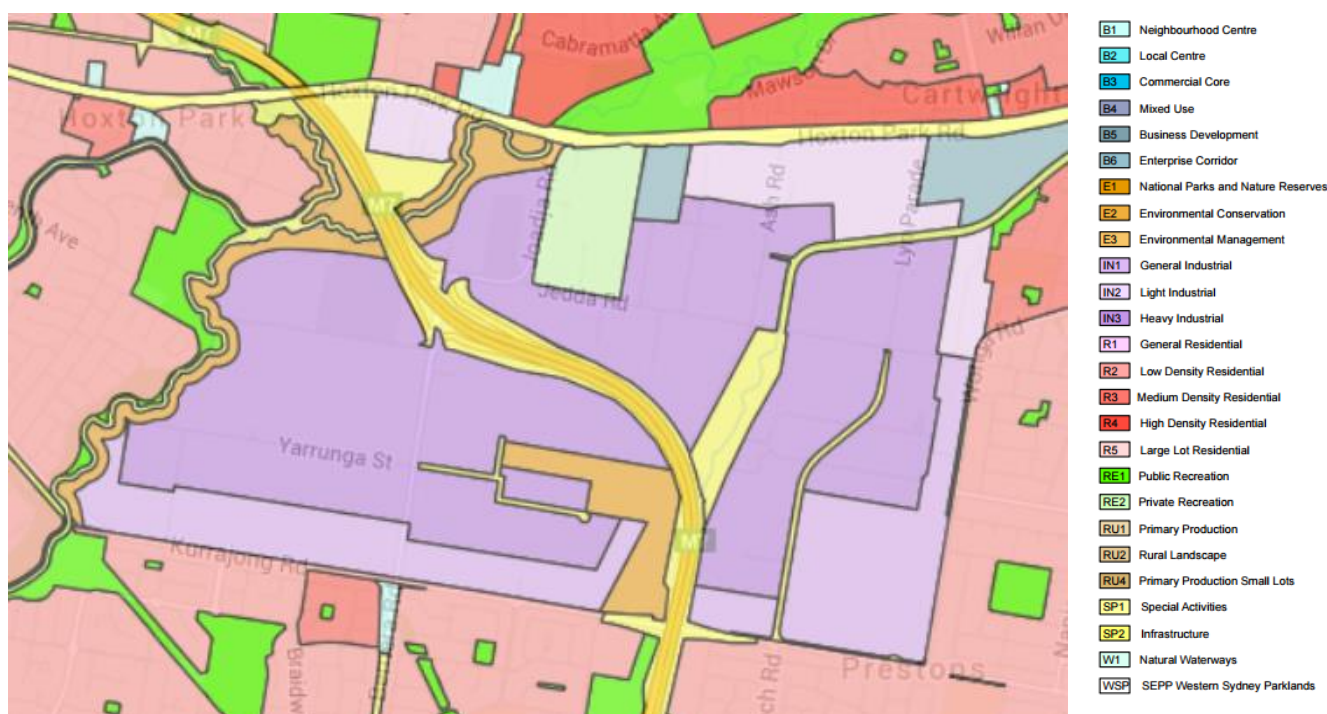
The strategic location of the Yarrunga/Prestons industrial area on the M7 Motorway and near the M5 Motorway is significant to the existing and future freight, logistics, warehousing and distribution land uses that are likely to significantly contribute to employment generation in the Liverpool LGA. Recent developments in the industrial area include the Aldi Distribution Centre, Inghams, Mainfreight Facility, Biz Holdings and Sydney Water.

As indicated within the Western Sydney Infrastructure Plan, the location of the Yarrunga/Prestons industrial area will also benefit from the planned upgrade of Bringelly Road and the Northern Road as well as the future M12 Motorway providing direct connections from the M7 Motorway to the Western Sydney Airport.

Improvements in public transport servicing the industrial area as the newer land release in parts of the industrial area continue to develop will be important to attracting well-known companies to locate in Yarrunga/Prestons and increase the employment generating capacity of the LGA.

Two areas of land zoned B6 Enterprise Corridor directly adjoin the industrial zoned land to the north of the industrial area. While the B6 zone allows for some light industrial uses with consent, it also permits some types of residential accommodation development such as multi-dwelling housing and shop-top housing which could reduce the employment generating capacity of the adjoining industrial lands due to a potential for land use conflict. Council should carefully consider any future rezoning proposals to rezone industrial land to B6 Enterprise Corridor within or adjoining the Yarrunga/Prestons Industrial Area.

Map 3. Yarrunga/Prestons Zoning Map



Source: NSW Department of Planning and Environment

2.1.2 MOOREBANK

The Moorebank Industrial Area is one of the largest industrial areas in the Liverpool LGA. The industrial area is predominantly zoned IN1 General Industrial with an area of land zoned IN2 Light Industrial in the north-western sector.

The northern and southern parts of the industrial area are well connected in terms of road access. The M5 Motorway Moorebank Avenue interchange and Heathcote Road interchange is located within the industrial area.

Parts of the northern-western sector are within an 800 metre radius of the Liverpool Train Station. Buses service the industrial area with connections from Liverpool Train Station.

The surrounding residential areas are predominantly buffered by recreation and waterway zones and defence land, however an established residential area is land-locked in the interior of the northern portion of the industrial area adjoining land zoned IN1 on two edges and IN2 on one edge with a recreational area zone on the other. A second residential area adjoins IN1 zoned land in the southern portion of the industrial area on one edge only. Vehicular access to these residential areas is largely shared with access into, and around, the industrial area.

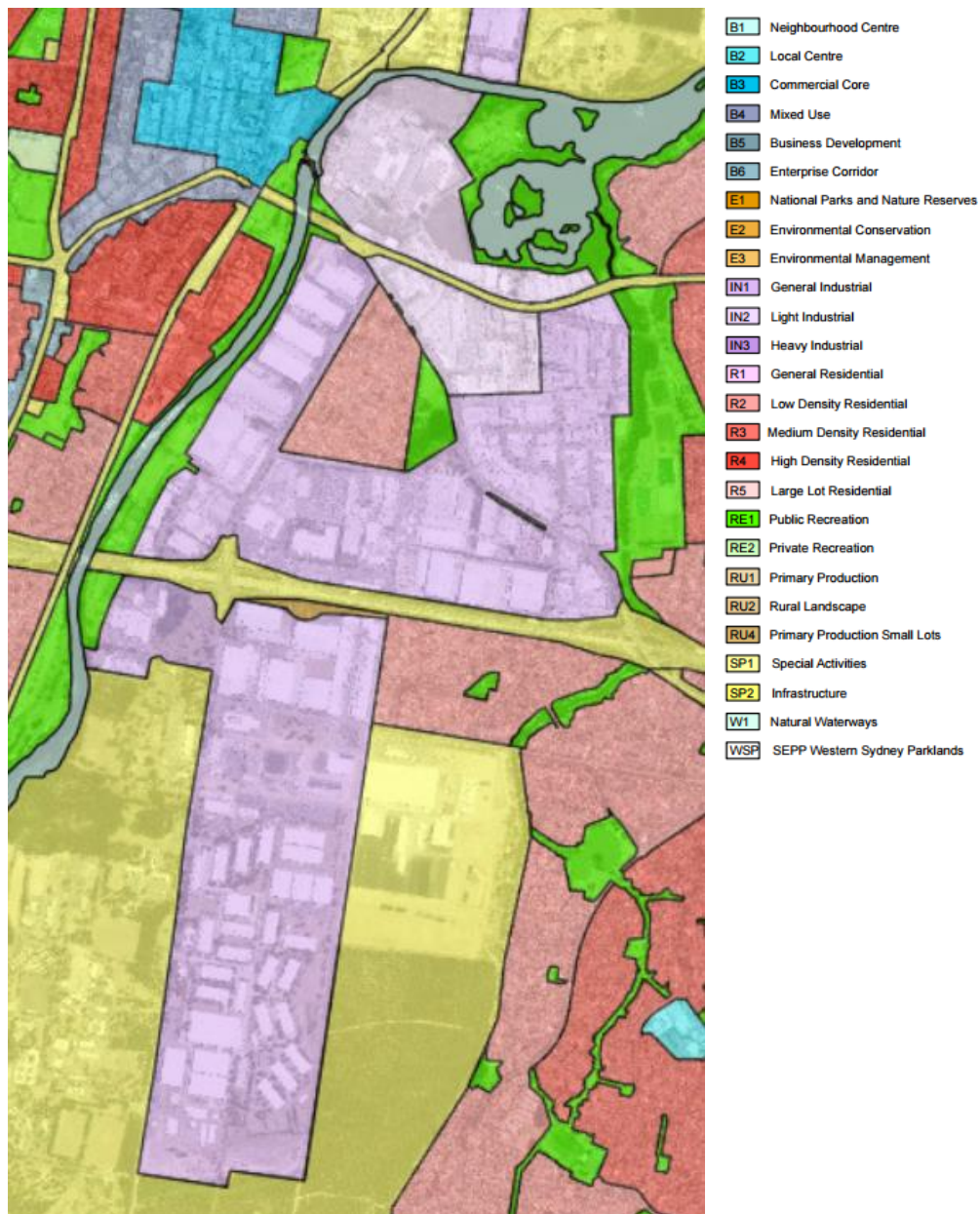
Land allotments within the industrial area are fragmented in parts. The size of allotments within the industrial area varies from 325 square metres to 83 hectares.

The strategic location of the Moorebank industrial area on the M5 Motorway is also important to the existing and future freight, logistics, warehousing and distribution land uses that are likely to significantly contribute to employment generation in the Liverpool LGA. The future M12 Motorway as indicated within the Western Sydney Infrastructure Plan will provide direct connections from the industrial area to Western Sydney Airport at Badgerys Creek. Newbridge Road currently provides a connection from the northern part of the industrial area to Bankstown Airport.

It is noted that in the southern portion of the industrial area, concept approvals have been granted for two intermodal terminals in Moorebank. The proposed intermodal terminal to the east of Moorebank Avenue is a private intermodal terminal known as the SIMTA Intermodal. The proponent for the intermodal terminal to the west of Moorebank Avenue is the Australian Government Department of Finance and Deregulation. It is known as the Moorebank Intermodal Terminal (MIT). The freight intermodals will be a destination for freight containers transported from the port via rail. From this terminal the freight containers will be distributed by trucks to their various destinations. The Environmental Impact Statement prepared for the assessment of the SIMTA Intermodal concept plan has indicated that the operation of the MIT Intermodal will generate approximately 2,174 jobs during its operation.

Parts of the Moorebank industrial area are located within the study area for the extension of the Sydney Metro line between Bankstown and Liverpool stations. A metro station in the Moorebank industrial area would improve public transport accessibility. The opportunity to allow employees to access their workplace via public transport will assist in attracting and maintaining the existing and future employment generating uses in the Moorebank industrial area.

Map 4. Moorebank Zoning Map



Source: NSW Department of Planning and Environment

2.1.3 CHIPPING NORTON

The Chipping Norton Industrial Area is a large industrial area in the Liverpool LGA. The industrial area is predominantly zoned IN3 Heavy Industrial with an area of land zoned IN2 Light Industrial along the northern and western edges of the industrial area.

In terms of road access, vehicles accessing the industrial area can connect to the Hume Highway via Governor Macquarie Drive and can connect to the M5 Motorway via Newbridge Road and either Moorebank Avenue or Heathcote Road. Access to public transport servicing the industrial area is limited. Bus stops along Newbridge Road and Governor Macquarie Drive provide connections to areas such as Liverpool, Bankstown, Burwood and Strathfield.

The industrial area zoned IN2 adjoins residential areas zoned R2 Low Density and R3 Medium Density on the northern and western edges. It is noted that this is a potential source of land use conflict between residential and non-residential use in terms of the manner in which industrial uses are likely to operate such as hours of operation, noise and/or odour. It is noted from a field inspection that there is a wide variety of industrial activities established in Chipping Norton, some of which may result in the potential for such conflict. It is noted that Governor Macquarie Drive accommodates a mix of residential and industrial traffic and in turn may be a limiting factor to further expansion and/or intensification of industrial uses particularly those involving the use of heavy transport including the use of B-doubles. An RE1 Recreation zone provides a buffer between the IN3 and adjoining Georges River to the east. A B6 Enterprise Corridor zone, RE2 Private Recreation zone and an E2 Environmental Management zone are adjacent to the south of the industrial area. Vehicular access to the surrounding residential areas to the north and west of the site area is largely shared with access into and around the industrial area.

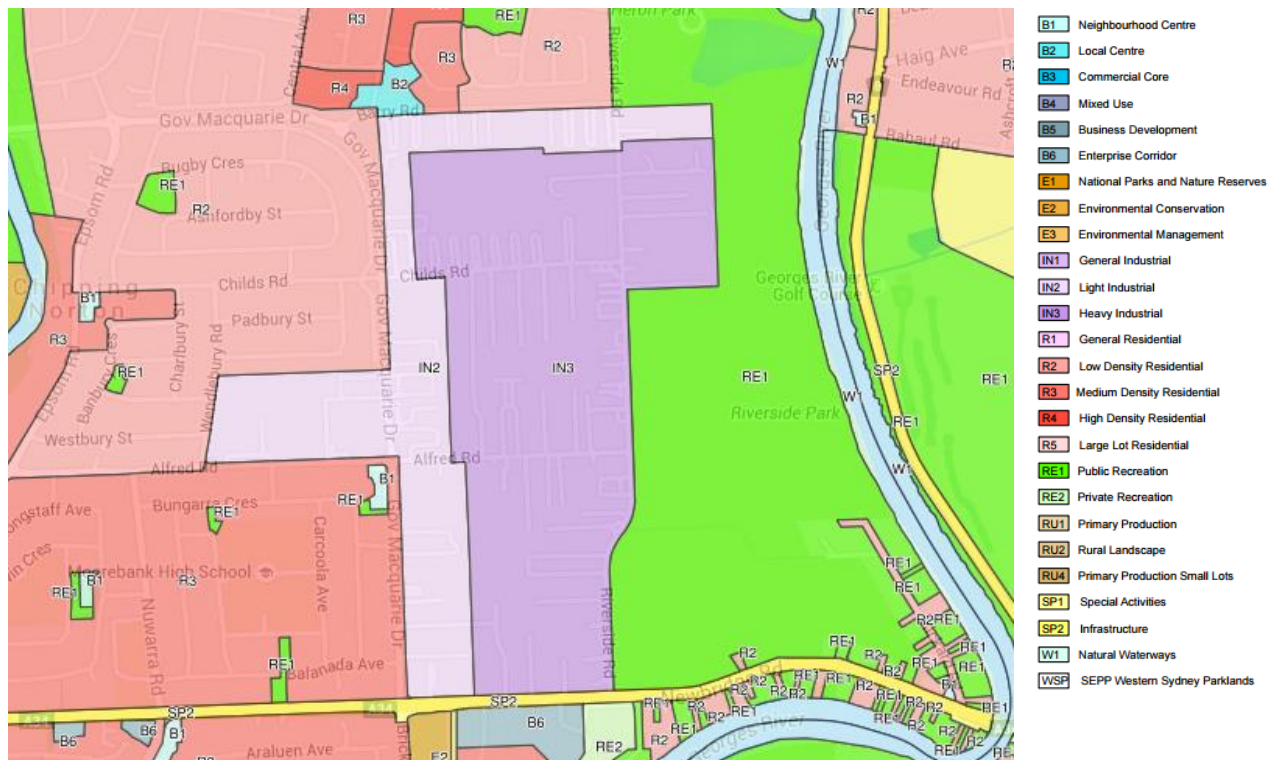
Land ownership within the industrial area is fragmented in parts. The size of allotments within the industrial area varies from 470 square metres to 4.1 hectares.

The location of the Chipping Norton industrial area is significant to the Bankstown Airport. The airport is located approximately 1.2 kilometres from the industrial area. A *Plan for Growing Sydney* nominates Bankstown Airport as a “transport gateway”. The Plan indicates a priority to “work with council to identify and protect strategically important industrial-zoned land in and near Bankstown Airport-Milperra for future employment purposes”. Newbridge Road to the south of the industrial area currently provides a direct connection from the industrial area to Bankstown Airport. However, to increase activity at Chipping Norton, the upgrading of Newbridge Road, to improve capacity, could assist in stimulating the area.

While the industrial area is one of the older and established industrial areas in the LGA, an improvement in public transport servicing the industrial area will be essential in attracting new development to occur and to assist in increasing the employment generating capacity of the LGA.

To stimulate new development in the industrial area and assist in increasing the employment generating potential of the LGA, Council may wish to consider the allowance of a range of development incentives for the Chipping Norton industrial area.

Map 5. Chipping Norton Industrial Zoning Map



Source: NSW Department of Planning and Environment

2.1.4 CROSS ROADS, CASULA

The Cross Roads, Casula industrial area is a small industrial area (approximately 21 hectares in area) in the Liverpool LGA. The industrial area is zoned IN3 Heavy Industrial.

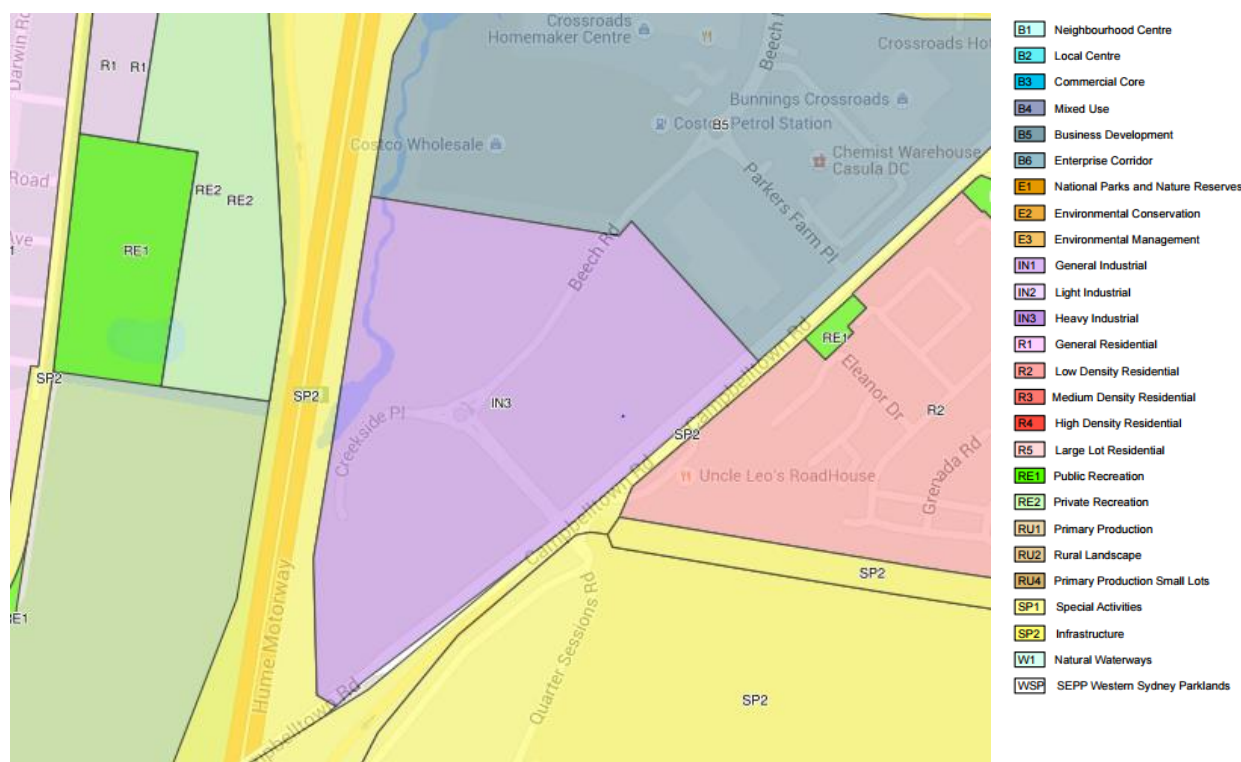
The industrial area is well connected in terms of road access. The M7 Motorway Camden Valley Way interchange is located in close proximity to industrial area. The M5/M7 Motorway interchange is located approximately 1 kilometre from the industrial area. The location of this industrial area allows for direct links from the M7 to the Sydney CBD, Port Botany, Sydney Airport, the future Western Sydney Airport at Badgerys Creek, the greater metropolitan region and interstate freeways.

Access to public transport servicing the industrial area is very limited. Bus stops along Camden Valley Way provide irregular connections to areas such as Narellan, Prestons and Bringelly.

The industrial area adjoins the M7 Motorway to the west and a B5 Business Development zone to the north-east. The Campbelltown City Council LGA is adjacent to the site to the south-east. On this land are residential development zoned R2 Low Density Residential and an SP2 Educational Establishment zone for the use of the Glenfield Park Special School.

The industrial area appears part of a new subdivision and has not yet been developed. The area is comprised of two main allotments. Given the recent anecdotal evidence of solid demand for the AMP Crossroads logistics centre the current Heavy Industrial (IN3) zoning is considered appropriate. However, given the adjoining B5 Business Development zoning, Council may wish to consider rezoning this land to a lighter Industrial Zone (IN1 or IN2). This will still permit industrial uses and warehousing and distribution centre uses in close proximity to the M7 Motorway and is likely to result in a reduced impact on the amenity of the adjacent residential and educational establishment uses. Furthermore, Council can be satisfied that the land could continue to generate employment for the LGA.

Map 6. Casula Crossroads Industrial Zoning Map



Source: NSW Department of Planning and Environment

2.1.5 HOXTON PARK AIRPORT (LEN WATERS ESTATE)

The Hoxton Park Airport (Len Waters Estate) industrial area is a small industrial area (approximately 21 hectares in area) in the Liverpool LGA and occupies the site of the former Hoxton Park Airport. The industrial area is zoned IN1 General Industrial and IN2 Light Industrial.

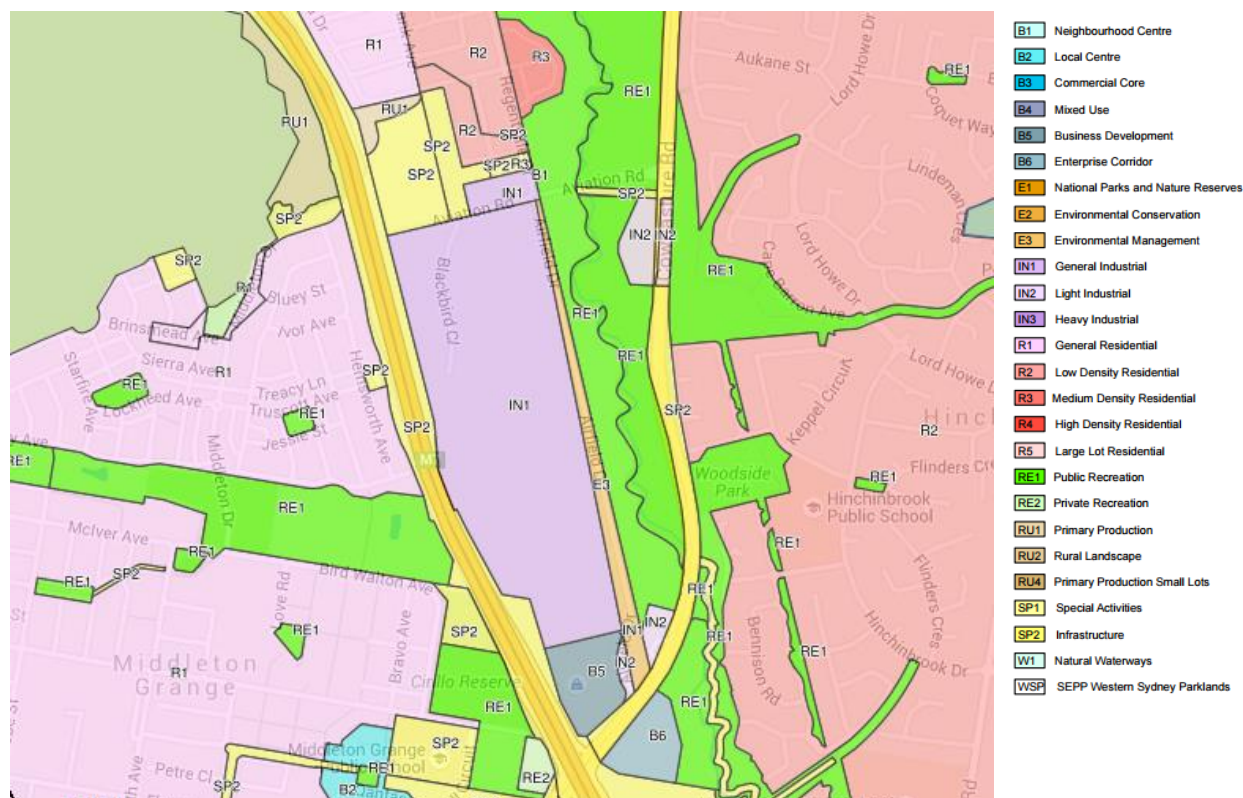
The industrial area is well connected in terms of road access. The industrial area has direct access to the M7 Motorway Cowpasture Road interchange. The location of this industrial area allows for direct links from the M7 to the Sydney CBD, Port Botany, Sydney Airport, the future Western Sydney Airport at Badgerys Creek, the greater metropolitan region and interstate freeways.

The industrial area is not well serviced by public transport. The closest bus stop is located approximately 450 metres from the northern boundary of the industrial area and provides a connection to Liverpool. The main part of industrial area adjoins the M7 Motorway to the west, a B5 Business Development zone to the south, an E3 Environmental Management zone to the east and an SP2 Drainage Infrastructure zone to the north. The area also contains four smaller pockets of IN2 Light Industrial land.

The industrial area is a recent new subdivision and has been recently developed. The main industrial area contains the distribution centres of Big W, Woolworths and Masters and some undeveloped allotments. The strategic location of this industrial area on the M7 Motorway is significant to the existing and future freight, logistics, warehousing and distribution land uses that are likely to significantly contribute to employment generation in the Liverpool LGA. The smaller pockets of industrial land contain a service station, a bus depot and vacant land.

As indicated within the Western Sydney Infrastructure Plan, the location of the industrial area will also benefit from the future M12 Motorway providing direct connections from the M7 Motorway to the Western Sydney Airport.

Map 7. Hoxton Park Airport (Len Waters Estate) Industrial Zoning Map



Source: NSW Department of Planning and Environment

2.1.6 WARWICK FARM RACECOURSE (COOPERS PADDOCK)

The Warwick Farm Racecourse industrial area, also known as Coopers Paddock, is a small pocket of industrial land (approximately 11.4 hectares in area) in the Liverpool LGA. The industrial area is zoned IN1 General Industrial.

In terms of road access, access to the Hume Highway via Governor Macquarie Drive is available to the site. The site is not well serviced by public transport. The closest bus stop is located approximately 600 metres from the northern boundary of the industrial area and provides a connection to Liverpool.

The site adjoins an SP2 Sewage system zone to the west (the Liverpool Water Recycling Plant), a RE2 Private Recreation zone to the north (the Warwick Farm Racecourse), an E2 Environmental Conservation zone to the south and an RE1 Public Recreation zone to the east providing a buffer to the Georges River.

It is noted that development consent was granted in April 2016 by the Joint Regional Planning Panel for the construction and use of four (4) warehouse facilities on the Coopers Paddock site including associated internal access roads and 345 car parking spaces (to be developed by Stockland). The total GFA for the four (4) warehouse facilities including ancillary office areas is 51,723sqm. The approved use of the warehouse facilities are for warehouse and distribution facilities. The extent to which the land could be further developed for a range of industrial uses and potentially at a greater density may be limited by its proximity to environmentally sensitive lands and the adjacent Liverpool Water Recycling Plant.

Map 8. Warwick Farm Racecourse (Coopers Paddock) Industrial Zoning Map



Source: NSW Department of Planning and Environment

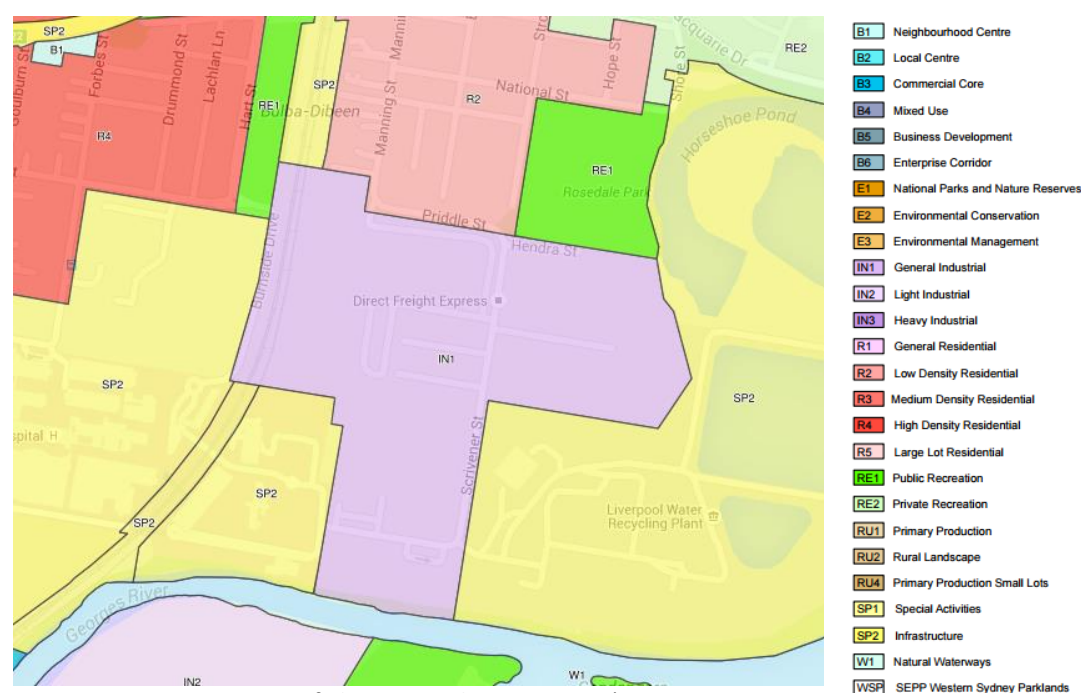
2.1.7 PRIDDLE/SCRIVENER STREET (WARWICK FARM)

The Priddle/Scrivener Street (Warwick Farm) industrial area is a small pocket of industrial land (approximately 25 hectares in area) in the suburb of Warwick Farm in the Liverpool LGA. The industrial area is zoned IN1 General Industrial. In terms of road access, access to the Hume Highway via Governor Macquarie Drive and the local street network is available to the industrial area. The local road network to access the industrial area is shared with the adjoining residential area to the north. Warwick Farm train station is a 550 metre walk from the northern part of the industrial area.

The site adjoins an SP2 Sewage system zone to the east and south-east (the Liverpool Water Recycling Plant) (STP), a W1 Waterway zone (the Georges River) to the south, a RE2 Private Recreation zone to the north (the Warwick Farm Racecourse), an RE1 Public Recreation zone, R2 Low Density Residential zone and SP2 Railway infrastructure zone to the north and an SP2 Health Services Facility (Liverpool Hospital) to the west and south-west.

The assumption has been made that there is a requirement for an odour buffer to protect the ongoing operating of the STP as strategic infrastructure. In turn, an assumption that this will limit the potential for a range of more sensitive uses and a limit on the intensification of development in the area within any such buffer. An increase in industrial density and potential for new development within the industrial area is limited given its proximity to the surrounding residential and health services uses adjoining the site. It is assumed that the industrial area acts as a buffer to these areas from the Liverpool Water Recycling Plant. The limits on accessibility into the industrial area and sharing this access with the adjoining residential area are also a limitation.

Map 9. Priddle/Scrivener Street (Warwick Farm) Industrial Zoning Map



Source: NSW Department of Planning and Environment)

2.1.8 SAPPHO ROAD (WARWICK FARM NORTH)

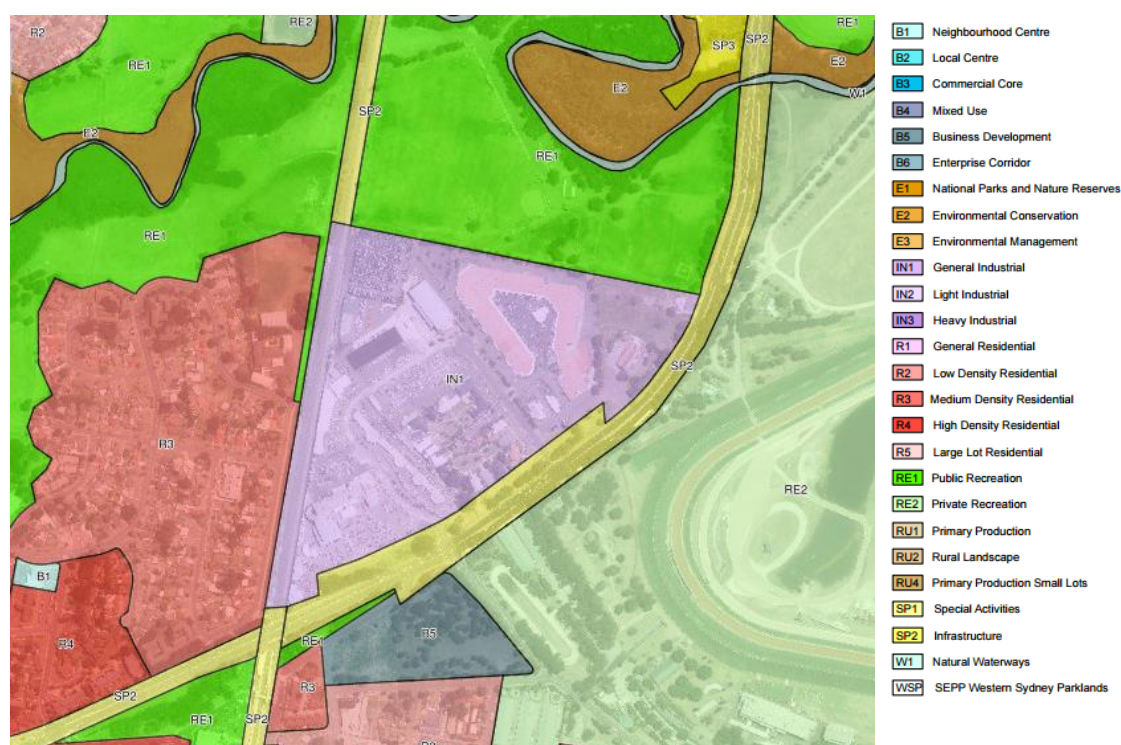
The Sappho Road (Warwick Farm North) industrial area is a small pocket of industrial land (approximately 20 hectares in area) in the suburb of Warwick Farm in the Liverpool LGA. The industrial area is zoned IN1 General Industrial.

Warwick Farm train station is a 400 metre walk to the main entrance of the industrial area. Bus stops along the Hume Highway frontage of the industrial area provide connections to Fairfield and Liverpool. In terms of vehicular access, the Hume Highway is directly accessible from the industrial area.

The site adjoins an RE1 Public recreation zone to the north, an R3 Medium Density Residential zone to the west (albeit separated by a railway line, just north of the Warwick Farm Station which acts as a buffer from the industrial zone). The Hume Highway adjoins the south-eastern boundary of the industrial area (SP2 Infrastructure zone) and the Warwick Farm Racecourse is located to the east of the industrial area (separated by the Hume Highway).

A number of uses occupy the industrial area including motor vehicle dealerships, project home displays, bulky goods premises, motel accommodation and food and drink premises. Given the known established uses existing within this site, and its close proximity to the Liverpool City Centre and Health cluster Council may wish to consider rezoning the land to either a B5 (Business development), B6 (Enterprise Corridor) B7 (Business Park) zone.

Map 10. Sappho Road (Warwick Farm North) Industrial Zoning Map



Source: NSW Department of Planning and Environment

2.1.9 ORANGE GROVE

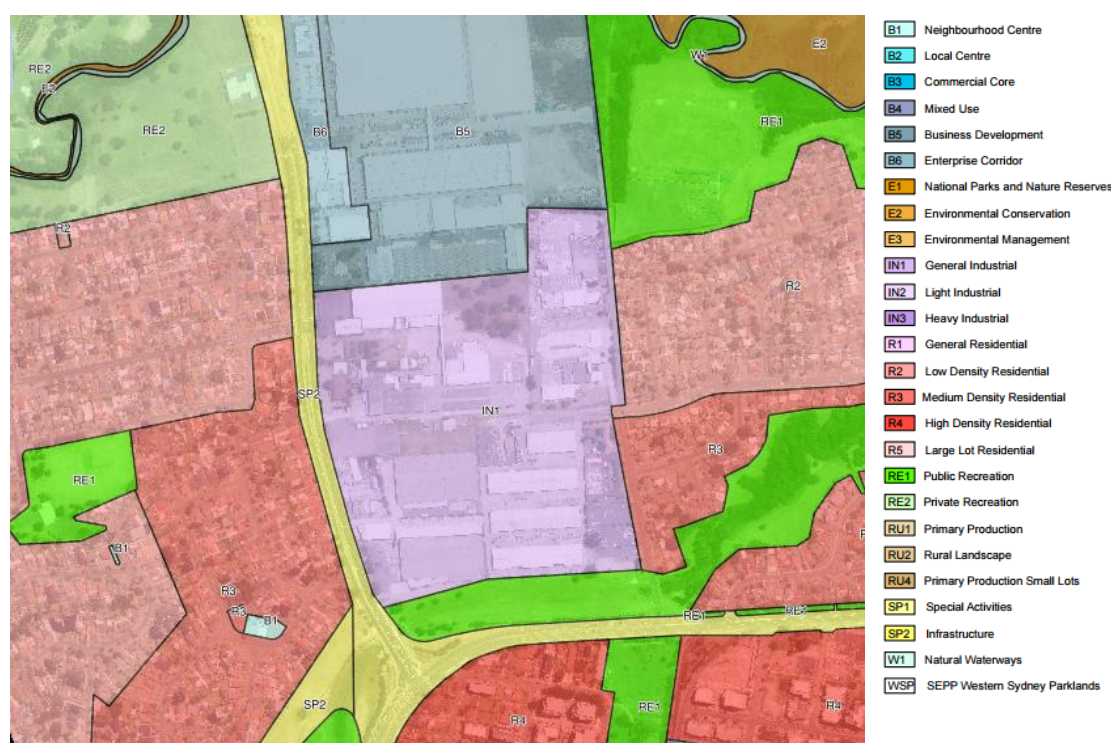
The Orange Grove industrial area is a small pocket of industrial land (approximately 22 hectares in area) in the suburb of Warwick Farm in the Liverpool LGA. The industrial area is zoned IN1 General Industrial and is located to the north of the Liverpool town centre.

Public transport access to the industrial area is available on the Cumberland Highway frontage and provides connections to Liverpool and Badgerys Creek. In terms of vehicular access, the Hume and Cumberland Highways are directly accessible from the industrial area.

The site adjoins a B5 Business Development zone to the north, an R2 Low Density Residential and R3 Medium Density Residential zone to the east, an RE1 Public Recreation zone to the south, the Cumberland Highway to the west (SP2 Infrastructure zone) providing a buffer to residential zones further to the west.

The location of the Orange Grove industrial area is in close proximity to the Liverpool city centre and at the junction of the Cumberland and Hume Highways. The industrial area is largely underutilized and it is evident that the general industrial zoning of the land is not the “highest and best use” for land in this location. Council may wish to consider rezoning the land for higher density employment lands such as B5 (Business development), B6 (Enterprise Corridor) or B7 (Business Park) zone in recognition of its proximity to the Liverpool City Centre and hospital, whilst also encouraging the location and retention of viable industrial uses.

Map 11. Orange Grove Industrial Zoning Map



Source: NSW Department of Planning and Environment

2.1.10 AUSTRAL

Under the State Environmental Planning Policy (Sydney Regions Growth Centres) 2006 (SEPP), the Austral precinct was rezoned for urban development in 2013. As part of the rezoning, an area of land of approximately 41 hectares in the Austral precinct has been rezoned IN2 Light Industrial. Gurner Avenue is located to the north of the industrial area and Fifteenth Avenue to the south. The land has not yet been developed.

Existing public transport servicing the site is limited however it is expected that improvements in public transport will be realized as the overall precinct develops.

The site adjoins undeveloped land zoned R2 Low Density Residential to the north and east, an RU6 Transition zone to the west and an R2 Low Density Residential zone to the south separated by Fifteenth Avenue.

The IN2 zone under the SEPP provides for a limited range of uses including light industries, depots, landscaping material supplies, hotel or motel accommodation and neighbourhood shops. It is unclear as to the basis of the zoning for light industry of the Austral precinct. Whilst it will be well placed to service the new urban releases, the range of permissible uses suggest it will provide for a wider mix of employment rather than just a conventional industrial precinct. The timing of the release and/or availability of land at Austral is subject to the provision of trunk infrastructure in conjunction with the staged sequencing of new urban release areas, the timing of which is not known.

Map 12. Austral Industrial Zoning Map



Source: NSW Department of Planning and Environment

2.2 BUSINESSES AND JOBS WITHIN EXISTING INDUSTRIAL PRECINCTS

Industrial employment lands within the Liverpool LGA are characterised by a wide range of employment and business types. As identified by Map 1 (page 12), existing industrial employment lands are surrounded by residential provisions, allowing a large number of local workers to live close to their place of employment. To highlight what types of industries (both businesses and jobs) are located within existing industrial lands, we have analysed ABS Counts of Australian Businesses data (2015) and ABS 2011 Census employment by industry (level 3) data for place of work. With the smallest level of readily data available at an SA2 level, we have identified relevant SA2 regions which accommodate the dominant existing industrial employment lands within the LGA. Notably, they are:

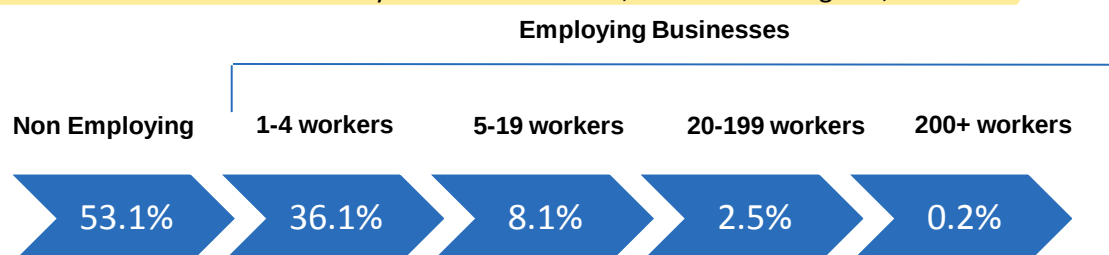
SA2 Region	Industrial Precincts
Chipping Norton – Moorebank	Chipping Norton, Moorebank
Holsworthy - Wattle Grove	Moorebank (Moorebank IMT site)
Liverpool - Warwick Farm	Warwick Farm Racecourse (Coopers Paddock), Orange Grove, Priddle/Scrivener Street (Warwick Farm), Sappho Road (Warwick Farm North)
Prestons - Lurnea	Yarrunga/Prestons
Green Valley - Cecil Hills	Hoxton Park Airport (Len Waters Estate)

2.2.1 BUSINESSES

As at June 2015, there were 9,465 businesses (all industries) located within the SA2 regions highlighted above, 55% of which were non employing/sole trading. Of the employing businesses located within the selected SA2 regions, the majority employ between one and four workers, while there are 13 businesses employing 200 or more workers. This highlights Liverpool's significant weighting towards smaller businesses.

From an industrial perspective, there are 4,359 businesses in industries who typically occupy industrial land. In line with broader business trends, 53.1% of businesses are sole trading/non employing, while a further 36.1% employ between one and four workers. With just seven industrial businesses employing 200 or more workers within the selected SA2 regions, it suggests that market appetite in Liverpool's existing industrial precincts for larger warehousing/manufacturing space has been low as larger users in the past are more than likely to have migrated north to Eastern Creek/Erskine Park where significant big box warehousing is available.

Figure 5. % of industrial businesses by number of workers, selected SA2 regions, June 2015



Source: ABS, Knight Frank Research

Based on a conservative employment density ratio of 25 employees per hectare, this suggests that the bulk of industrial demand in Liverpool's existing industrial precincts would be for sub 1,500m² tenancies. Key observations by SA2 region were:

- The Chipping Norton – Moorebank SA2 region has the largest number of industrial businesses within the Liverpool LGA with 1,043.
- In comparison to other SA2s, the Chipping Norton – Moorebank SA2 region has a significant skew towards manufacturing businesses, majority of which employ between one and 19 workers (60%).
- A large concentration of construction businesses are located in the Liverpool - Warwick Farm and Green Valley - Cecil Hills SA2 regions. Businesses of this nature include residential construction services (cabinet makers, bathroom supplies etc.).
- Wholesale trade businesses are more than likely to gravitate towards the Chipping Norton – Moorebank SA2 region, there are 221 businesses in the industry located there.
- The representation of transport, postal and warehousing businesses was evenly spread thought the selected SA2 regions.

Table 1. Count of Businesses by industrial industries within selected SA2 regions, June 2015

	Chipping Norton - Moorebank	Holsworthy - Wattle Grove	Liverpool - Warwick Farm	Prestons - Lurnea	Green Valley - Cecil Hills	Total
Manufacturing	246	36	114	134	68	598
Non employing	68	19	38	33	41	199
1-4	79	14	52	46	24	215
5-19	69	0	16	43	3	131
20-199	30	3	5	12	0	50
200+	0	0	3	0	0	3
Construction	351	227	548	422	524	2,072
Non employing	148	122	420	214	290	1,194
1-4	155	98	115	161	223	752
5-19	43	7	13	39	8	110
20-199	5	0	0	8	3	16
200+	0	0	0	0	0	0
Wholesale Trade	221	47	66	100	42	476
Non employing	70	24	33	29	20	176
1-4	83	17	20	40	22	182
5-19	48	6	9	18	0	81
20-199	16	0	4	13	0	33
200+	4	0	0	0	0	4
Transport, Postal and Warehousing	207	112	258	271	294	1,142
Non employing	102	84	193	153	161	693
1-4	84	25	62	108	128	407
5-19	10	3	3	7	5	28
20-199	11	0	0	3	0	14
200+	0	0	0	0	0	0
Other	18	5	12	20	16	71
Non employing	8	5	12	17	9	51
1-4	7	0	0	3	7	17
5-19	3	0	0	0	0	3
20-199	0	0	0	0	0	0
200+	0	0	0	0	0	0
Total	1,043	427	998	947	944	4,359

Source: ABS, Knight Frank Research

2.2.2 EMPLOYMENT

At a high level, there are 44,817 jobs located within these SA2 regions. Of the selected SA2 regions, the Liverpool – Warwick Farm area accounts for 41% of jobs within the selected SA2 regions, a large share of which are white collar based given the Liverpool CBD's location within the SA2. From an industrial employment perspective, there are 15,883 jobs within the selected SA2 regions with the Chipping Norton – Moorebank SA2 region representing the largest share of jobs at 6,807, followed by the Prestons – Lurnea SA2 region (4,193 jobs).

Looking at specific SA2 regions, each are unique in that the composition of employment varies greatly. Overall, the Chipping Norton – Moorebank and Holsworthy - Wattle Grove SA2 regions had a large skew towards manufacturing based employment, accounting for 55% and 53% respectively. Alternatively, a more diverse industrial employment base was evident in the other selected SA2 regions. For Green Valley – Cecil Hills, which incorporates the Hoxton Park Airport site (Len Waters Estate), there is a skew towards construction (e.g. Masters Home Improvement) and transport, postal and warehousing employment (e.g. Big W distribution centre).

Table 2. Industrial based jobs within selected SA2 regions

	Chipping Norton - Moorebank	Holsworthy - Wattle Grove	Liverpool - Warwick Farm	Prestons - Lurnea	Green Valley - Cecil Hills	Total
Manufacturing	3,758	764	1,140	1,617	46	7,325
Construction	517	177	739	681	188	2,302
Wholesale Trade	1,322	318	316	958	44	2,958
Transport, Postal and Warehousing	1,062	183	538	779	157	2,719
Other	148	3	159	158	111	579
Total	6,807	1,445	2,892	4,193	546	15,883

Source: ABS, Knight Frank Research

Drilling down further to ABS level 3 data for the selected SA2 regions, the following key observations were made:

- Road freight transport was the largest employer, representing 1,530 jobs, double the total for any other industry. The representation of road freight transport jobs was concentrated in the Chipping Norton – Moorebank and Prestons – Lurnea SA2 regions where businesses such as Mainfreight Transport are located there.
- In terms of manufacturing based employment, the dominant sub-sectors were electrical equipment manufacturing (689 jobs), bakery product manufacturing (489 jobs) and polymer product manufacturing (469 jobs) which includes fibreglass products.
- With a large number of businesses within the selected SA2 regions servicing the local population, there was a considerable presence of construction sub sectors in the selected SA2 regions. Building installation services and residential building construction industries were the largest construction

sub sectors, employing 603 and 586 persons respectively. This was particularly true for Prestons – Lurnea and Liverpool - Warwick Farm SA2 regions.

- Other notable sub sectors include motor vehicle and motor vehicle parts wholesaling, however this was largely confined to the Chipping Norton – Moorebank SA2 region.
- Given that Aldi's distribution centre is located within the Prestons – Lurnea SA2 region, there is a large presence of grocery, liquor and tobacco product wholesaling in the SA2, employing 206 persons as at 2011.

The key takeout in regards to how Liverpool's existing industrial lands differ from the broader Sydney region is that the bulk of businesses (and hence jobs) service the local population. It must be noted that there are also a number of larger users who occupy industrial land within the LGA including the Aldi (distribution centre) and Visy.

Given this skew towards smaller, localised business, it is important for Liverpool City Council to continue to support and encourage growth for these sectors and industries. This can be done by broadening the zoning/permitted use parameters to accommodate a larger mix of industries within current precincts.

Table 3. Top ABS Level 3 industrial employment industries by selected SA2 regions

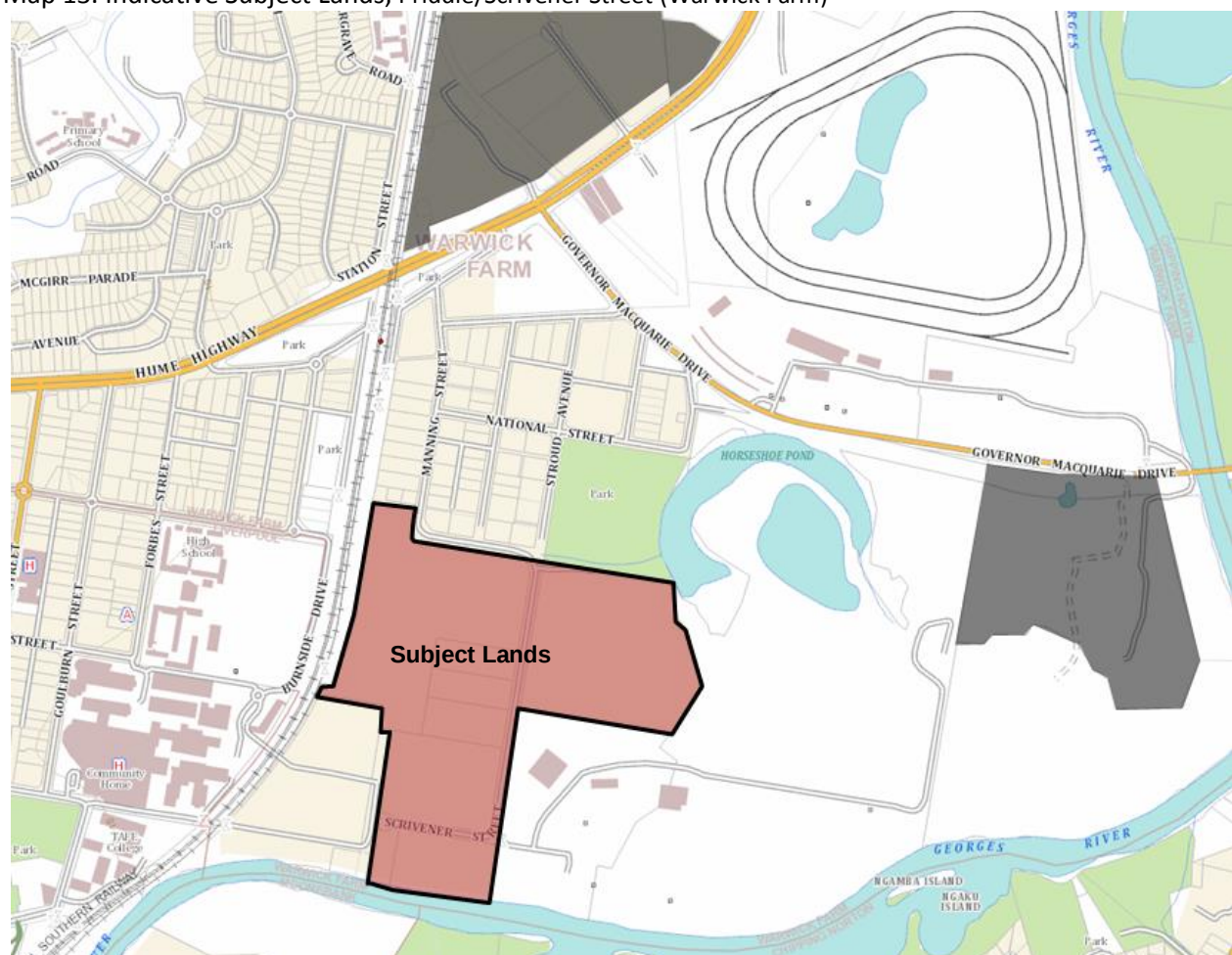
	Chipping Norton - Moorebank	Holsworthy - Wattle Grove	Liverpool - Warwick Farm	Prestons - Lurnea	Green Valley - Cecil Hills	Total
Road Freight Transport	683	61	198	506	82	1,530
Manufacturing (not defined)	439	36	95	168	7	745
Electrical Equipment Manufacturing	248	298	92	51	0	689
Building Installation Services	182	52	116	209	44	603
Residential Building Construction	80	45	290	138	33	586
Other Machinery and Equipment Wholesaling	160	163	28	222	3	576
Bakery Product Manufacturing	233	26	207	17	6	489
Furniture, Floor Covering and Other Goods Wholesaling	218	20	64	171	9	482
Polymer Product Manufacturing	370	5	22	72	0	469
Printing and Printing Support Services	365	3	27	64	0	459
Grocery, Liquor and Tobacco Product Wholesaling	103	39	74	206	12	434
Motor Vehicle and Motor Vehicle Parts Wholesaling	305	7	51	65	0	428
Domestic Appliance Manufacturing	222	97	28	23	0	370
Other Transport Support Services	126	64	131	34	4	359
Building Completion Services	58	36	73	114	63	344
Warehousing and Storage Services	126	24	11	166	5	332
Other Wood Product Manufacturing	96	3	18	195	3	315
Meat and Meat Product Manufacturing	9	4	159	141	0	313
Furniture Manufacturing	161	5	49	91	0	306
Professional and Scientific Equipment Manufacturing	82	168	23	4	5	282
Other	2,541	289	1,136	1,536	270	5,772
Total	6,807	1,445	2,892	4,193	546	15,883

Source: ABS, Knight Frank Research

2.3 CASE STUDY – WARWICK FARM

Warwick Farm, located immediately north of the Liverpool CBD is a strategic employment node within the Liverpool LGA. As per the 2015 ELDP and for the purpose of this analysis, we have analysed the area known as Priddle/Scrivener Street (Warwick Farm). The indicative boundary is shown below.

Map 13. Indicative Subject Lands, Priddle/Scrivener Street (Warwick Farm)



Source: Knight Frank Research

Note – shaded black areas are other industrial zoned lands

Under the Liverpool Local Environmental Plan (2008), the subject precinct is zoned IN1 General Industrial. This land use zoning permits (with consent) a wide range of industrial based activities such as freight transport facilities, light industries, storage premises, transport depots, vehicle body repair workshops, vehicle repair stations, warehouse or distribution centres

The subject precinct is surrounded by a varied mix of land uses including residential and horse stables to the north, the Liverpool Hospital to the West, Georges River to the south and the Liverpool Water Recycling Plant to the East. Also in close proximity is the Warwick Farm Racecourse and the adjacent industrial land

(12.8 ha), which is being developed by Stockland (Coopers Paddock) while further to the north is the nearby industrial land of Sappho Road (Warwick Farm North - 16.8 ha), which is home to car dealerships (Peter Warren), Masterton Homes and the Warwick Farm Hometown Centre.

In total, there are 23.2 ha of industrial zoned land within the subject precinct, all of which has been developed (2015 ELDP). Current uses operating on the site include freight forwarding, warehouse and distribution and packaging and paper manufacturing. There is also a large presence of smaller business located at 29-31 and 33 Scrivener Street who service local residents including auto repairs/mechanics and local construction businesses (see Table 4).

Table 4. Current Tenant Mix, Priddle/Scrivener Street (Warwick Farm) Industrial Lands

Street Address	Business Name	Core function/service
8 Priddle Street	Hannanprint	Print/Paper Manufacturing/Packaging
8 Priddle Street	Stockwell International	Freight Forwarding/Transport Solutions
20 Scrivener Street	Direct Freight Express	Freight Forwarding/Transport Solutions
41 Scrivener Street	Visy	Print/Paper Manufacturing/Packaging
20 Scrivener Street	Tru Blue Beverages	Wholesale Seller
29-31 Scrivener Street	MTA Autoparts	Automotive Repairs
29-31 Scrivener Street	BT Constructions	Construction
29-31 Scrivener Street	T&T Kitchens and Shop fitting	Construction
29-31 Scrivener Street	Evolution Auto Repairs	Automotive Repairs
29-31 Scrivener Street	TNN Kitchens	Construction
29-31 Scrivener Street	Colours Unlimited	Automotive Repairs
29-31 Scrivener Street	SMW Built-in Wardrobes	Construction
29-31 Scrivener Street	Head2work	Rehabilitation Service
29-31 Scrivener Street	Enterpraise	N/A
29-31 Scrivener Street	All Auto Spares	Automotive Repairs
29-31 Scrivener Street	GMN Smash Repairs	Automotive Repairs
29-31 Scrivener Street	Viman Smash Repairs	Automotive Repairs
29-31 Scrivener Street	Food Storage/Preparation	Food Wholesaling
33 Scrivener Street	28 Gate Christian Centre	Religion
33 Scrivener Street	Modern Design Wardrobes	Construction
33 Scrivener Street	W.F. Plastics	Packaging/Cleaning Supplies
33 Scrivener Street	Embroidery House	Embroidery/Clothing Retailing
33 Scrivener Street	Cabinetry	Furniture Manufacturer
33 Scrivener Street	Anavada Upholstery	Furniture Manufacturer
33 Scrivener Street	Dry Cleaners	Clothing
42 Scrivener Street	Gamma Illumination	Lighting Manufacturer
48 Scrivener Street	HY Quest Solutions	Hydrological/Meteorological Manufacturing

Source: Knight Frank Research

*Derived from Knight Frank Research's inspection of the subject precinct (14/06/2016)

From our inspection, it appears that the vacancy rate is low with no visible vacancies identified. However, speaking to Knight Frank agents operating in the area, there is 4,000m² available for lease at 8 Priddle Street. Feedback from the marketing campaign of the current vacant space has highlighted that, despite the sites

comparatively cheap rental offering (20% below market levels) - due to its poor truck access and conflicting interests with other uses (in particular horses) - interest has been minimal. Poor truck access and confined street access was identified in our inspection of the site, as highlighted by the photos below. Given these competing uses, Council may wish to investigate alternative access arrangements to the precinct.

Figure 6. Field Inspection Photos – Warwick Farm



Source: Knight Frank Research (14/06/2016)

At the same time, the area appeared to be quite vibrant due to the low vacancy in the area and activity of workers. Drawing upon both BTS employment estimates at a travel zone level and our observations from inspection, Knight Frank estimates there to be 1,300 to 1,500 jobs within the subject lands. Unlike other industrial precincts in the Liverpool LGA and elsewhere in Sydney, there is a moderate skew towards manufacturing employment where 500 manufacturing jobs are estimated to be within the precinct, representing 33-38% of jobs. Key employing industries include:

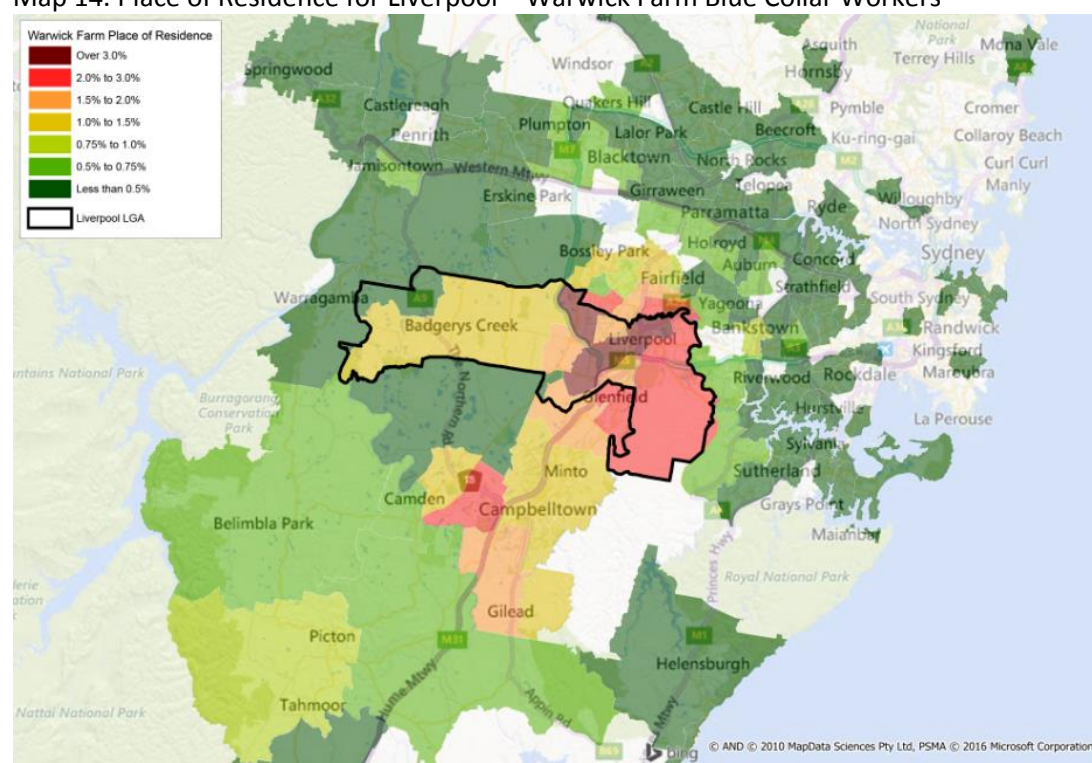
- **Transport, Postal and Warehousing** – given Direct Freight Express’s location within the precinct
- **Construction** – there is a strong presence of local construction businesses at 29-31 and 33 Scrivener Street
- **Pulp, Paper and Converted Paper Product Manufacturing** – Visy and Hannanprint
- **Furniture and Other Manufacturing**

2.3.1 WHERE WORKERS LIVE

The workforce of Warwick Farm is very localised in that the majority live in close proximity to Warwick Farm. This is important as it provides local residents employment opportunities close to home. In addition, and to the benefit of the Liverpool LGA, this will mean that the bulk of their spending is done in Liverpool. Drawing upon ABS Census Place of Work and Place of Usual Residence data, we are able to see where workers of the Liverpool – Warwick Farm SA2 live. Given the SA2 includes the Liverpool CBD and Liverpool hospital precincts, we have drawn upon blue collar industries only.

As at 2011, 31% of blue collar workers in the Liverpool – Warwick Farm SA2 lived in the Liverpool LGA, majority of which lived in the immediate Liverpool – Warwick Farm SA2 region (10.2%). By SA2 region, the next dominant destinations of where workers of the Liverpool – Warwick Farm SA2 live include Green Valley - Cecil Hills, Prestons – Lurnea and Cabramatta – Lansvale SA2s. Map 14 below highlights the areas in which workers from the Liverpool – Warwick Farm SA2 live.

Map 14. Place of Residence for Liverpool – Warwick Farm Blue Collar Workers



Source: ABS, Knight Frank Research

2.3.2 VIABILITY OF THE PRECINCT

Our examination has highlighted that the subject lands has a large presence of ageing secondary industrial stock and is likely to require investment/development in the near future (next five to ten years) to remain compatible with prevailing market demand and need. Similarly, vehicle and truck access, which is provided through Priddle and Scrivener Street is arguably not ideally suitable for heavy trucks (on average, the width of both streets is 11.5m with street parking offered on both sides), while other competing uses (including residential and horse stables) to the north supports this view. Similarly, anecdotal feedback with Knight Frank agents operating in the area confirm that leasing enquiry within the precinct is low given its poor vehicular access.

While the subject precinct has a high occupancy rate with just 4,000m² available for lease, market activity in the light industrial sector is evolving with businesses increasingly gravitating towards newer premises given the associated operational efficiencies. While larger occupiers, particularly within transport, postal and warehousing sub sectors have relocated to more suitable sites along key road and transport networks (Prestons, Eastern Creek etc.) from established locations, smaller businesses who service the local population will still require to be located close to residents. This is the case for the subject precinct with a high provision of local auto repairs/mechanics and construction businesses who service the local community.

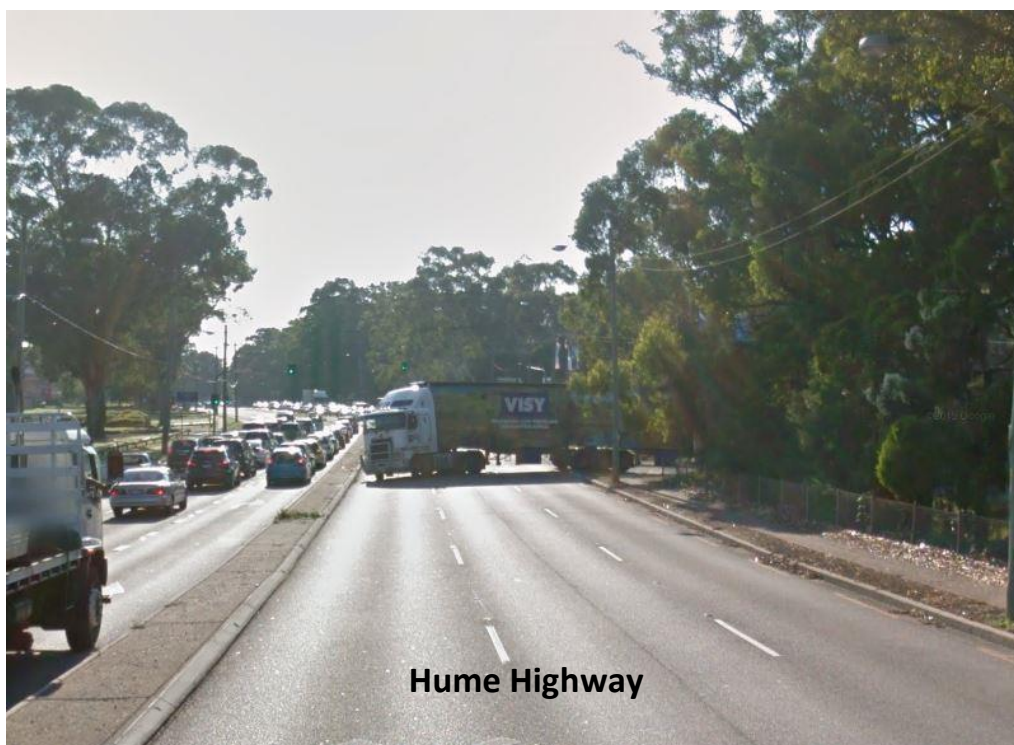
In this context, it is important that existing industrial lands such as the subject precinct be preserved for employment uses, ultimately allowing Liverpool residents to continue to work close to where they live. However, while the current precinct's zoning of IN1 General Industrial accommodates a broad range of industrial users, it is expected that the viability of the current zoning is not compatible with prevailing and anticipated market conditions. In this environment, it is recommended that Liverpool City Council explore the option to broaden the subject precinct's zoning/permitted use parameters to accommodate a larger mix of industries. Not only could this potentially lead to a greater employment outcome, it would also encourage and support smaller local businesses to remain close to where their workers live. Given the ageing stock base within the precinct, it is important that Council encourages development which can be achieved through a more flexible zoning provision.

We have assessed road issues faced by current tenants, having regard for both directions i.e. goods on-route to the site, and goods that have been dispatched from the site to other locations in Sydney. The following observations have been made:

- Width of both Priddle and Scrivener Streets is not supportive of trucks. On average, the width of both streets is 11.5 metres. With street parking offered on both sides, truck access is limited.
- Left hand turn onto the Hume Highway (the main arterial road from the subject precinct) from Warwick Street is single lane only. This movement is constrained, and not conducive to large vehicular usage and movement (see Figure 7).
- Congestion within the precinct is high given it's shared between industrial freight traffic, local workers and horse movements to and from stables.
- Congestion along Hume Highway is not supportive of inbound and outbound truck movements.

N.B 1 – This analysis is high level. For an in depth analysis of the subject precinct including testing the precincts viability and suitability as industrial land, a separate in-depth study would need to be undertaken.

Figure 7. Trucks turning from Warwick Street onto the Hume Highway



Source: Street View - Google Maps (April 2013)

2.4 CASE STUDY – CITY OF SYDNEY EMPLOYMENT LANDS: NEW START UP HUB

Across Sydney, other Councils have rezoned industrial lands to other business employment zones to encourage additional jobs growth and facilitate the development of underutilised industrial lands which are no longer operating at their highest and best use. To highlight this, we have undertaken a high level case study of the City of Sydney Employment Lands which were rezoned in mid-2015. This case study discusses the concept, provides the framework for further discussion and presents a snapshot of the principles addressed by another Sydney council. The rezoning of the precinct has proved successful with early indicators suggesting the area has become an attractive option for new start-ups and tech businesses.

As discussed in the previous section of this report (2.3 Case Study - Warwick Farm) there are areas and locations that are zoned IN1 Industrial across the Liverpool LGA which, with changing economic drivers, land use conflicts and access issues would need to be investigated in terms of their future viability and opportunities.

In the context of the above statement, the City of Sydney's southern employment lands are some of the most strategically important in NSW, however their future viability began to be questioned. The southern employment lands is an area of approximately 265 hectares in size within the suburbs of Alexandria and Rosebery. It stretches from the southwest corner of the Green Square Town Centre to the south west corner of the LGA. Generally the area is bordered by Gardners Road to the south, McEvoy Street on the west and Mentmore Avenue and Botany Road on the east. The southern employment lands are located in the Global Economic Corridor between some of Australia's major trip generators such as Sydney Airport, Port Botany and Sydney CBD.

Until recently most of the area was zoned for General Industrial purposes. As such a range of industrial businesses are currently located in the area. These include industrial activities, such as manufacturing, wholesale trade, transport and logistics related industries, postal activities and warehousing. However, changes in the Australian (and NSW) economy mean there is now less need for industrial-zoned land close to the inner-city. New forms of business and enterprise are emerging, such as high tech industry, creative spaces and retail and distribution facilities. These activities require flexible places to locate and grow close to their customers at the airport and inner-city.

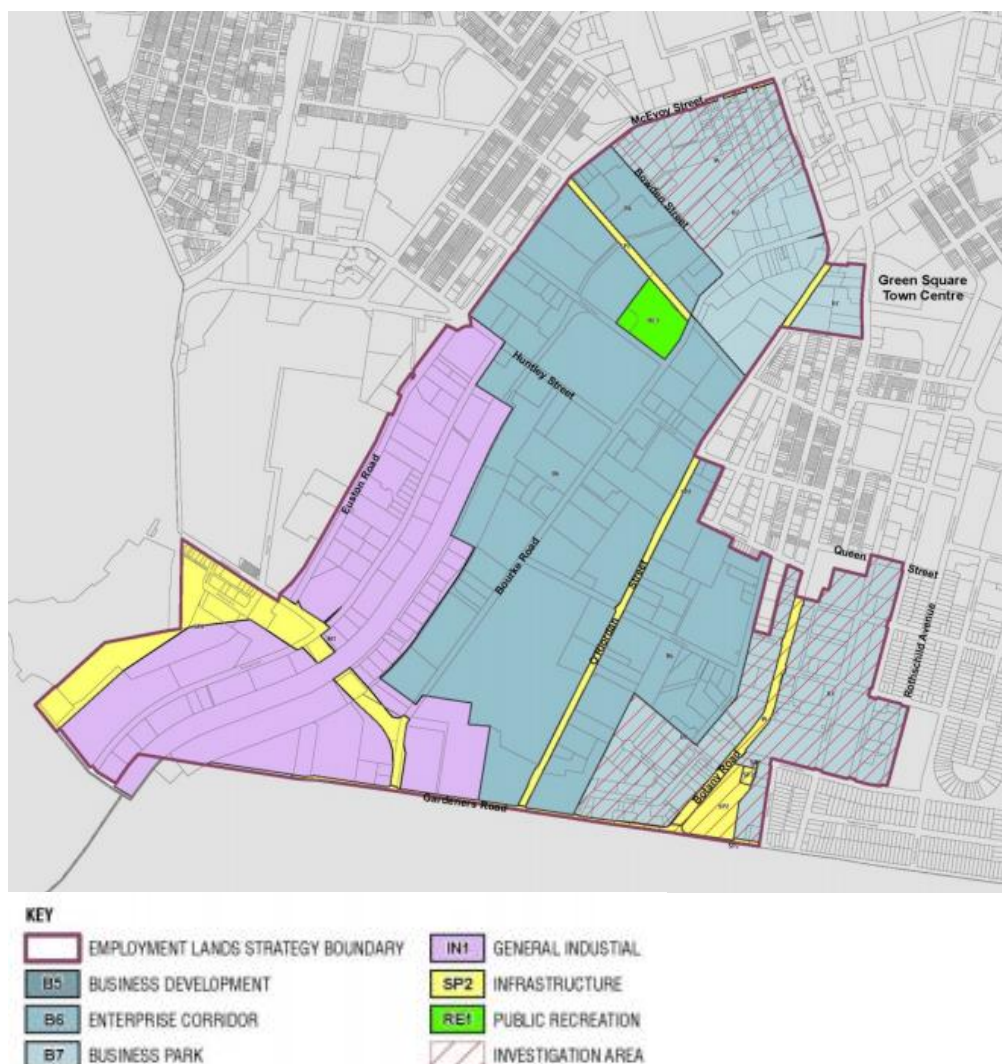
In June 2015 most of the southern employment lands were rezoned to allow for a wider range of business activities and employment opportunities (see Map 15). However, in recognition of the strategic importance of retaining sufficient space for industrial activity over time, a portion of the employment lands retained their IN1 General Industrial zoning. These lands are essential to the efficient functioning of the City and will ensure activities associated with key state infrastructure, including Sydney Airport and Port Botany, and other activities that require access to the Sydney CBD, can continue to locate in the LGA.

Other areas within the employment lands were moved toward more flexible land use zones. It was argued that this would generally allow existing uses to continue, but over time would also facilitate a more flexible approach to land use. Parts of the employment lands would facilitate higher density employment and new economic activities such as new industrial uses, creative uses, knowledge industry development and flexible commercial, retail, industrial and community spaces.

A City of Sydney economic study identified a clear demand for a range of business uses, including many commercial-type uses that have to date been prevented from being accommodated in the southern employment lands owing to the current planning restrictions. There was strong demand for adaptively reused space by retail and other commercial businesses as well as creative uses traditionally located in Surry Hills and Paddington.

This rezoning approach was supported by a literature review of prominent thinkers on cities and economic geography including Enrico Moretti, Richard Florida and Edward Glaeser. They argue that successful modern urban economies are built around knowledge and creative industries, and attracting firms and workers in these industries, depends on economically diverse, dense and mixed use environments. These industries thrive in environments where they can cluster together with other 'like' uses/users, creating opportunities for synergies, knowledge sharing and collaboration to strengthen and grow a cluster.

Map 15. City of Sydney Southern Employment Lands, Proposed Zonings



Source: City of Sydney (B5 on the above map key refers to Moore Park Employment lands)

It is designed that the rezoning of Industrial land to B6 (Enterprise Corridor) and B7 (Business Park) zones will help facilitate a wide variety of economic activities, as well as 'other' uses likely to attract and support higher value activities and promote better amenity. The long term aspiration for the new zones is to create a mixed business precinct facilitated by a flexible approach to land use. In the short to medium term the zone is likely to remain reasonably industrial in character, with higher value uses moving in slowly over time.

The proximity of the proposed Business zones to the new Green Square Town Centre makes the area an attractive location for the knowledge and creative industries to locate. The 'just out of centre' location makes it more affordable, while at the same time ensuring easy access to the services and amenities located in the new town centre. Other benefits include its proximity to the Green Square train station, and to an educated and accessible workforce. All of these factors are driving considerations for these kinds of knowledge and creative industries when they are choosing where to locate their business.

In addition, the changes from General Industrial to B6 and B7 zones will form a more intense use of land for employment than what was previously occupied. Therefore, rezoning's would add to the quantity of people that could be employed rather than reduce job opportunities as traditional heavier industrial uses (predominantly warehousing and distribution, transport and logistics, depots) provide limited opportunity for densification.

NB1: Planning for the City of Sydney southern employment lands was done in consultation with the community, landowners, government organisations and key stakeholders such as Sydney Airport and Port Botany.

NB 2: Information for this case study has been taken from a number of City of Sydney reports.¹²³

2.4.1 LESSONS LEARNT AND OPTIONS APPLICABLE TO THE LIVERPOOL LGA

The Primary role of the employment lands is to facilitate new business and industry opportunities, provide employment across a range of sectors, and provide for strategic industrial activity and essential urban services. A more flexible approach, as per the City of Sydney example, to land use in certain precincts across the Liverpool LGA, could help to facilitate higher density employment and help sustain new economic activities.

There were a number of lessons learnt in this case study which can be applied to the Liverpool LGA. Similar to the Liverpool LGA, it was identified that the City of Sydney needed to support and accommodate more jobs into the future and the key constraint to this was the limited availability of land in close proximity to the CBD and transport nodes.

The previous General Industrial zoning of the land was seen as a prohibitor to this growth as it did not encourage the development of older, underutilised sites. By adopting more flexible planning controls to parts of the City of Sydney's southern employment lands, it facilitated and encouraged higher density employment uses. At a high level, key lessons and options applicable to the Liverpool LGA include:

¹ <http://www.cityofsydney.nsw.gov.au/vision/major-developments/southern-employment-lands#page-element-dload>

² http://www.cityofsydney.nsw.gov.au/__data/assets/pdf_file/0007/232459/Adopted-Planning-Proposal.pdf

³ http://www.cityofsydney.nsw.gov.au/__data/assets/pdf_file/0003/232464/2C.-PP-Attach-C_EL-strategy.pdf

- **Proximity to other business clusters** – Given the City of Sydney’s southern employment lands proximity to higher density employment uses (namely being the CBD), it was seen as a logical decision to “broaden the CBD boundaries”. For Liverpool, there are a number of industrial precincts in close proximity to the CBD which may be better served under a business zone including a B5 (Business development), B6 (Enterprise Corridor) or B7 (Business Park) zone. These precincts include Orange Grove, Priddle/Scrivener Street (Warwick Farm), Sappho Road (Warwick Farm North) and the Cross Roads, Casula, as it would help facilitate new business and industry opportunities and accelerate their redevelopment and regeneration.
- **It will take time to evolve** - Importantly, the development of new industry clusters will not occur at once and it was recognised that the newly rezoned land would evolve over time as development progressively occurs. However, like the City of Sydney, the Liverpool LGA needs to be proactive by rezoning key precincts to facilitate this growth and development aspiration.
- **Access to infrastructure** – it was identified that the rezoning of land would lead to increased congestion of road networks. The City of Sydney was proactive in lobbying key stakeholders to ensure transport improvements would occur. Although they were broader State and Federal Government initiatives, examples include the WestConnex road project and the Sydney Metro rail project where the addition of a station at Central and Waterloo would alleviate some pressure on local road networks. For the Liverpool LGA, the potential extension of the Sydney Metro from Bankstown to Liverpool, including a station at Moorebank and the upgrading of Newbridge Road, would significantly improve the public transport accessibility for a number of industrial precincts, accentuating their attractiveness as a business zone to either a B5 (Business development), B6 (Enterprise Corridor) or B7 (Business Park) zone to facilitate further employment growth.
- **Access to affordable housing** – it was recognised that as employment grows in the City of Sydney’s southern employment lands, so too would demand for affordable housing. While this was seen as a large constraint for the City of Sydney given the high cost of housing in the area, Liverpool has a significant competitive advantage in that housing is significantly cheaper by comparison.
- **Promotion of flexibility** – By rezoning underutilised industrial land to higher order business zones, including B5 (Business Development), B6 (Enterprise Corridor) and B7 (Business Park), more flexibility in regards to both development, and the types of industries that could be accommodated, was given. While it remains early stages, there is evidence that the new zoning controls which encouraged flexibility has begun to support an increase in start-up and tech businesses moving into the area. A similar outcome could occur at Liverpool, particularly in the precincts close to the CBD, hospital and existing rail stations, including Orange Grove, Priddle/Scrivener Street (Warwick Farm) and Sappho Road (Warwick Farm North).

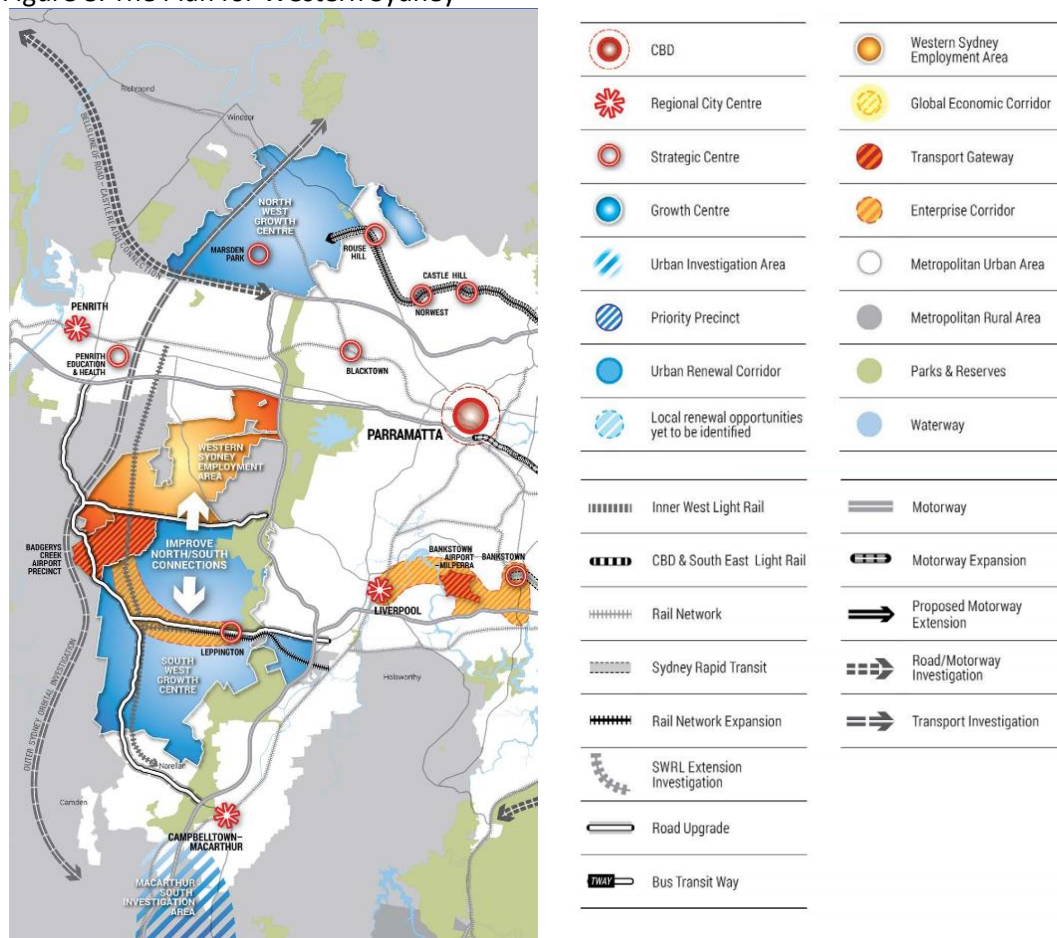
3.0 OVERVIEW OF METROPOLITAN AND SUB-REGIONAL STRATEGIC FRAMEWORK FOR INDUSTRIAL EMPLOYMENT LANDS IN THE LIVERPOOL LGA

An overview of the strategic framework has been prepared in order to understand the planning policy directions to which Council needs to respond together with the strategic drivers that will influence the locating and type of future industrial employment, as well as protecting and enhancing existing industrial lands, which will provide significant employment generation for the LGA. These strategic drivers include:

- **A Plan for Growing Sydney** (the Plan) prepared by the Department of Planning and Environment, which details the NSW Government's plan for the future of the Sydney Metropolitan Area over the next 20 years. The Plan provides key directions and actions to guide Sydney's productivity, environmental management, and liveability, including the delivery of housing, employment, infrastructure and open space. Figure 8 below demonstrates the plan for Western Sydney specifically.
- **Western Sydney Airport** (Badgerys Creek Airport). This airport will be a major catalyst for industrial employment and economic growth in Western Sydney and in the Liverpool LGA in particular. The project will be one of the largest infrastructure projects in Australia and works have already commenced on the road networks supporting the future airport.
- Bankstown Airport. An existing airport in close proximity to established industrial areas in the Liverpool LGA. **A new Master Plan for Bankstown Airport was approved in 2015.** According to the Plan, it is predicted that aircraft movements at Bankstown Airport will increase over the next 20 years.
- **The M12 Motorway which is proposed to be built under the Western Sydney Infrastructure Plan. The Motorway will run east-west between the Northern Road and the existing M7 Motorway.** The Motorway will direct access to the Western Sydney Airport, will improve freight movements throughout western Sydney, and is expected to service the Western Sydney Priority Land Release Area and the Western Sydney Employment Area. The Western Sydney Infrastructure Plan is illustrated under Figure 9.
- **The upgrading of Bringelly Road.** Identified in the Western Sydney Infrastructure Plan, Bringelly Road will be upgraded to a divided road of between four and six lanes.
- **The upgrading of the Northern Road.** As also identified in the Western Sydney Infrastructure Plan the project will upgrade approximately 35 kilometres of the Northern Road between Penrith and Narellan. The road will comprise a minimum four lane divided road and up to an eight divided road with dedicated bus lanes. The upgrade will include interchanges with the new M12 Motorway, the M4 Motorway and Bringelly Road.
- **The M9 Orbital.** A suitable corridor is currently under investigation to preserve an area for the provision of a north-south connection future motorway, freight rail and where practical a passenger rail line.

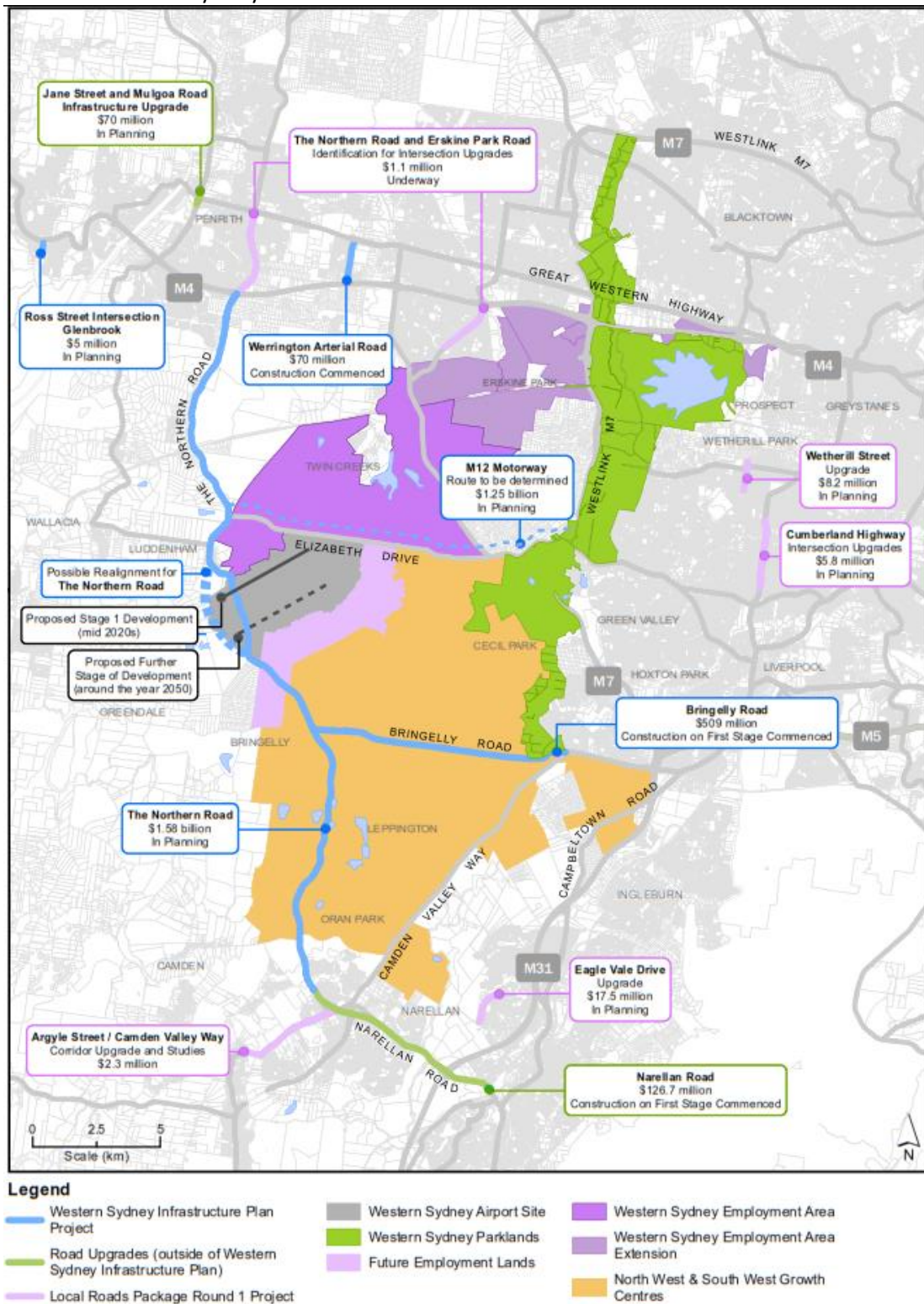
- **Sydney Metro extension from Bankstown to Liverpool.** A study area has been identified for investigation between Bankstown and Liverpool for the potential extension of the Sydney Metro line.
- **Western Sydney Priority Growth Area.** The State Government is planning to release a draft Land Use and Infrastructure Strategy which will outline the planning around the Western Sydney Airport including new industrial employment land opportunities. **The Strategy is likely to include a new special infrastructure contribution levy.**
- **Western Sydney Employment Area.** While not located in the Liverpool LGA, the Western Sydney Employment Area is located to the north of the LGA and will have direct connections to the new airport.
- **South-West Rail Link Extension.** It is understood that a corridor will be preserved for an extension of the South-West Rail Link. According to Transport for NSW, a number of core stations are proposed in the existing and planned centres of **Rossmore, Bringelly, North Bringelly, Oran Park and Narellan.** A station is also proposed at **Badgerys Creek** to serve the Western Sydney Airport.

Figure 8. The Plan for Western Sydney



Source: Department of Planning and Environment

Figure 9. The Western Sydney Infrastructure Plan.



Source: Department of Planning and Environment

The table below identifies the key directions and actions and comments in 'A Plan for Growing Sydney' relevant to the future of industrial employment lands in the Liverpool LGA.

Table 5. Key directions and actions relevant to the future of industrial employment lands in Liverpool

Direction	Action	Comment
1.4 Transform the productivity of Western Sydney through growth and investment	1.4.1 Improve transport links and creates a new services centre and industrial precinct to support the growth of Badgerys Creek Airport	The Plan indicates that the Government will preserve land for complimentary airport-related activity including freight-related uses.
	1.4.2 Develop new strategic employment corridors along transport infrastructure investments that will service Badgerys Creek Airport	The Plan indicates that the Government will: • Facilitate an enterprise corridor enabling a wide range of commercial uses from Leppington to the airport along Bringelly Road. • Facilitate development opportunities to leverage off improved transport connections such as improvements to Elizabeth Drive, the Northern Road and Bringelly Road • Maximise opportunities to increase economic activity and jobs growth in the Bankstown to Liverpool corridor through a flexible regulatory environment. This includes the potential for further economic activity within the Bankstown Airport-Milperra transport gateway
1.5 Enhance capacity at Sydney's gateways and freight networks	1.5.2 Support the productivity of the freight network by identifying buffers around key locations on the freight network	The Plan indicates that the Government will: • Work with local councils to reduce unnecessary barriers to efficient freight movements • Make sure the development assessment processes consider the needs of the freight industry • Work with local councils to identify where buffer measures in local planning controls could help to minimise the impact of development on the efficient functioning of the freight industry

1.7 Grow strategic centres – providing more jobs closer to home	1.7.2 Improve councils' access to data on the demand and supply of homes, office and retail space	The Plan indicates that the Government will work with councils through the Employment Lands Development Program to provide a stronger evidence base for evaluation decisions in relation to proposed and existing industrial land by providing demand and supply data sets on industrial development including freight and logistics
1.8 Enhance linkages to regional NSW	1.8.1 Improve productivity and access to services through improved transport links to regional NSW	The Plan indicates that the Government will preserve a corridor for the Outer Sydney Orbital to improve freight connections from Regional NSW to Sydney Airport and Ports
1.9 Support priority economic sectors	1.9.2 Support key industrial precincts with appropriate planning controls	The Plan indicates that the Government will: • Undertake an analysis of Sydney's stock of industrial zoned land to identify key industrial precincts and use the findings to: - Determine where improved planning controls are required to better protect industrial land from conversion to other uses; - Identify where improved and innovative planning controls will allow for the ongoing evolution of industrial activities to more intensive commercial activities; and update the <i>Industrial Lands Strategic Assessment Checklist</i>. • Assess new proposals to convert existing industrial zoned land to other uses under the <i>Industrial Lands Strategic Assessment Checklist</i>.

The Plan identifies specific priorities for the south-west subregion which includes the Liverpool LGA. The relevant priorities for industrial employment lands in the Liverpool LGA are as follows:

- Investigate the long-term potential to locate a major enterprise corridor between Leppington and Bringelly, linked to the extension of the South West Rail Link
- Protect land to serve Sydney's future transport needs, including intermodal sites and associated corridors
- Recognise and strengthen the subregion's role in Sydney's manufacturing, construction and wholesale/logistics industries by maximising existing employment lands particularly in Fairfield and Liverpool.
- Identify and protect strategically important industrial-zoned land.
- Strengthen the diverse benefits to the economy proposed by Badgerys Creek Airport
- Work with council to investigate potential future uses of land located east of Georges River and north of Newbridge Road
- Plan as a transport gateway focused on the Badgerys Creek Airport site as part of the Western Sydney Employment Area/Badgerys Creek Airport Precinct transformational place

4.0 KEY TRENDS IN INDUSTRIAL BUILDING ACTIVITY

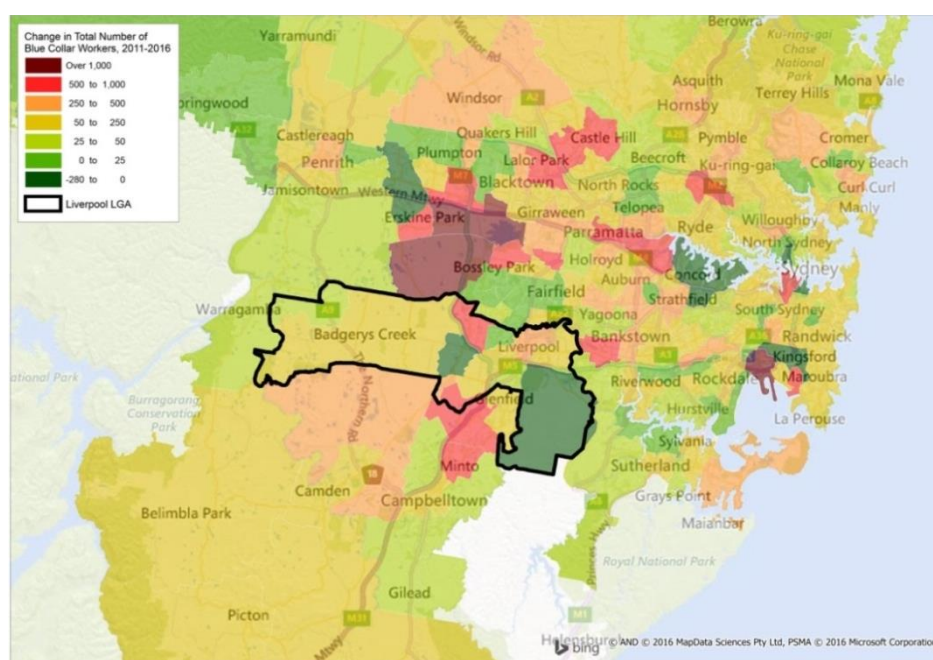
The Sydney industrial market has evolved rapidly over the past decade, not only in terms of location but also built form and development size. This section of the report highlights these trends.

4.1 TRENDS IN BUILDING LOCATION

Map 16 below highlights regions (by SA2) where employment growth in the dominant industrial industries (Manufacturing, Construction, Wholesale Trade and Transport, Postal & Warehousing) has occurred during the five year period of 2011-16. Importantly, the data has been projected out to 2016 (from 2014) and is reliant on demand being met by suitable employment land. In the case where appropriate supply is not available, demand would have shifted elsewhere.

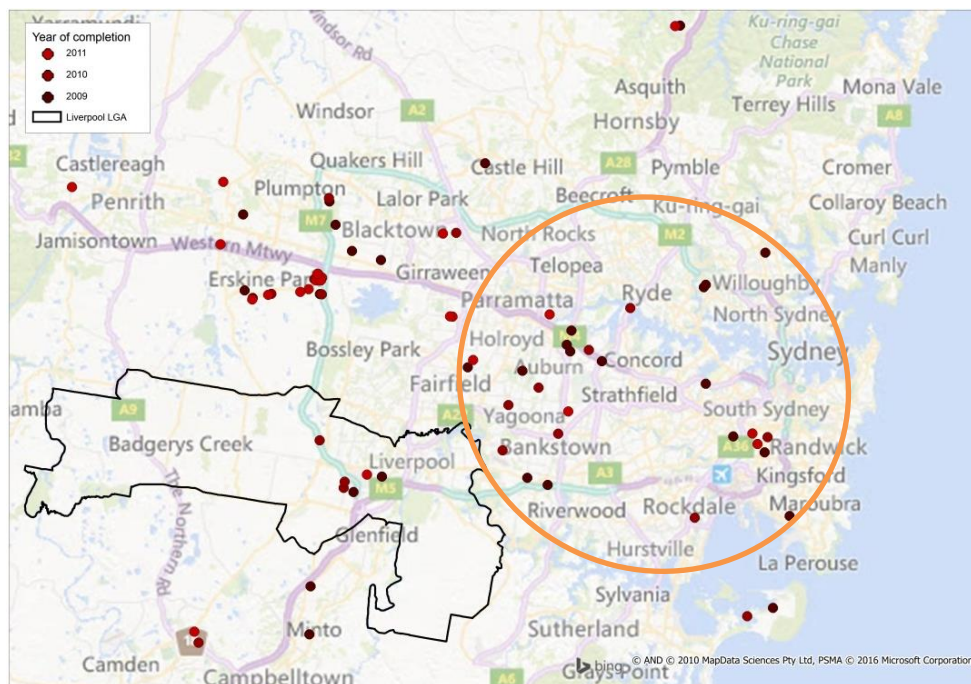
Between 2011 and 2016 precincts to the north of the Liverpool LGA have become the most buoyant in terms of the industrial employment growth (alongside the SA2 region including the Sydney Airport). Furthermore, in recent years the bulk of Sydney's industrial take-up and development activity has occurred in the Blacktown and Penrith LGAs, as highlighted by Map 17 and Map 18 on the following page. Industrial take-up and development has namely been concentrated in selected precincts including Eastern Creek and Erskine Park where there is ease of access to major arterial roads and availability of undeveloped land. The three Maps begin to exemplify the gravitational shift of industrial businesses to Western Sydney. This is illustrated by the lack of development within the inner ring (represented by the orange shape overlayed on Map 17 and Map 18) during the most recent three year period (2014-16) compared with location of development during 2009-11.

Map 16. Industrial Based Employment Gains, 2011-2016



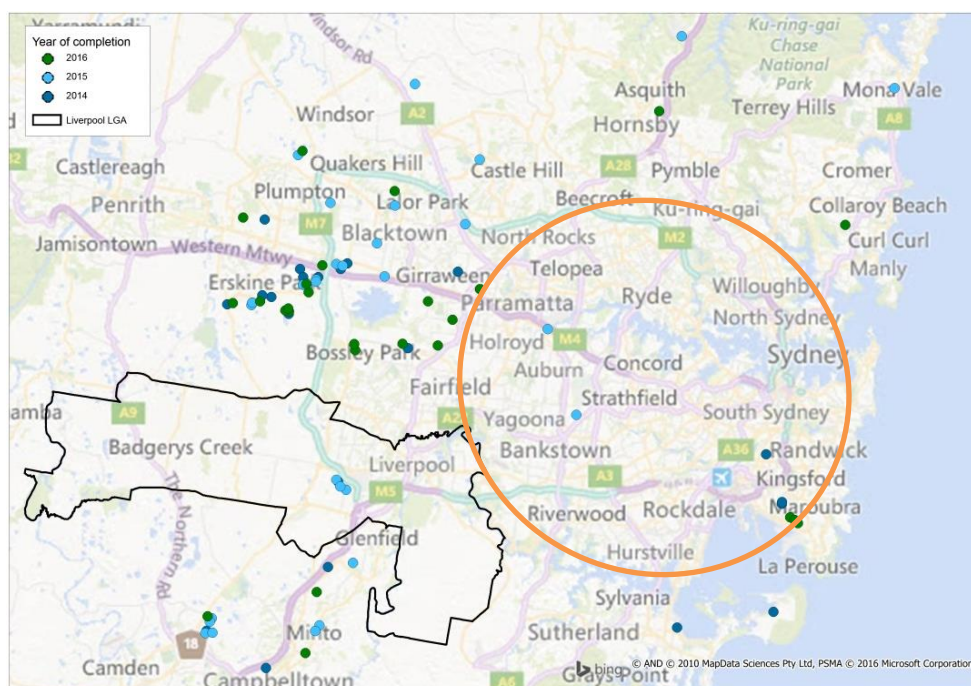
Source: Knight Frank Research, BTS

Map 17. Industrial Development Activity, 2009-2011



The migration of industrial user groups to Sydney's Outer Western suburbs has been an ongoing trend that is continuing to shape the location of new industrial assets. This trend is even more evident over the past three years (2014-16). This is highlighted by the rapid increase in both the number of, and space developed in the Outer West region and the lack of growth across traditional industrial areas of the South and Inner West (Figure 10 and Figure 11).

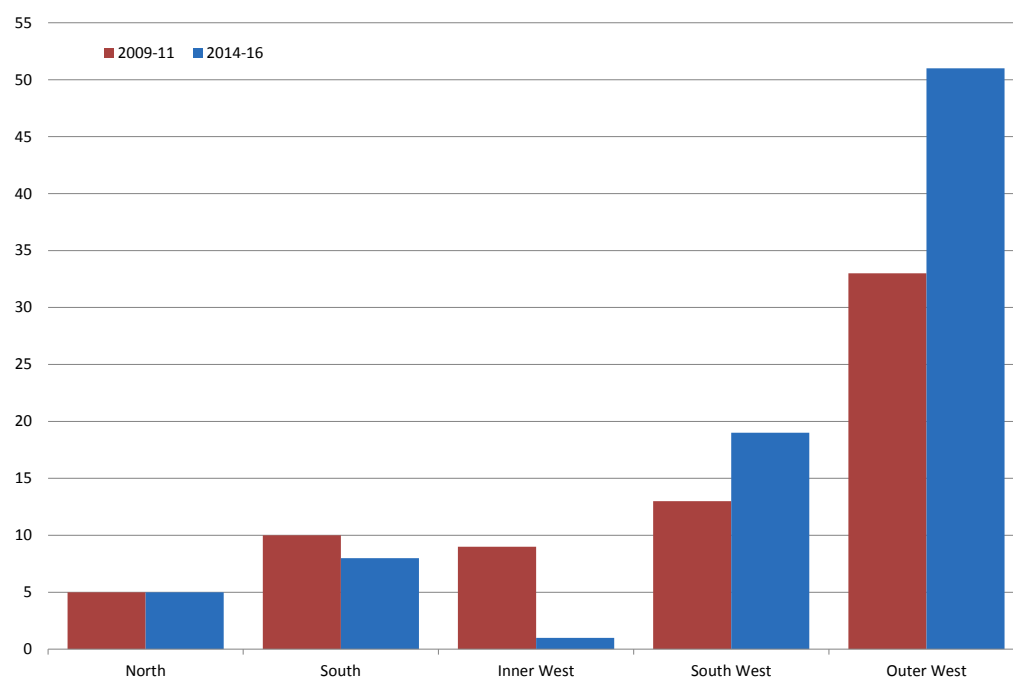
Map 18. Industrial Development Activity, 2014-2016



While the availability of relatively cheaper greenfield land in combination with industrial user groups seeking supply chain efficiencies derived from locations at major transport hubs has driven this pattern, the provision of appropriate land remains a critical issue for users and developers alike. It is important to note for Liverpool City Council that 2012 saw a spike in industrial development across the Liverpool LGA which is not depicted on these maps.

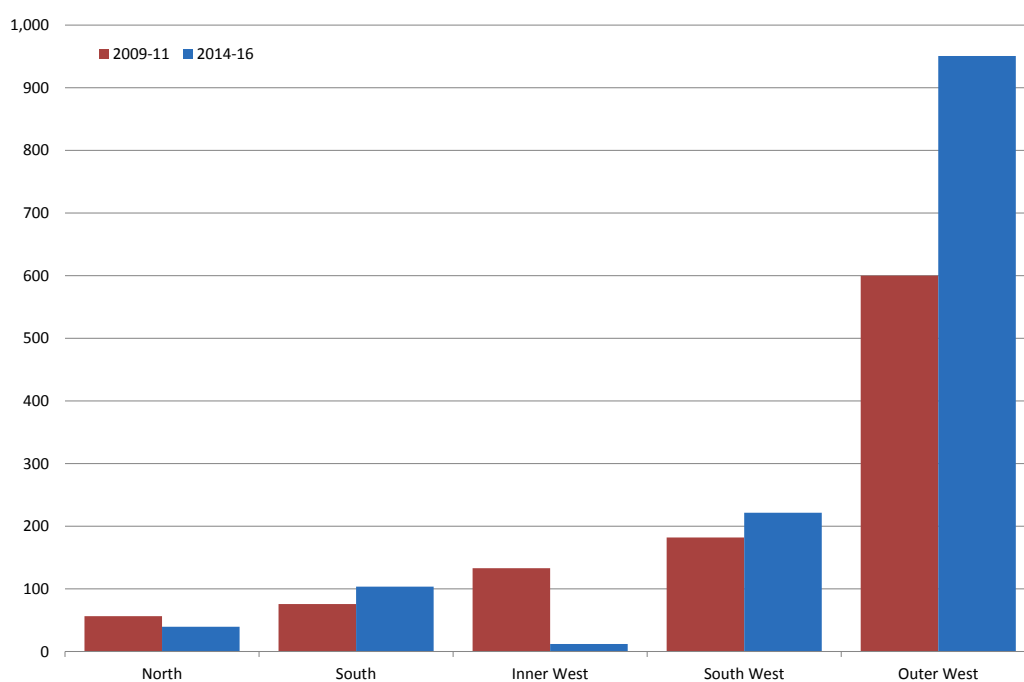
Source: Knight Frank Research

Figure 10. Industrial New Supply, by Region and Number of Developments - 2009-11 vs. 2014-16



Source: Knight Frank Research (*regions are Knight Frank defined regions)

Figure 11. Industrial New Supply, by Region and Total Developed Area (000's m²) - 2009-11 vs. 2014-16



Source: Knight Frank Research (*regions are Knight Frank defined regions)

4.2 TRENDS IN BUILDING TYPE

Using ABS approvals data, we are able to ascertain trends in industrial built-form type. Across the Liverpool LGA, warehouses represented the dominant industrial built form option. In value terms, approximately 85.4% of all industrial approvals in the Liverpool LGA since July 2014 were for warehouses which include storage sheds and typical warehouse and logistic provisions. Alternatively, factories only represented 4.2% of approvals (by value) in the Liverpool LGA over the same period while the remaining 10.4% was in the form of 'other' industrial formats which includes agricultural buildings.

In comparison to the adjacent LGAs of Blacktown and Penrith, Liverpool has a skew towards warehouse construction (77.9% for Blacktown and 63.7% for Penrith). At the same time, approvals for factories have been well below the adjacent LGAs and Greater Sydney (see Table 6). However, we note the majority of these approvals have been in locations in close proximity to major road networks including Prestons and Hoxton Park. This trend ties up with broader industrial market developments.

Table 6. Value of Industrial Approvals by Type, selected LGAs & Greater Sydney, July 2014-March 2016

	Liverpool LGA	Blacktown LGA	Penrith LGA	Greater Sydney
Factories	4.2%	22.0%	7.1%	13.1%
Warehouse	85.4%	77.9%	63.7%	70.7%
Other	10.4%	0.1%	29.2%	16.1%
Total	100.0%	100.0%	100.0%	100.0%

Source: ABS, Knight Frank Research

The dominance of warehouse typologies is indicative of increased transport and logistics activity in the Liverpool LGA given its proximity to major arterial roads. This reaffirms the needs for Liverpool City Council to rezone land in order for larger industrial user groups to locate to the LGA, capturing demand that would otherwise have established in precincts to the north of the Liverpool LGA, including Eastern Creek and Erskine Park where land is available. However, we note demand for existing 'eastern' industrial precincts (i.e. Moorebank, Chipping Norton and Priddle/Scrivener Street -Warwick Farm) remains underpinned by smaller users who service the local population. For these areas, preservation of existing warehousing/employment lands is required in order for jobs to remain in the LGA.

Similarly, the progression of the Moorebank Intermodal Terminal is likely to strengthen demand for warehouse development, particularly in the form of storage (containers) sheds. In addition, a lesser share of factory development across Sydney reconciles with the relocation of domestic manufacturing activity to offshore locations.

Drilling down further, we are able to determine which built forms have been prevalent in particular SA2 regions. Across Liverpool's dominant industrial regions, namely being Prestons, Warwick Farm, Chipping Norton and Moorebank, industrial approvals (by value) since July 2014 have been skewed towards warehousing, representing 91.9% of approvals over the period. The skew was most pronounced within the

Prestons – Lurnea SA2 region due to availability of land and proximity to road networks while there was a larger representation of factory approvals in the Liverpool – Warwick Farm SA2 region.

Table 7. Value of Industrial Approvals by Type, selected Liverpool SA2 Regions, July 2014-March 2016

	Prestons - Lurnea	Liverpool - Warwick Farm	Chipping Norton - Moorebank	Total
Factories	3.4%	32.1%	8.9%	4.1%
Warehouse	94.6%	49.0%	70.5%	91.9%
Other	2.0%	19.0%	20.7%	4.1%
Total	100.0%	100.0%	100.0%	100.0%

Source: ABS, Knight Frank Research

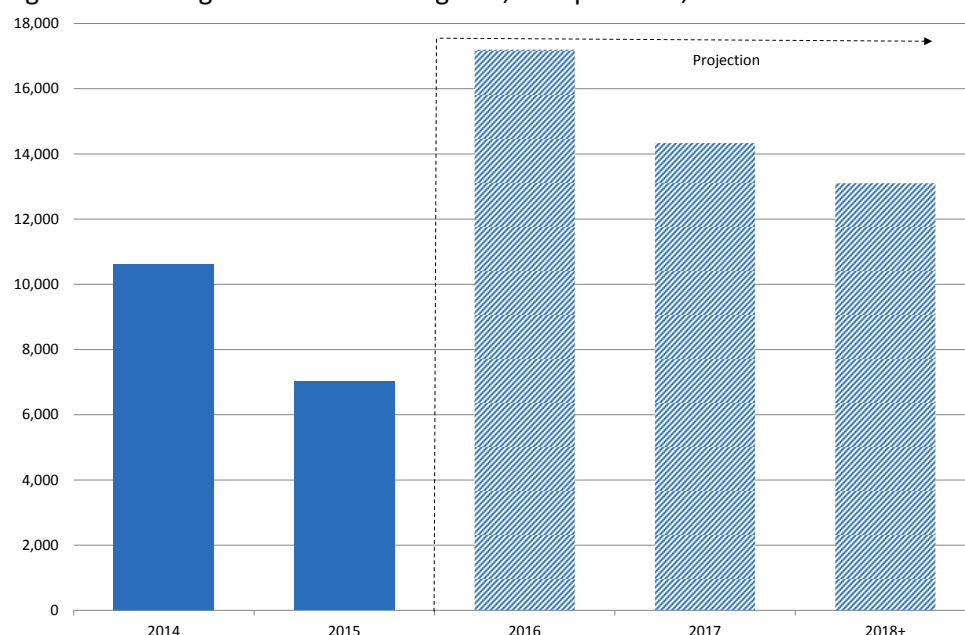
With much of Sydney's industrial growth over the past five years stemming from logistic and transport (particularly 3PL groups) users seeking warehousing space along key road networks, recent industrial approval activity in the Liverpool LGA suggests the area is well placed to capitalise on future demand for industrial space, particularly in areas such as Prestons and Hoxton Park. However, we note demand in inner industrial precincts are expected to remain supported by smaller users, typically occupying less than 1,500m².

4.3 TRENDS IN BUILDING SIZE

Looking at industrial projects which have been constructed over the past two years within Liverpool, the average industrial construction size was 8,820m². Underpinned by the construction of an additional 13,260m² warehouse at the Mainfreight facility at Prestons, the average building size constructed during 2014 was 10,630, considerably above the 7,023m² for 2015.

Looking ahead, the average construction size of industrial facilities within the LGA is expected to increase over the next three years as demand for transport and logistics warehousing space increases, where typically these users occupier larger sheds of 10,000m²+. During 2016, the average industrial building earmarked for construction is set to measure 17,200m², which is largely off the back of Charter Hall's development of 402 Hoxton Park Road, Prestons to accommodate the new East Coast head office for Automotive Holdings Group. Thereafter, average building sizes are expected to remain well above historical levels during 2017 and 2018. There is however a number of developers looking at developing a variety of warehouse sizes, highlighted by Stockland's Coopers Paddock project at Warwick Farm where warehousing space will range from 3,415m² to 23,674m².

Figure 12. Average Industrial Building Size, Liverpool LGA, 2014-2018+



Source: Knight Frank Research

However, we note data is skewed towards larger industrial developments predominantly focused at areas such as Prestons, Hoxton Park and the Stockland site at Warwick Farm where institutions can realise scale and efficiencies. For Liverpool's existing 'eastern' industrial precincts, little development has occurred due to a lack of developable land, the majority of which is surrounded by residential land uses.

5.0 DEMAND OUTLOOK

In line with Knight Frank's May 2016 Liverpool Industrial Employment Lands Study, the outlook for industrial land demand in the Liverpool LGA has been derived from BTS employment projections and employment density ratios for the industries which utilise industrial land. While the previous demand projections were high level by industry type, the projections in this report drill down to a more minute level for manufacturing employment, thereby giving a greater understanding of the types of industrial land that will be in demand over the next 15 years.

5.1 EMPLOYMENT PROJECTIONS

Over the 2016-2031 period, the Liverpool LGA is anticipated to experience jobs growth of 30,885, at which point there are expected to be 107,843 jobs within the Liverpool LGA. In terms of blue collar industries which relate to industrial land demand, jobs growth of 7,432 is anticipated over the same period, majority of which (54%) are expected in Transport, Postal & Warehousing industries. Underpinned by the Intermodal Terminal, Moorebank is set to capture the bulk of these jobs, while Elizabeth Hills (Hoxton Park Airport/Len Waters Estate precinct) is also earmarked for considerable growth in Transport, Postal & Warehousing industries over the 2016-2031 period.

In line with Liverpool's strategic location within Sydney's South West Growth Centre, construction employment is anticipated to grow by 1,279 jobs over the 2016-2031 period. While BTS projections do not provide a sub-sector split, Knight Frank Research anticipates residential building construction and associated sub sectors (electricians etc.) will represent the bulk of these gains while solid growth is also anticipated to stem from construction of Badgerys Creek Airport. Construction employment growth is expected to be relatively evenly spread throughout the LGA, however notable areas include Bringelly, Prestons and Chipping Norton.

Similarly, wholesale trade employment growth is expected to measure 1,677 jobs over the 2016-2031 period, with Knight Frank expecting motor vehicle parts wholesaling, basic material wholesaling and hardware goods wholesaling to represent the largest share of job gains. Notable areas expected to experience growth for this industry include Bringelly, Moorebank (Intermodal Terminal) and Prestons.

Overall, manufacturing employment is forecast to be moderate with growth of 492 jobs over the period (2016-2031). By sub sector, the following observations were made:

- Basic Chemical and Chemical Product Manufacturing, which includes fertilisers, pharmaceutical and medical product manufacturing are anticipated to experience the largest employment growth over the period (+280 jobs).
- Jobs growth of 198 in Furniture and Other Manufacturing.
- Loss of jobs in seven manufacturing sub sectors including Polymer Product and Rubber Product Manufacturing, Pulp, Paper and Converted Paper Product Manufacturing and Fabricated Metal Product Manufacturing.

Of the manufacturing industries expected to experience growth, Chipping Norton, Moorebank (existing industrial lands) and Prestons are expected to capture the majority of future demand. Alternatively, the

largest loss in manufacturing employment is earmarked to occur at Priddle/Scrivener Street (Warwick Farm) as a result of a decline in Pulp, Paper and Converted Paper Product Manufacturing.

5.2 LAND DEMAND PROJECTIONS

To determine the anticipated future demand for industrial lands in the Liverpool LGA, we have applied employment density ratios for the industry sectors which primarily utilise industrial land. As per Knight Frank's previous report, these projections relate to net land demand (or allotment demand) and do not include provision for roads, reserves and buffers. High impact industry uses, and those reliant on heavy vehicle access, will require greater provision for roads, reserves and buffers than lower impact areas such as service industry precincts.

As noted earlier in the report, BTS projections provide a sub sector split for manufacturing industries. These sub sectors have been broken down to determine the likely demand for industrial land in the Liverpool LGA.

In line with Knight Frank's previous report, BTS employment projections imply that there will be a need for 1,176 hectares of industrial land by 2031, an increase of 427 hectares from the 749 developed hectares identified by the 2015 ELDP Report.

Table 8. Industrial Employment and Land Projections

Industry	Total Employment				Emp/ha	Estimated Land Demand				Land Demand (2016-2031)
	2016	2021	2026	2031		2016	2021	2026	2031	
Food Product Manufacturing	1,663	1,666	1,669	1,671	35	48	48	48	48	0
Beverage and Tobacco Product Manufacturing	172	188	209	219	35	5	5	6	6	1
Textile, Leather, Clothing and Footwear Manufacturing	377	364	359	359	35	11	10	10	10	0
Wood Product Manufacturing	451	457	459	455	35	13	13	13	13	0
Pulp, Paper and Converted Paper Product Manufacturing	265	241	222	220	35	8	7	6	6	-1
Printing (including the Reproduction of Recorded Media)	545	533	523	522	40	14	13	13	13	-1
Petroleum and Coal Product Manufacturing	70	84	102	109	25	3	3	4	4	2
Basic Chemical and Chemical Product Manufacturing	689	799	892	970	25	28	32	36	39	11
Polymer Product and Rubber Product Manufacturing	589	584	569	547	25	24	23	23	22	-2
Non-Metallic Mineral Product Manufacturing	454	451	440	425	25	18	18	18	17	-1
Primary Metal and Metal Product Manufacturing	415	433	437	439	25	17	17	17	18	1
Fabricated Metal Product Manufacturing	541	533	519	508	25	22	21	21	20	-1
Transport Equipment Manufacturing	303	296	291	286	35	9	8	8	8	0
Machinery and Equipment Manufacturing	1,911	1,942	1,978	2,009	30	64	65	66	67	3
Furniture and Other Manufacturing	1,631	1,703	1,769	1,829	30	54	57	59	61	7
Construction	4,499	4,887	5,466	5,778	25	180	195	219	231	51
Wholesale Trade	3,946	4,680	5,159	5,623	25	158	187	206	225	67
Transport, Postal and Warehousing	5,206	7,060	8,154	9,190	25	208	282	326	368	159
Total	23,728	26,903	29,215	31,160		880	1,007	1,099	1,176	296
Average Annual Increase		635	462	389			25	18	15	20

Source: Knight Frank Research, BTS

Note: Industrial land projections are based on using the same employment density ratios over the forecast period.

Similar to broader Sydney industrial trends, demand is expected to be most pronounced within the Transport, Postal & Warehousing sector where 159 hectares of industrial land is expected to be required by 2031. Overall, industrial land demand within the manufacturing sector is anticipated to be weak over the 2016-2031 period, however varying greatly by industry sub-sector. By sub-sector, demand is expected to be strongest for Basic Chemical and Chemical Product Manufacturing and Furniture and Other Manufacturing.

Table 9 highlights key the areas and industries which are projected to experience solid employment gains over the 2016-2031 period.

Table 9. Selected Employment Growth Precincts

Precinct	Employment growth (2016-2031)	Key Industries
Moorebank Intermodal Terminal	1,925	Transport, Postal and Warehousing, Wholesale Trade, Petroleum and Coal Product Manufacturing
Bringelly	1,309	Transport, Postal and Warehousing, Wholesale Trade and construction
Elizabeth Hills (Hoxton Park Airport/Len Waters Estate)	605	Transport, Postal and Warehousing
Prestons	668	Transport, Postal and Warehousing, Construction and Basic Chemical and Chemical Product Manufacturing
Chipping Norton	302	Transport, Postal and Warehousing, Wholesale Trade, Basic Chemical and Chemical Product Manufacturing and Construction
Moorebank	575	Furniture and Other Manufacturing, Transport, Postal and Warehousing and Wholesale Trade
Warwick Farm	126	Construction, Transport, Postal and Warehousing

Source: BTS, Knight Frank Research

It is important to note that the Sydney Metropolitan Plan 'A Plan for Growing Sydney' uses Bureau of Transport Statistics, Small Area Employment Forecasts (2014) for their employment targets. Given the land demand forecasts within this report have been derived from the same dataset, the two projections will align. While these targets are ambitious (40,165 additional jobs between 2011 and 2016), in our opinion, these projections can be sufficiently met if appropriate land is rezoned and serviced to accommodate future growth.

6.0 WHAT DOES THIS MEAN FOR EXISTING EMPLOYMENT LAND?

Given the localised nature of current industrial businesses operating in the LGA, the majority of which employ four or less workers, demand within Liverpool's existing industrial precincts is expected to remain solid, especially in the inner industrial areas which cater towards smaller businesses including Chipping Norton, Moorebank and Priddle/Scrivener Street (Warwick Farm). The forecast for strong population growth in the Liverpool LGA and broader South West Sydney region supports this view. However, we also note (as per the Knight Frank May 2016 Liverpool Industrial Employment Lands Study report) industrial demand from larger user groups in the Liverpool LGA is expected to gravitate towards the undeveloped land parcels between Northern Road and the M7 (i.e. Kemps Creek, West Hoxton etc.), land adjacent to the Moorebank Intermodal Terminal, Prestons and Hoxton Park.

In effect, existing industrial land in the LGA is expected to remain tightly held by smaller localised businesses that require warehousing/manufacturing space of 1,500m² or less. However, given the older style nature of current industrial provisions, redevelopment of some precincts is likely to be needed over the coming five to ten years. To facilitate the development, some of the existing employment lands may be better served by higher employing zones such as a B5 (Business development), B6 (Enterprise Corridor) or B7 (Business Park) zone, which offer flexibility in regards to the user types which could be accommodated in the area. At a high level, potential areas which should be investigated further for potential rezoning include:

- **Orange Grove** - The industrial area is largely underutilised and it is evident that the general industrial zoning of the land is not the "highest and best use" for land in this location, particularly given its close proximity to the Liverpool city centre and health cluster. The rezoning of the area to either a B5 (Business development), B6 (Enterprise Corridor) or B7 (Business Park) zone whilst also encouraging the location and retention of viable industrial uses may be appropriate.
- **Priddle/Scrivener Street (Warwick Farm)** – The precinct is not suitable for heavy trucks as the area is also characterised by residential and other competing uses. Given these competing uses, Council may wish to investigate alternative access arrangements. Similarly, Council may wish to consider broadening the subject precinct's zoning/permitted use parameters (to a B5 Business Development, B6 Enterprise Corridor or B7 Business Park zone) to accommodate a larger mix of industries which will progressively evolve over time.
- **Sappho Road (Warwick Farm North)** - Given the known established uses existing within this site, and its close proximity to the Liverpool City Centre and Health cluster Council may wish to consider rezoning the land to either a B5 (Business development), B6 (Enterprise Corridor) B7 (Business Park) zone.
- **The Cross Roads, Casula** - Given the relatively small and isolated nature of the industrial area compared to other areas in the Liverpool LGA and the adjoining B5 Business Development zoning, Council may wish to consider rezoning this land to a B5 (Business development), B6 (Enterprise Corridor) or B7 (Business Park) zone. This will still permit light industrial uses and warehousing and distribution centre uses in close proximity to the M7 Motorway and is likely to result in a reduced impact on the amenity of the adjacent residential and educational establishment uses.
- See section 6.2 for further commentary.

6.1 IMPACTS FROM THE MOOREBANK INTERMODAL TERMINAL

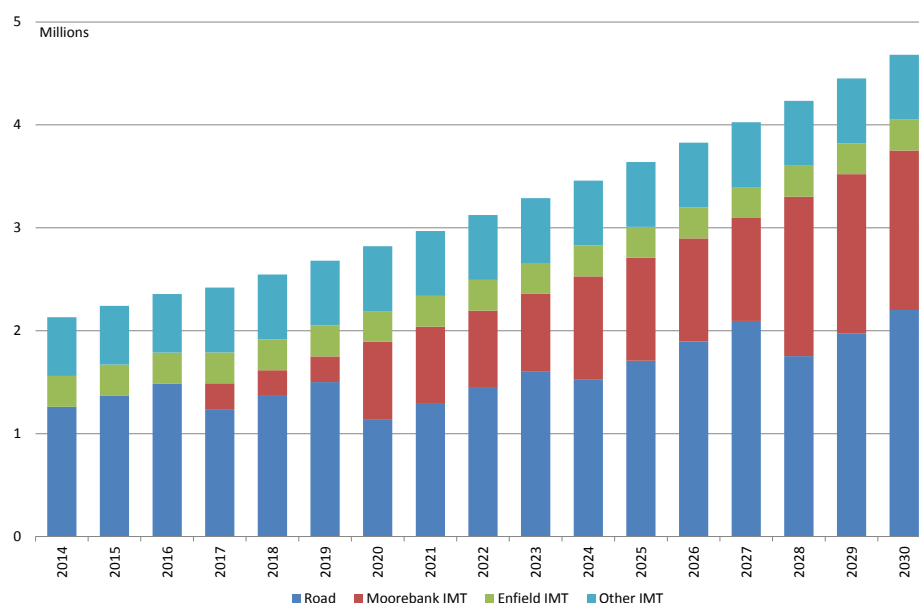
The dominance of Western Sydney as a location for industrial development has been strongly underpinned by large-scale infrastructure investment. Over the past decade, road transport has come to dominate the movement of freight from Port Botany in the absence of additional rail freight capacity.

Unlike a number of other Australian cities, Sydney is predominantly a net importer of containerised freight. Currently, the Sydney container freight market is almost entirely dependent on Port Botany which is one of state's key container port facilities. The use of rail freight is currently only a small proportion of total import and export volumes through Port Botany, with Knight Frank estimating road transport to currently account for around 50-60% of freight movements in and out of Port Botany (see Figure 13).

Overall, the addition of the Moorebank Intermodal Terminal (IMT) will provide an efficient solution for improved movement of container freight between Port Botany and South West Sydney while at the same time represents a significant shift in the transport economics for the broader Sydney region. Current plans suggest the site layout has a sustainable practical capacity of approximately 1.05 million twenty-foot equivalent unit (TEU) p.a. for the IMEX facility, and 0.5 million TEU p.a. for the interstate terminal. The current 'sweet spot' to the north of the Liverpool LGA around the M4 and M7 intersection has the potential to see pent up demand move further south towards the Moorebank IMT. This outcome bodes well for the Liverpool LGA as industrial development could shift away from the M4 and M7 intersection and down the M7. The widening of Northern Road as part of the Western Sydney Infrastructure Plan will help facilitate this movement.

Once the Moorebank IMT is complete and operational, road freight movements through inner western Sydney will become less frequent (see Figure 13). This outcome means that inner western locations will become much less valuable for industrial redevelopment (Kingsgrove, Riverwood, Padstow etc.), while at the same time increasing demand for industrial demand within Liverpool. The range of freight being transported along the road network is set to drop sharply as the Moorebank IMT begins operation, particularly after the completion of stage two.

Figure 13. Projected TEU Movements from Port Botany (2014-2030)



Source: Knight Frank Research

Note: based on TEU volumes growth of 5% per annum

As freight movements (presented as TEUs) more than double at Port Botany by 2030, this outcome will greatly reduce freight traffic along key arterial roads. In the short term, road freight will continue as the main mode for distribution and logistics of containerised goods. In this case, demand for warehouse space and distribution facilities is expected to remain strong in the short to medium term at locations within proximity to the M4/M7 and M5/M7 Sydney Orbital intersections.

With the Moorebank Intermodal precinct expected to include up to 850,000m² of warehouse space, of which will be released to the market on a sustained basis, inbound demand from other areas of Sydney is expected to be solid. Currently, there is approximately 240,000m² of warehousing space being marketed for lease at the Moorebank IMT with anecdotal evidence from agents indicating a considerable pick-up in the level of tenant enquiry for this space. Similarly, feedback from Knight Frank agents suggest tenant enquiry has been solid in other industrial precincts in Liverpool, particularly Prestons and AMP's undeveloped Crossroads Logistics Centre at Casula given their proximity to the Moorebank IMT and the existing road networks of the M5, M7 and the Hume Highway.

6.1.1 LIKELY TENANTS

Unlike the Liverpool LGA's existing employment lands which primarily accommodate smaller localised users, the Moorebank IMT will be attractive for tenants who rely on container movements to and from Port Botany. For these users, such as third party logistics (3PL) operators, by locating adjacent to an IMT (in this case within the warehousing space as part of the Moorebank IMT precinct), operational efficiencies can be achieved given their scale of operations. The motivation is that larger tenants such as 3PL groups will be able to use the adjacent warehousing space within the IMT precinct as the focal point of their operations, while using it as a base for their broader freight movements throughout Sydney and NSW. Given that these groups have tended to gravitate towards Eastern Creek in the past, the addition of these users to the area will generate a greater employment outcome for the Liverpool LGA.

It is important to note that not all businesses who require industrial land will want to be close to an IMT. For businesses which service the local population (automotive repairs etc.), the motivation to locate near an IMT is low as they do not rely on supply chain efficiencies (from Port Botany) to do business. For these users, proximity to residents is vital, so demand for current industrial precincts in Liverpool is anticipated to remain strong.

Overall, the progression of the Moorebank IMT is expected to be positive for the Liverpool LGA as it is likely to result in an influx of businesses who may have not established a presence in the LGA without it. As such, this will result in a net increase in employment, while providing local employment opportunities for local residents.

6.2 STRATEGIC IMPLICATIONS FOR THE FUTURE INDUSTRIAL EMPLOYMENT LANDS IN THE LIVERPOOL LGA

According to BTS, the forecasted increase in industrial employment in the Liverpool LGA by 2031 will be an additional 7,432 jobs (from 2016). Whilst the mix of future of industrial employment is subject to further review, it is important that the Council positions its land use planning response to accommodate this forecasted increase in jobs. This land use planning response is likely to be by way of a combination of both an increase in the amount of land set aside together with importantly ensuring a sufficiently flexible regulatory zoning framework to accommodate changes in industry and market trends in terms of employment types.

Based on the Employment Report noting the suggested limitations, the existing industrial land stock in the Liverpool LGA is considerable and a strategically important employment asset for both the LGA and Western Sydney. It confirms the comparative advantage of Liverpool in a wider regional setting particularly in terms of transport, freight and logistics. The existing land supply however does have a number of practical limits and/or barriers to further development and intensification when accounting for the specific features and attributes of particular precincts.

Noting the above, there is an opportunity for Council to reposition its strategy towards the long term provision of industrial employment land noting the practical limits to the continuing use of certain precincts and the emergence of new areas reflecting the investment in regional infrastructure. The following describes the implications for industrial employment lands in the LGA based on both the strategic drivers and a general commentary on certain key precincts.

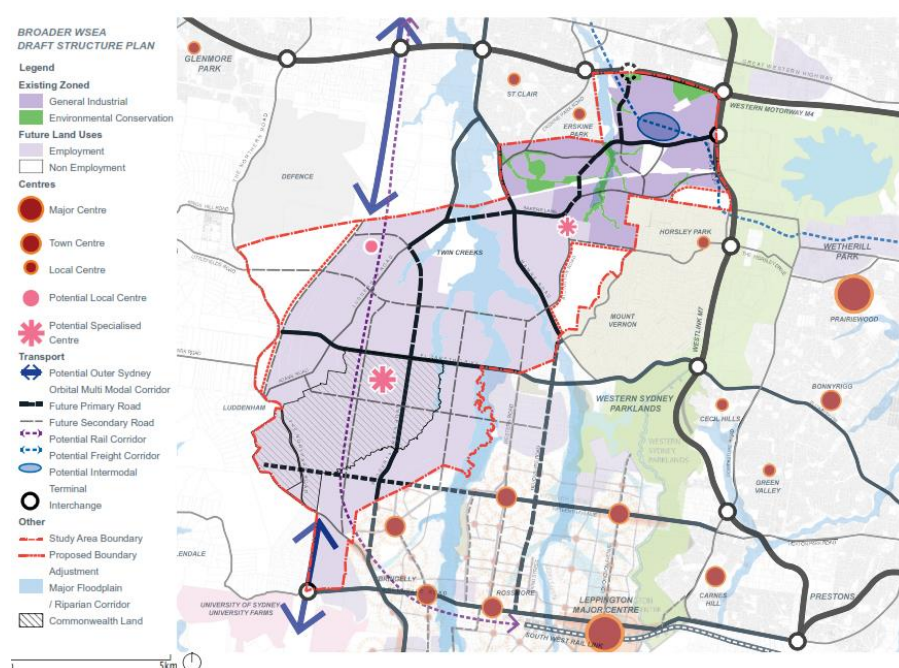
6.2.1 STRATEGIC DRIVERS' COMMENTARY

The relevant key directions and actions from A Plan for Growing Sydney (the Plan) in conjunction with the strategic drivers as previously outlined will result in a number of implications for the existing and future industrial employment lands in the Liverpool LGA. These implications are as follows:

- A significant opportunity to generate new industrial employment areas in the Bringelly Road Enterprise Corridor as identified in A Plan for Growing Sydney alongside the upgrade of Bringelly Road and the Northern Road. This has the potential to both consolidate the role of Prestons at its eastern "bookend" coinciding with the intersection of the M5 and M7 Motorways together with providing a greater level of accessibility to the proposed western most industrial employment areas in and adjacent to Badgerys Creek Airport. This opportunity will significantly contribute to the currently limited stock of undeveloped industrial lands in the LGA. Part of the enterprise corridor falls within the Western Sydney Priority Growth Area which involves the preparation of a Land Use and Infrastructure Strategy by the Department of Planning and Environment in conjunction with Liverpool City Council. The Council should use this opportunity to promote with the State Government to the delivery of additional and importantly serviced industrial land within this enterprise corridor.

- The Plan identifies opportunities to protect and enhance the existing industrial employment lands in the Bankstown to Liverpool Enterprise Corridor including Chipping Norton and Moorebank industrial areas. In order to effectively protect the existing industrial areas, the Plan has identified the use of a flexible regulatory framework environment. Furthermore, as the Bankstown to Liverpool Enterprise Corridor has been identified as an area of significance in servicing the future Western Sydney Airport and the existing Bankstown Airport which are both identified as transport gateways in the Plan, it is important that Council begin engaging in discussions with the Roads and Maritime Authority and lobbying the State Government to upgrade Newbridge Road and associated local roads to provide adequate vehicular access. It is also recommended that Council undertake research to determine a future regulatory framework to protect these industrial areas as the Plan mentions. It is also noted that a priority for Liverpool for the subregion is to investigate potential future uses of land located east of Georges River and north of Newbridge Road.
- The draft Broader Western Sydney Employment Area Structure Plan nominated a large area on the eastern side and a smaller portion on the western side of the Western Sydney Airport in the Liverpool LGA for future employment uses (see Map 19). In October 2015, the State Government announced a broader investigation into opportunities for new jobs and homes around Western Sydney Airport known as the Western Sydney Priority Growth Area. The new Western Sydney Priority Growth Area (illustrated on Map 20) will guide new infrastructure investment and identify new employment areas as well as residential areas in proximity to public transport.

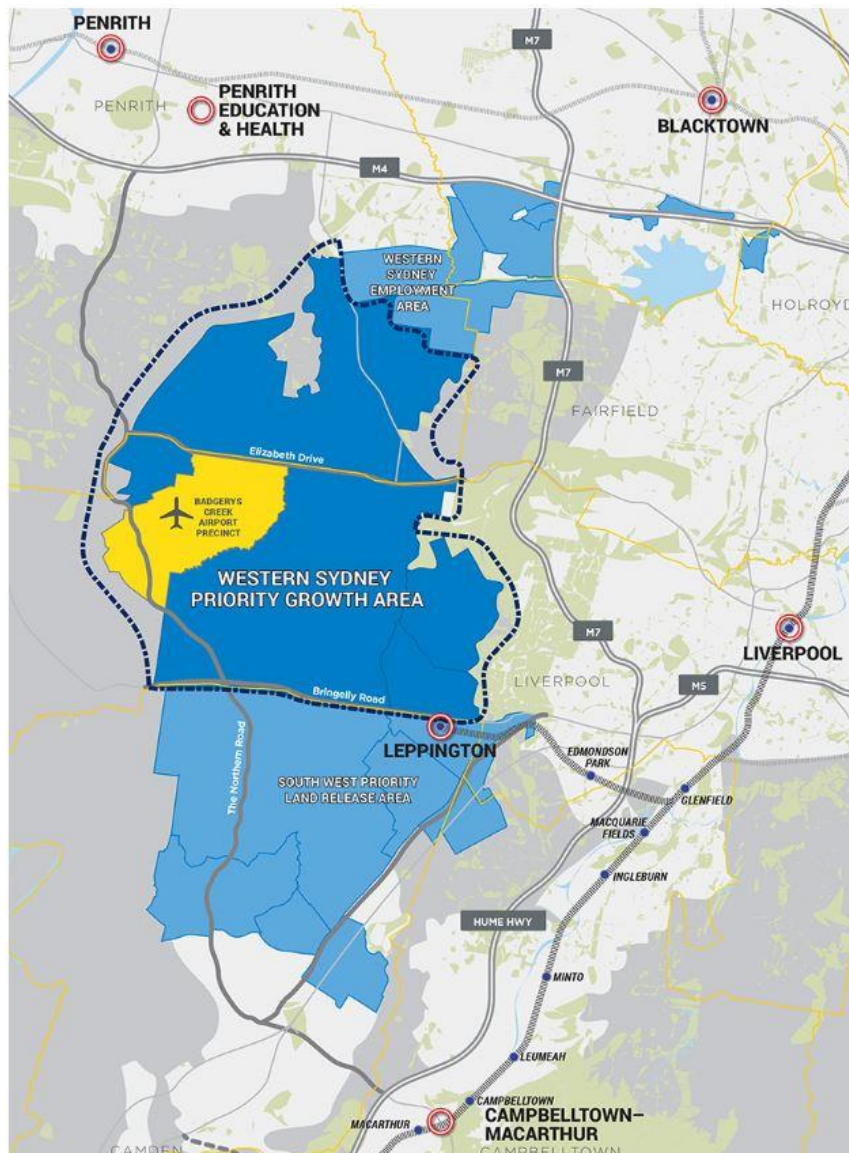
Map 19. The draft Broader Western Sydney Employment Area Structure Plan



Source: Department of Planning and Environment

The location of the originally proposed employment land on either side of the airport land remains a significant strategic location due to its proximity to the future airport, the future M12 Motorway, the Northern Road (soon to be upgraded) and the existing M7 Motorway. It will be important for Council to reinforce its position in the continued provision of the original strategic location of employment land on either side of the Western Sydney Airport land. This follows and aligns with the State Government's preparation of the draft Land Use and Infrastructure Strategy to ensure the provision of future industrial employment land for the LGA.

Map 20. The Western Sydney Priority Growth Area



Source: Department of Planning and Environment

- The Employment Lands Development Program 2015 is a valuable tool in understanding the developed and undeveloped zoned land in the Liverpool LGA by industrial precinct. The Plan seeks for Government to work with councils through the Employment Lands Development Program to provide a stronger evidence base for evaluation decisions in relation to proposed and existing industrial land by providing demand and supply data sets on industrial development including freight and logistics.

While land may be zoned for industrial uses, the review of the existing industrial areas has revealed that certain industrial areas are being utilised for uses better characterised as a broader mix of business uses. In this regard, it is considered that the amount of zoned industrial land in the LGA and stated in the Employment Report does not reflect the actual amount of zoned land used for industrial purposes nor therefore the extent of land available for industry. It is recommended that Council engage with the State Government to discuss how to undertake a more accurate describing of industrial land.

- The review of existing industrial land in the Liverpool LGA undertaken in a previous section of the report has identified the Yarrunga/Prestons, and Moorebank industrial areas as strategically important land due to their significant land area and direct connections to the M7 and M5 Motorways. Similarly, the Len Waters Estate is significant in its direct access and location on the M7 Motorway. It is recommended that Council investigate the introduction of development incentives in these precincts for manufacturing, construction and wholesale/logistics industries to recognise the role of the region in these specific industries and to protect these strategically located industrial areas.

While not as well linked in terms of access to the Motorways, the Chipping Norton industrial estate is a large industrial area in the LGA and is in close proximity to the Bankstown Airport, nominated as a transport gateway in the Plan. Given these significant attributes of the Chipping Norton industrial area, it is recommended that Council undertake investigations into the provision of development incentives for certain industries in order to protect this industrial area.

Such development incentives should take a whole Liverpool LGA industrial precincts approach, including a combination of measures that seek to discourage and or/limit the further locating of uses in inappropriate areas whilst encouraging their locating within alternative precincts within the LGA. In doing so, it is noted of course that there will be a number of existing developments and uses otherwise already approved and established that will continue to operate in all precincts. Those measures should be subject to specific “testing” as to their impact on specific precincts however by way of example, suggest the following be considered:

- Requiring a minimum allotment size for warehousing and distribution that is capable of accommodating large service vehicles and including potentially B-doubles. Noting

the generally smaller size and older, established uses in for example, Chipping Norton, such a requirement is likely by default to encourage such uses to locate in those precincts where purpose built and planned large lot subdivisions can be developed such as Moorebank south and Yarrunga/Prestons.

- A review of the current Section 94 contributions applicable to the Yarrunga/Prestons industrial area which we note is currently based on a per square metre levy. A review of this contribution by way of consideration to a reduction has the potential to be a direct and tangible financial “lever” to influence decisions as to where to locate specific industries. Any such review is of course subject to Council ensuring a balance between the need to provide the necessary supporting infrastructure and the public benefit arising from encouraging greater local employment.
- The potential future extension of the Sydney Metro from Bankstown to Liverpool provides an opportunity to provide significantly improved public transport connections to the Moorebank industrial area. The location of Metro stops in or in close proximity to the industrial area will significantly improve the public transport accessibility for employees and will assist in protecting strategically important industrial zoned land.

The potential for Metro stops provides an opportunity to reposition parts of these industrial precincts to make best use of this heightened accessibility and the principal of intensifying development within a walking distance of such stations. Repositioning the precinct involves identifying the range of highest and best land uses that will most effectively utilise land in and adjacent to the significant public investment in a Metro rail station. By way of comparison, in terms of other industrial employment areas we note the following:

1. The current construction of the Metro station at Norwest Business Park
2. The prior construction of the station portals at Macquarie Park
3. The proposed construction of a Metro station at Sydenham and the recent release by the Department of Planning and Environment of the proposal for the transformation of the older industrial area into a range of “start-up” businesses.

This transit oriented form of development is also consistent with unlocking the investment potential in the new Metro rail as evidenced in the precinct planning being undertaken by State Government in and around the Metro stations already identified on the network.

6.2.2 KEY PRECINCT COMMENTARY

As part of the review of key precincts and in turn the potential repositioning of the industrial areas within the LGA, it is recommended that it is important and strategic to clarify the desired future role and character of the individual precincts noting that each has particular local issues and conditions that will influence the manner and extent of future industrial uses. By way of commentary, we note the following:

1. A number of the precincts are located in areas that historically were urban fringe areas and now are surrounded and adjoin residential areas. Specifically, Chipping Norton and Moorebank (north). The result appears to be a number of practical limits to their operating and prospects of expansion or intensification. Specifically;
 - The mixing of residential and industrial traffic on the local road network
 - The locating of housing on land adjoining industrial and the resulting land use conflict.
 It suggests that the long term locating of new 'heavier' industry, in particular those that maybe characterized as 'offensive or hazardous' maybe more appropriately directed towards areas where they are least constrained by the potential for land use conflict. Specifically, Prestons and Moorebank (south of the M5 Motorway) are not close or adjacent to existing residential areas and provide an opportunity to maintain an appropriate and planned buffer.
2. The principal industrial precincts of Chipping Norton, Moorebank and Prestons comprise a wide mix of uses confirming the appropriateness of a broad industrial zone noting the already mentioned issue of new heavy industrial uses locating in certain precincts. All three have a critical mass in terms of scale that make each an important and strategic contributor to industrial employment.
3. The presence of warehousing and logistics, particularly in Yarrunga/Prestons, Moorebank and Hoxton Park Airport (Len Waters Estate) confirms the strategic location of Liverpool in terms of the M5, M7, future M12 and longer term, the M9 Western Orbital. This is a key comparative advantage for Liverpool and confirms the importance of preserving and consolidating this role for each precinct, noting the practical limits to any expansion of Hoxton Park.
4. The Orange Grove industrial area is largely underutilized and it is evident that the general industrial zoning of the land is not the "highest and best use" for land in this location. Council may wish to consider rezoning the land for higher density employment uses including B5 (Business development), B6 (Enterprise Corridor) or B7 (Business Park) whilst also encouraging the location and retention of viable industrial uses. Given its city edge location, this precinct would be appropriate for higher densities subject to a detailed local master plan.
5. Following our review of the Priddle/Scrivener Street (Warwick Farm) precinct, vehicle and truck access, which is provided through Priddle and Scrivener Street, is arguably not ideally suitable for heavy trucks, while residential and other competing uses to the north supports this view. However,

the area is a large employer within the LGA and in this case the precinct should be preserved for employment uses. Council may wish to consider alternative access arrangements to the precinct and broadening the subject precinct's zoning/permitted use parameters to accommodate a larger mix of industries/employment uses noting:

- i) its locational advantage of being within close proximity to the Liverpool health cluster and the Liverpool CBD suggesting the potential for allied health and research uses such as that now established in, and adjacent to, the Westmead health precinct and Macquarie University.
- ii) confirm and clarify the extent to which any odour buffer associated with the Liverpool Water Treatment Plant is a limit to either specific uses or density of development. Subject to the outcome of this review, it may be appropriate to reconsider the land use zoning of this area by way of say the "unlocking" of the area for a wider range of uses or alternatively, a further limiting.

6.2.3 IMPLICATIONS OF LOCAL PLANNING FRAMEWORK

In considering both the character of the established industrial areas and the emergence of newer more recent areas, and the potential for additional employment areas as a result of new infrastructure, we would recommend that a review be undertaken of the current industrial zoning framework in order to determine whether it reflects a more contemporary and long term positioning of the role and character of precincts within the LGA. Specifically and by way of example:

- a) A review as to whether a wider business zone (including B5 - Business development, B6 - Enterprise Corridor or B7 - Business Park) is more appropriate for the Sappho Road (Warwick Farm North) industrial area.
- b) A review as to whether the best and highest order employment use for Orange Grove is more flexible business and employment lands than general industrial, particularly given its close proximity to the Liverpool CBD.
- c) The further consolidation of the role of Yarrunga/Prestons as a strategic freight, logistics and warehousing hub for Liverpool and Western Sydney.
- d) The potential to encourage the locating of heavier industry that might be characterized as offensive and/or hazardous industries in areas where buffer can be address land use conflicts such Moorebank South and Yarrunga/Prestons.
- e) The potential to allow development incentives in the Moorebank, Yarrunga/Prestons and Chipping Norton industrial areas to stimulate and encourage industrial development and reaffirm the employment generating potential of the LGA in these areas. Incentives for specific land uses which will rely on and will most benefit from the strategic location of the industrial area such as freight, logistics, warehousing and distribution should also be considered.
- f) By reviewing the local planning framework, which considers the rezoning of some industrial zoned land to either a B5 (Business development), B6 (Enterprise Corridor) or B7 (Business Park), the precincts would facilitate greater flexibility in regards to development and user types which could be accommodated.

Any queries please contact the author:

Paul Savitz

Director – Consulting

Knight Frank Australia

Ph: (02) 9036 6811

paul.savitz@au.knightfrank.com

Luke Crawford

Senior Analyst – Consulting

Knight Frank Australia

Ph: (02) 9036 6629

luke.crawford@au.knightfrank.com

Mark Grayson

Director – Town Planning

Knight Frank Australia

Ph: (02) 9036 6687

mark.grayson@au.knightfrank.com

© Knight Frank Australia Pty Ltd 2016 – This report is published for general information only and not to be relied upon in any way. Although high standards have been used in the preparation of the information, analysis, views and projections presented in this report, no responsibility or liability whatsoever can be accepted by Knight Frank Australia Pty Ltd for any loss or damage resultant from any use of, reliance on or reference to the contents of this document. As a general report, this material does not necessarily represent the view of Knight Frank Australia Pty Ltd in relation to particular properties or projects. Reproduction of this report in whole or in part is not allowed without prior written approval of Knight Frank Australia Pty Ltd to the form and content within which it appears.