

5 RETAIL CENTRES

5.1 Introduction

Aside from Chatswood and St Leonards, there are 15 retail centres in Willoughby LGA including one village centre, five small village centres, six neighbourhood centres and a number of other smaller retail centres (these are shown in Figure 1). There is over 200,000 sqm of floorspace across these 15 centres, with only around 10,000 sqm vacant at the time of the floorspace audit. There are four supermarkets within Chatswood (Coles and Aldi in Westfield, Coles in Chatswood Chase and Woolworths at the railway station), however despite the large number of centres within the LGA there are only three supermarkets located in the rest across the LGA (Woolworths at Northbridge, IGA at Castlecrag and Coles at St Leonards station).

The following sections discuss the aggregate demand for retail floorspace by commodity type, key findings from the capacity-demand gap analysis and the main issues relating to public transport accessibility.

The location, current floorspace profile and floorspace projections for each village or smaller village centre are analysed in Appendix 3.

5.2 Retail floorspace demand by commodity type

Retail demand modelling was conducted as part of this study to forecast the required retail floorspace to accommodate expenditure growth in the catchment area of each centre in Willoughby LGA. Detail on the modelling is provided in Appendix 2.

Table 20 provides the aggregate demand for retail floorspace in Willoughby LGA by commodity type. It can be seen that the highest projected growth in demand is for clothing and shoes, followed by restaurants/cafes.

The floorspace demand for household goods, hardware, gardening and electronic goods is projected to grow by around 60,000 sqm from 2014 to 2031. There is also additional demand for around 5,500 sqm floorspace for food and groceries. This demand for food and groceries floorspace would typically be met by supermarkets, and suggests there is scope for perhaps two major supermarkets in future (if not more given what might be unmet existing demand).

TABLE 20. GROWTH IN FLOORSPACE DEMAND IN WILLOUGHBY BY COMMODITY TYPE (2014-2031)

	Additional floorspace (sqm)
Food/Groceries	5,519
Pharmaceutical	10,694
Tobacco/Bottleshops	-1,613
Restaurants/Cafes/Takeaway	32,959
Clothing/Shoes	34,729
Personal	2,748
Furniture/Whitegoods/Manchester/HomeDec	27,127
Electronic	24,601
Hardware/Gardening	9,811
Newsagent/Lotto	-6,468
Total	140,107

Source: SGS Economics and Planning, 2014

The retail analysis also projects there to be demand to 2031 for around 33,000 sqm of retail floorspace in Willoughby's bulky goods precinct. Note this additional demand does not include any latent demand that is not satisfied by the existing bulky goods provision.

Council has identified specific precincts within both Artarmon and the East Chatswood employment lands precincts for bulky goods. There is a Bunnings hardware store and other bulky goods or warehouse retail uses in both of these precincts. Masters sought to rezone a site in the Gore Hill Tech Park, adjacent to the Artarmon employment lands, for their hardware and related retailing but Council did not support the planning proposal.

One major additional hardware store, or two or three bulky goods retailers in a cluster, would be equivalent to around 33,000 sqm. There is capacity for bulky goods of this scale within the zoned precincts in both Artarmon and East Chatswood, and for some of these retailers in the enclosed centres and appropriate fringe sites within Chatswood.

5.3 Capacity at retail centres

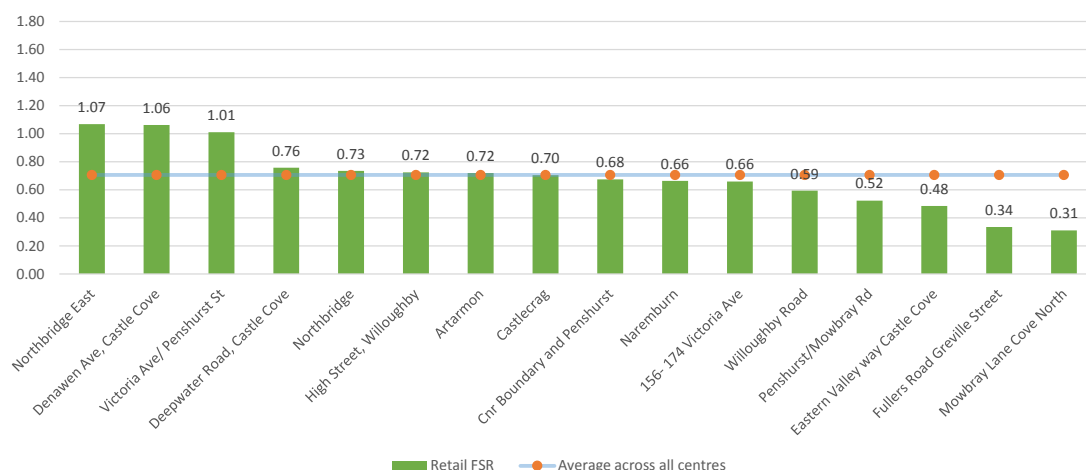
A slightly different approach to calculating capacity for growth in the individual smaller retail centres has been adopted compared to that for Chatswood and St Leonards. Because the zoning in these centres (typically B1 and/or B2) allows for residential, it is not possible to assume that the existing FSR controls represent the benchmark (even if discounted for constraints or inefficiencies) for employment development potential, as residential could be part of the mix within this FSR control. Different theoretical benchmarks therefore need to be established.

Figure 52 and Figure 53 overleaf show the 'actual' FSR for retail and total employment floorspace by 'small' centre in the LGA respectively based on the land audit. The horizontal lines in both charts show the average FSRs for all retail and total employment floorspace in the small centres across the LGA (0.71 and 0.93 respectively). It is notable that half of the centres have a retail FSR within 0.05 of this average of 0.71 (and the full range is a minimum of 0.31 to a maximum of 1.07). There is a slightly greater spread for 'total employment' FSR around the 0.93 average for the LGA.

Within the capacity analysis for these centres, the 0.71 FSR for retail and 0.93 FSR for total employment floorspace averages have been used as benchmarks **except where these figures are already exceeded**. These benchmark figures feel intuitively 'about right'. The reality is that for retail at least the capacity is somewhat limited by the extent of ground floor development that is possible (because retail shops in the smaller centres mostly depend on passing pedestrian trade and street level access). Non retail

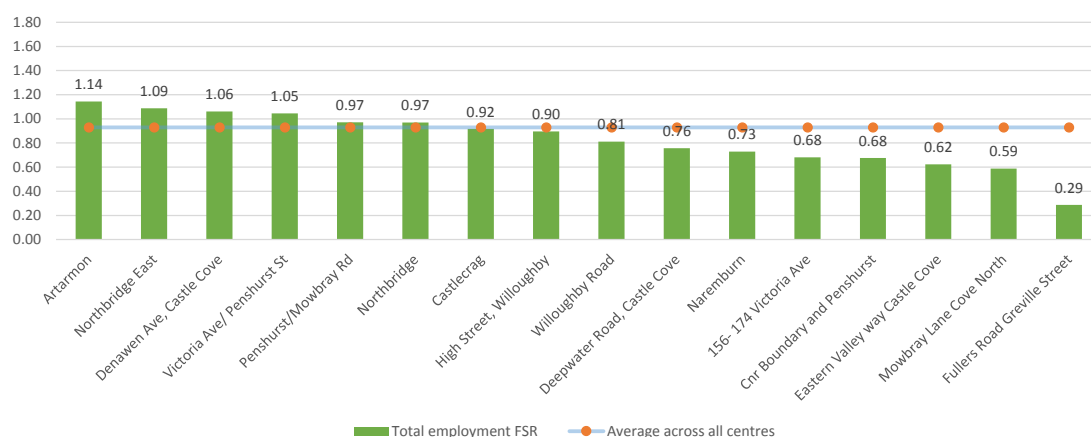
employment floorspace will fill the residual not filled by retail at the ground floor and some of the first floor capacity, where this is not filled by residential. In this analysis 'retail' floorspace is a sub-set of 'total' employment floorspace but the distinction between the categories **is not** hard or clear. The benchmarks are based on the land audit and small centre ground level floorspace in particular can shift between retail and non-retail services easily. The analysis of **both** the retail and total employment demand and capacity is intended to provide two 'checks' and ways to inform the planning directions.

FIGURE 52. 'ACTUAL' RETAIL FSR BY CENTRE IN WILLOUGHBY LGA



Source: SGS Economics and Planning, 2016

FIGURE 53. 'ACTUAL' TOTAL EMPLOYMENT FSR BY CENTRE IN WILLOUGHBY LGA



Source: SGS Economics and Planning, 2016

The basic logic is that centres will have scope to intensify from an employment floorspace perspective beyond that which exists (including vacant floorspace) to the average benchmark which represents a notional physical development 'cap'. Appendix 3 examines each of the larger centres (Villages and Small Villages), and includes the detailed demand and capacity analysis based on the approach described here.

Table 21 summarises the findings of the detailed demand and capacity analysis and highlights those centres where it is considered a review of controls is warranted to make provision for new employment floorspace. The Village and Small Village centres highlighted (Northbridge, Artarmon, Castlecrag, Victoria Ave/ Penshurst St, Penshurst St/Mowbray Rd) should be a particular focus though the highlighted neighbourhood centres are also likely to provide opportunities for 'overflow' or revitalisation and should also be considered.

TABLE 21. GROWTH IN FLOORSPACE DEMAND BY SMALL VILLAGE AND VILLAGE CENTRES IN WILLOUGHBY LGA (2014-2031)

Centre type	Centre	Total land area	Current employment floorspace	Current retail floorspace	Vacant floorspace	Benchmark Retail FS	Benchmark Emp FS	Net retail demand	Net emp. demand	Retail gap /surplus	Total employment gap /surplus	Retail FS gap as share of existing	Total employment FS gap as share of existing	Review of controls required
		A	B	C	D	$E=\max(C, 0.71*A)$	$F=\max(B, 0.93*A)$	G	H	$I=E-G+D-C$	$J=F-H+D-B$	$K=I/B$	$L=J/B$	
Village	Northbridge	42,093	40,805	30,930	1,481	30,930	40,805	4,999	11,152	-3,518	-9,671	-9%	-24%	✓
Small Village	Artarmon	15,605	17,855	11,222	1,952	11,222	17,855	841	3,958	1,111	-2,006		-11%	✓
Small Village	Castlecrag	10,503	9,622	7,403	146	7,457	9,768	1,073	1,973	-872	-1,681	-9%	-17%	✓
Small Village	Penshurst Mowbray, Willoughby	26,266	25,535	13,747	1,485	18,649	25,535	1,179	4,711	5,207	-3,226		-13%	✓
Small Village	Victoria Ave/ Penshurst St Chatswood	26,043	27,228	26,335	2,071	26,335	27,228	1,810	5,538	262	-3,467		-13%	✓
Small Village	Willoughby Road, Willoughby	29,412	23,887	17,455	2,151	20,882	27,353	2,167	5,324	3,411	293			
N'hood	Willoughby Road, Naremburn	5,439	3,960	3,608	163	3,862	5,059	554	974	-137	287	-3%		
N'hood	Mowbray Road Lane Cove North	1,137	668	353	0	808	1,058	107	197	348	193			
N'hood	Cnr Boundary and Penshurst, Roseville	3,095	2,090	2,090	0	2,198	2,879	234	558	-126	231	-6%		✓
N'hood	Deepwater Road, Castle Cove	2,639	1,998	1,998	0	1,998	2,455	104	562	-104	-106	-5%	-5%	
N'hood	High Street, Willoughby	5,313	4,763	3,845	229	3,845	4,942	357	1,156	-127	-748	-3%	-16%	✓
N'hood	Northbridge East	1,696	1,844	1,813	0	1,813	1,844	69	242	-69	-242	-4%	-13%	✓
	Denawen Ave, Castle Cove	987	1,048	1,048	0	1,048	1,048	89	244	-89	-244	-9%	-23%	✓
	Eastern Valley way Middle Cove	3,529	2,199	1,711	0	2,506	3,282	163	551	632	532			
	156- 174 and 216-234 Victoria Ave	4,638	3,157	3,056	199	3,293	4,314	492	697	-57	659	-2%		
	Fullers Road	1,492	429	500	0	1,059	1,387	0	130	559	828			
	Total		167,086	127,114	9,877	137,905	176,809	14,237	37,967	6,431	-18,368	4%	-11%	

Source: SGS Economics and Planning, 2014

Where the benchmark capacity is exceeded by either the identified retail or total employment floorspace demand in any particular centre (while also allowing for vacant floorspace to be consumed), particularly where this is above say 5% of the existing floorspace, the implication is that controls will need to be adjusted to 'quarantine' a share of future floorspace is available for employment. Four basic options are available to Council.

1. **Ensure employment floorspace within current FSR envelope.** This would ensure that within the existing FSR envelope employment floorspace broadly equivalent to the 'gap' is provided in future. Maintaining the current FSR but changing all or part of the centre's zoning to an employment only zone (B3 or B5) or requiring both ground and first (and perhaps other) floors to be employment only in a mixed use development are ways of achieving this.
2. **Increase overall FSR and quarantine a share for employment.** This would involve increasing the overall FSR and requiring ground and some or all the first (and perhaps other) floors to be employment broadly equivalent to the 'gap'.
3. **Expand footprint and quarantine a share for employment.** This would involve expanding the horizontal footprint of the mixed use or local centre zone and requiring ground floor retail as a minimum. This may be particularly relevant where the 'gap' is concentrated in the 'retail floorspace'.
4. **Establish new or expand existing centres.** This would involve establishing a new centre or expanding an existing small centre near to the one where a gap is observed, where the latter centre is highly constrained and options 1, 2 and 3 are not possible.

Options 2 and 3 (and perhaps 4) are most likely to be favoured because this will create the incentives for redevelopment that will provide the required new retail and employment floorspace. Car parking innovations (including using Council's at grade car parks creatively) and built form control reforms will inevitably need to be part of facilitating appropriate development outcomes. It should be noted that any 'gap' figure is indicative and signals the possible need for a planning response. The planning response needs to come with some certainty that a retail and / or employment floorspace increment broadly equivalent to the identified gap will be realised. The retail gap figure in particular probably signals a more urgent requirement for changes to planning controls because it is likely to be conservative (in that latent or unsatisfied demand has not been considered) and because of the need to open up opportunities for new development outside Chatswood.

A more detailed review of each centre will be required to identify which approach is warranted but a quick review of controls such as those applying in the Victoria Ave/Penshurst Rd centre illustrates how the current controls might be constraining development. The B2 local centre zone has an FSR control of 2:1. The employment FSR is already about 1.32, and there is some shop top housing in addition. Though there is a height control of 14 m (allowing perhaps 4 storeys) the FSR control provides no incentive for intensification or redevelopment beyond the current generally 2 storey built form. In addition, to the south of the B2 zone, beginning at Patrick Street on the east side of Penshurst Street for example, there is an R3 medium density zone which only has an FSR of 0.7:1 FSR and an 9 m (2-3 storey) height limit. Again there is insufficient incentive for change. In this case options 2 and 3 above should both be considered to expand the employment floorspace potential and generally revitalise the centre.

5.4 Accessibility

Many of the retail centres discussed in this section are located in areas with poor public transport accessibility. Whilst bus services operate along major road corridors adjacent to these locations, they often do not provide adequate accessibility in terms of coverage or frequency.

Willoughby City Council has recognised this and operates a number of shuttle bus services known as the Loop.

The Loop is a free bus service providing transport to key destinations across the local government area of Willoughby. The Loop runs from 10.15am to 3.30pm, Monday to Friday, servicing a different area of Willoughby each day.

- Mondays and Tuesdays: Castle Cove to Chatswood every 45 minutes
- Thursdays: Castle Cove to Northbridge every 45 minutes
- Wednesdays and Fridays: Chatswood to Northbridge every 45 minutes

Passengers can jump on the bus anywhere along the route indicated on the map, by just waiting at an existing bus stop, or picking a spot where the bus can safely and legally stop and flagging it down. The bus is unable to pick up or drop off passengers in “no stopping” zones. Bicycles can be carried on bike racks at the rear of the bus. The trial service aims to help residents access the services offered throughout the suburbs of Willoughby and reduce the use of private vehicles.

Willoughby City Council also runs the Artarmon Loop shuttle bus which runs daily from St Leonards Station through the Artarmon industrial area. The Artarmon Loop runs every 10 minutes during peak times (Route A) and every 30 minutes during off peak periods from 6am to 7pm, Monday to Friday. The service incorporates Artarmon Station, Artarmon shops and the Royal North Shore Hospital (Route B) between 10am and 2.30pm, stopping at these locations every 30 minutes.

These shuttle services may be increased in frequency, time of operation and direction of travel around the loop to improve accessibility, however this would require appropriate levels of demand to justify the cost. With likely changes to the local route bus services resulting from the Sydney Metro, the location and need for these loop services should be reviewed at the appropriate time.

The results of the business survey (home, industrial and local) conducted by Willoughby City Council are contained in Appendix 6. The survey highlighted that for businesses located within the LGA, parking is a major constraint or issue, and confirms that generally accessibility and access to services and infrastructure such as the National Broadband Network (NBN) are also considered to be key issues. The businesses surveyed range in size, however those that responded were primarily smaller businesses with five or fewer employees. There was no consistent trend in terms of the length of time that businesses have been located within Willoughby LGA. For businesses surveyed, outside of Willoughby, the Sydney CBD was the major competitor location.

Consultation with real estate agents confirmed that within the majority of these centres real or perceived parking constraints are considered a major issue.

5.5 Summary of findings

Across the LGA there is considered to be a gap in the provision of supermarket floorspace with sufficient demand apparent for probably two supermarkets in future. There is demand for 5,500 sqm of additional floorspace for food/groceries to 2031, the majority of which could be satisfied through the provision of full-line supermarket floorspace. It should be noted that this relates to future floorspace demand only. The analysis suggests that there is unfulfilled existing demand for supermarket floorspace in the LGA. If the proposed East Chatswood supermarket proceeds this would ‘soak up’ a partial share of the unmet and future demand for supermarket floorspace.

It should be noted that Chatswood contains four of the seven supermarkets located within the LGA (Coles and Aldi in Westfield, Coles in Chatswood Chase and Woolworths at the railway station). This represents a concentration of one type of retailing activity and highlights how the centre plays local and convenience roles alongside its subregional and higher order retailing role. Facilitating local retailing (and associated residential development) outside Chatswood, in other centres in the LGA, could partially address the growing congestion in Chatswood while also reducing the competition for sites between uses in the centre.

The retail analysis also found that there is demand to 2031 for around 6,400 sqm retail floorspace in neighbourhood centres across Willoughby and 33,000 sqm bulky good retail floorspace. One major additional hardware store, and two or three bulky goods retailers in a cluster, would be equivalent to around 33,000 sqm. There is capacity for bulky goods of this scale within the zoned precincts in both Artarmon and East Chatswood, and for some of these retailers in the enclosed centres and appropriate fringe sites within Chatswood.

The detailed demand and capacity analysis highlights those centres where it is considered a review of controls is warranted to make provision for new employment floorspace. The larger Village and Small Village centres at Northbridge, Artarmon, Castlecrag, Victoria Ave/ Penshurst St, Penshurst St/Mowbray Rd should be a particular focus though a number of neighbourhood centres are also likely to provide opportunities for 'overflow' or revitalisation and these should also be considered.

6 INDUSTRIAL PRECINCTS

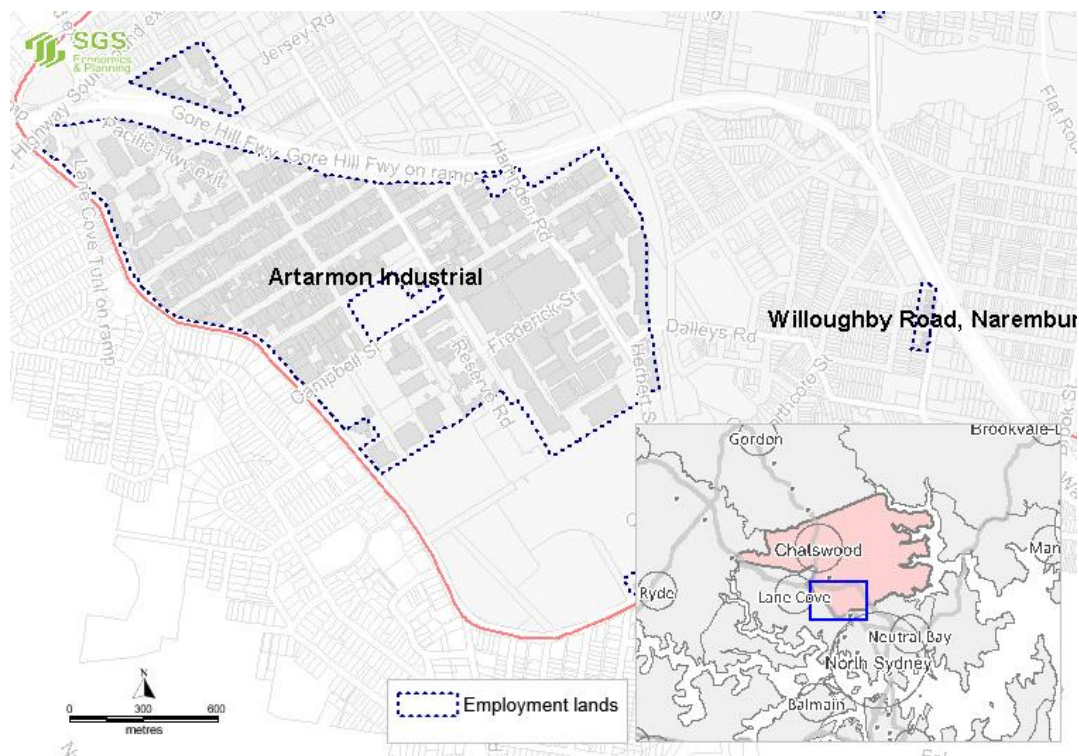
This section will assess the three industrial precincts in Willoughby LGA in terms of location and zoning, strategic nature, employment profile, current market and floorspace profile and employment and floorspace projections and capacity to accommodate these. This is followed by preliminary recommendations on the strategic land use directions.

6.1 Artarmon industrial precinct

Location and zoning

The Artarmon industrial precinct is located in the south west of Willoughby LGA, to the south of Artarmon railway station and retail centre, and north of St Leonards (refer to Figure 54).

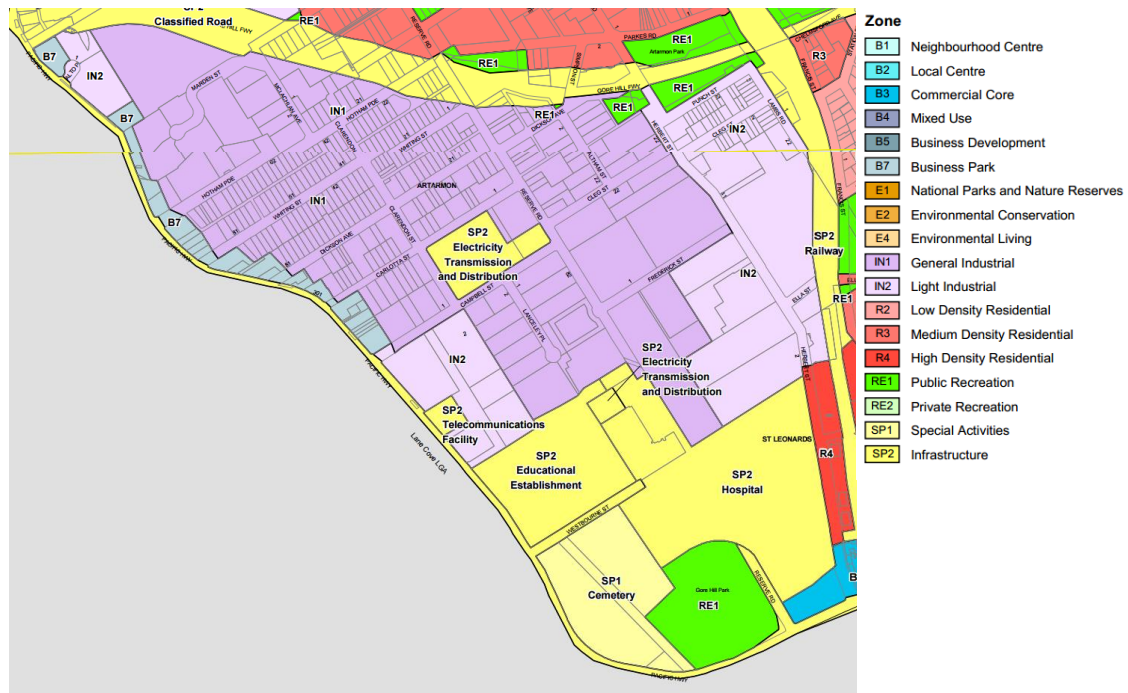
FIGURE 54. LOCATION OF ARTARMON INDUSTRIAL PRECINCT



The Artarmon industrial precinct is 63 hectares and contains local industry and light manufacturing uses. Artarmon is located on the lower north shore location and is relatively close to the Sydney CBD and to major activity centres such as North Sydney, Chatswood and Ryde. The industrial area is located on the north edge of St Leonards, which is evolving as a location for high rise residential and office/employment activities. The southern parts of the industrial area are within walking distance of St Leonards Station.

The Artarmon industrial precinct is primarily zoned IN1 General Industrial and is bounded by IN2 Light Industrial zoning (refer to Figure 55). The industrial zones provide for a wide range of industrial and warehouse land uses, as well as convenience uses and ancillary office uses which support the function of industrial uses located within the precinct.

FIGURE 55. ARTARMON INDUSTRIAL PRECINCT ZONING MAP



Source: Willoughby City Council, 2012

A planning proposal is currently being assessed for the Gore Hill Technology Park which is currently zoned IN2 and is located within the Artarmon industrial precinct along the Pacific Highway. Willoughby Council has previously resolved to support the planning proposal which proposes to rezone the two sites from IN2 to B7 and increase the FSR from 1.5:1 to 3.5:1. Council are currently assessing a revised planning proposal seeking a higher FSR for one of the lots (lot 6) to 4.52:1. This site was identified as vacant within the land audit. There is potential for the capacity of the precinct to increase if the planning proposal is approved and the FSR control increases.

The Artarmon industrial precinct has an FSR control of 1:1, however under Clause 4.4 of the Willoughby LEP, the maximum FSR a building on land identified as “Area 5” or “Area 6” on the Floor Space Ratio Map (refer to Figure 56) may exceed 1:1 if:

- the site area is greater than 1,000 sqm, and
- the floor space ratio will not exceed 1.5:1, and
- if the building is on land in Area 6—the site coverage will not exceed 45 percent of the site area.

For the land zoned B7 Business Park, along the Pacific Highway, the FSR may exceed 1:1 if:

- the site area is greater than 1,000 sqm, and
- the floor space ratio will not exceed 2.5:1.

A detailed map of a portion of the City of Vancouver, British Columbia. The map shows several residential areas outlined in black and labeled: AREA 5, AREA 6, AREA 7, and AREA 8. Other labels include AREA 1, AREA 2, AREA 3, AREA 4, AREA 9, AREA 10, AREA 11, AREA 12, AREA 13, AREA 14, AREA 15, AREA 16, AREA 17, AREA 18, AREA 19, AREA 20, AREA 21, AREA 22, AREA 23, AREA 24, AREA 25, AREA 26, AREA 27, AREA 28, AREA 29, AREA 30, AREA 31, AREA 32, AREA 33, AREA 34, AREA 35, AREA 36, AREA 37, AREA 38, AREA 39, AREA 40, AREA 41, AREA 42, AREA 43, AREA 44, AREA 45, AREA 46, AREA 47, AREA 48, AREA 49, AREA 50, AREA 51, AREA 52, AREA 53, AREA 54, AREA 55, AREA 56, AREA 57, AREA 58, AREA 59, AREA 60, AREA 61, AREA 62, AREA 63, AREA 64, AREA 65, AREA 66, AREA 67, AREA 68, AREA 69, AREA 70, AREA 71, AREA 72, AREA 73, AREA 74, AREA 75, AREA 76, AREA 77, AREA 78, AREA 79, AREA 80, AREA 81, AREA 82, AREA 83, AREA 84, AREA 85, AREA 86, AREA 87, AREA 88, AREA 89, AREA 90, AREA 91, AREA 92, AREA 93, AREA 94, AREA 95, AREA 96, AREA 97, AREA 98, AREA 99, AREA 100. Streets shown include GORE HILL Fwy, PARKER ST, ARTHUR BLVD, CLUG ST, PINEVIEW ST, LINDEN ST, VANESSA ST, OAKWOOD RD, CARLETON ST, SHELLEY ST, VANCE ST, PACIFIC HWY, HERRING ST, and ST LEONARDS. Parks shown include Gore Hill Park and Armon Park. The map also shows various other features like schools, libraries, and community centers. The map is color-coded by area, with different colors representing different neighborhoods or districts. The map is oriented with North at the top. The map is a vector graphic, so it can be scaled without losing quality. The map is a public domain resource, so it can be used freely for informational purposes. The map is a useful tool for understanding the geography and infrastructure of the City of Vancouver.

A	0.25
B	0.4
C	0.45
D	0.5
F	0.6
G	0.65
H	0.7
L	0.9
N	1
O	1.1
Q	1.3

R	1.4
S1	1.5
S2	1.7
T1	2
T2	2.2
U1	2.5
U2	2.6
U3	2.7
V1	3
V2	3.3

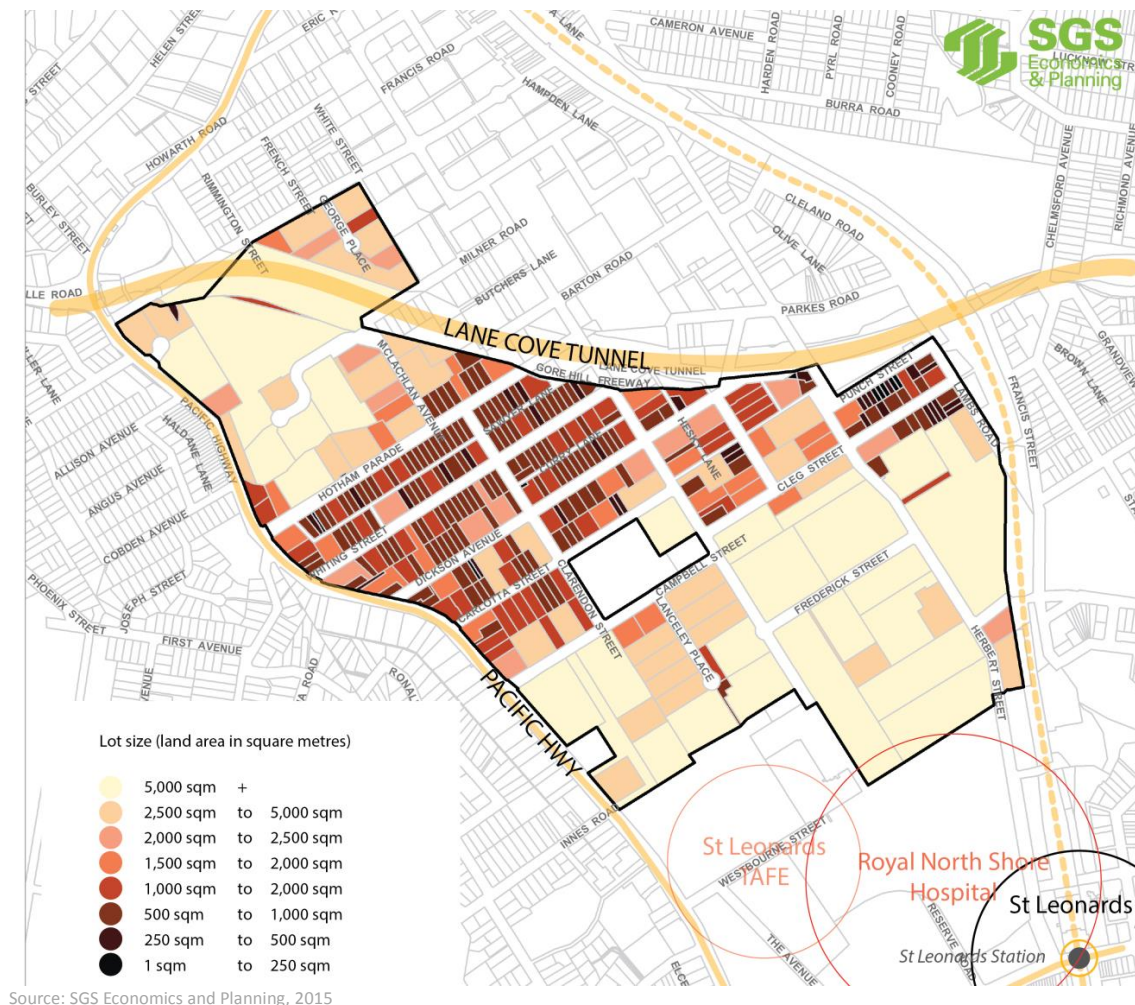
Y	4.5
Z1	5
Z2	5.5
AA	6
AB	7
AC	8

Area 1	Refer CI 4.4A
Area 2	Refer CI 4.4A
Area 3	Refer CI 4.4A
Area 4	Refer CI 4.4A
Area 5	Refer CI 4.4A
Area 6	Refer CI 4.4A
Area 7	Refer CI 4.4A

Area 8	Refer CI 4.4A
Area 9	Refer CI 4.4A
Area 10	Refer CI 4.4A
Area 11	Refer CI 4.4A
Area 12	Refer CI 4.4A
Area 13	Refer CI 4.4A
Area 14	Refer CI 4.4A



FIGURE 57. DISTRIBUTION OF LOTS IN ARTARMON



Strategic context

There are a number of advantages and disadvantages associated with the location of the Artarmon industrial precinct which have been identified by SGS.

The advantages of the location of the Artarmon industrial precinct include:

- The area is one of the few major concentrations of industry on the inner north shore. As a result it has strategic value in terms of retaining the opportunity for those types of businesses that require a location within an industrial zone.
- The industrial area is located on the north edge of the St Leonards activity centre, which is a growing activity centre that is evolving as a location for high rise residential and office / employment activities. The southern parts of the industrial area are within walking distance of St Leonards Station.
- The northern parts of the industrial area are within an 800 metre walking distance of the Artarmon local shopping centre and railway station to the north. However, the M2 Motorway provides an effective barrier in that direction.
- At the intersection of the Pacific Highway and the M2 Motorway, the precinct has excellent access to the metropolitan arterial road network, both in a north-south as well as an east-west direction, including access to Port Botany and Sydney airport. This accessibility was greatly enhanced by the construction of the Lane Cove Tunnel.

- The industrial area is well buffered from sensitive residential and other uses in most directions and does not have interface issues. The Pacific Highway to the west, M2 Motorway to the north and railway line to the east provide effective long term buffers to sensitive uses and clearly define the area in those directions. The George Place area on the north side of the Freeway is an exception. It is an isolated pocket of industrial land that is located in an otherwise residential precinct.
- There appear to be synergies between the industrial zone and the hospital precinct. Close to Royal North Shore Hospital there are several of medical industry related manufacturers; including one of the precincts largest manufactures Stryker (7,500 sqm).

The disadvantages associated with the location of the Artarmon industrial precinct include:

- Artarmon predominantly consists of smaller sized sites, less than 2,500 sqm. If businesses grow beyond these requirements, they generally relocate, often to Lane Cove. There are also fewer opportunities for purpose built industrial space, which deters larger corporations, who tend to move to Macquarie Park or Lane Cove.
- Some stock is outdated for modern businesses, and with fragmented ownership redevelopment can be challenging, but this also provides opportunities for business start-ups.
- Given lot sizes in the central part of the precinct, business expansion may require the purchase of the next door unit or site, which could lead to two entrances, two offices etc., creating unnecessary dead space.

The Artarmon industrial precinct is a significant industrial precinct as it is one of the few major concentrations of industrial land within the subregion.

The area is one of the few major concentrations of industry in the north shore. As a result it has strategic value in terms of retaining the opportunity for those types of businesses that require a location within an industrial zone.

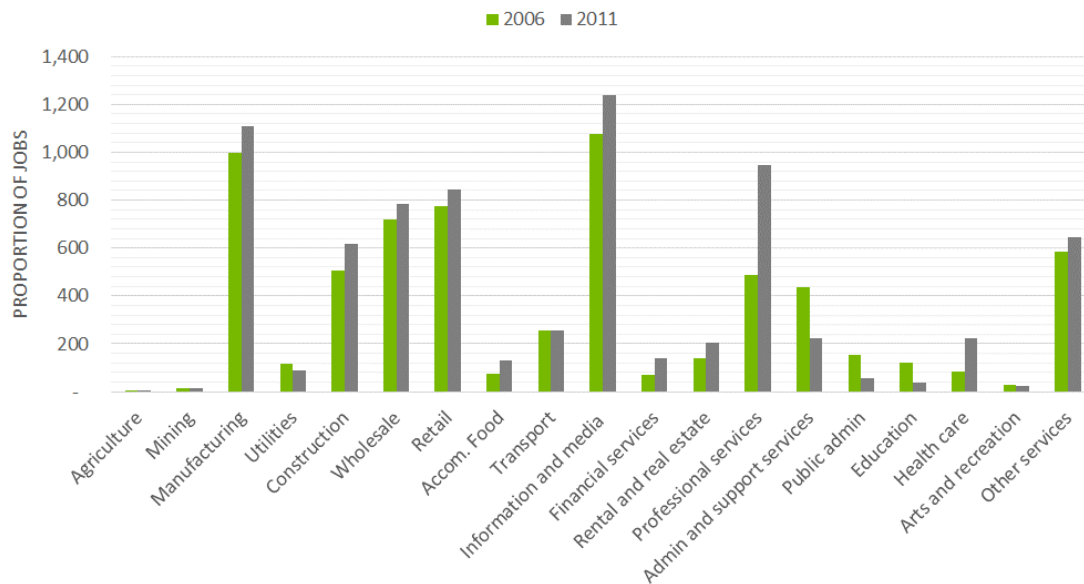
The locational advantages discussed above highlight the significance of the Artarmon industrial precinct, in terms of its size and location. The precinct plays a subregional role and attracts strategic industries which are driven by a range of factors such as metropolitan wide freight movements, access to major transport corridors, investment climate, and alignment of competitive advantages for these uses with demand elsewhere in the economy. It is important to protect enough employment lands to accommodate future growth or change within the economy, particularly in strategic locations. The precinct also plays a local role and is important due to the scarcity of employment lands across the lower north shore of Sydney.

Employment profile

The precinct contains a wide variety of industries of employment and has been experiencing growth in a number of main industries, including manufacturing, construction and wholesale.

In 2011, the Artarmon industrial precinct (including Gore Hill) contained 7,800 jobs, up from 6,800 jobs in 2006. The industrial precinct contains a wide variety of industries including information and media, manufacturing, professional services, retail and wholesale (refer to Figure 58).

FIGURE 58. ARTARMON INDUSTRIAL PRECINCT INDUSTRY OF EMPLOYMENT, 2006-2011



Source: raw data source from Bureau of Transport Statistics (2006 and 2011) Journey to Work data

Market assessment

There is strong demand for industrial properties within Willoughby LGA which is reflected by high net face rents

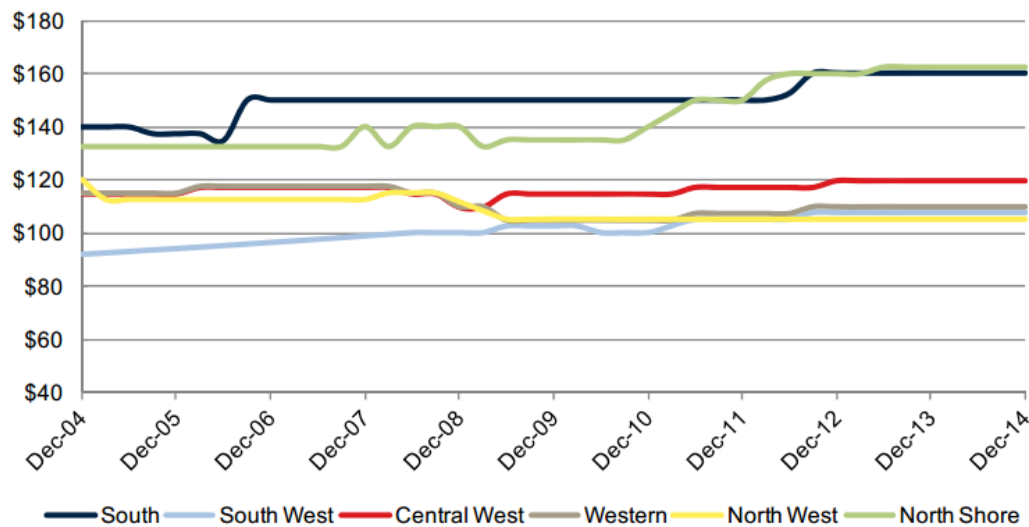
Both the leasing and sales markets in Willoughby LGA are performing strongly, particularly in St Leonards and Artarmon, which are achieving high rates per sqm. Demand is also being driven by businesses being pushed progressively out of south Sydney (Alexandria, Beaconsfield) due to the redevelopment of that area.

The desire to locate in industrial areas in Willoughby LGA is driven by proximity to train stations for staff and proximity to the CBD for businesses with small distribution channels.

Net face rents for industrial precincts located on the north shore of Sydney are equivalent to the inner city industrial precincts which are facing significant pressure for rezoning to residential development. The rents for the north shore are also significantly higher than other precincts within Sydney (refer to Figure 59), particularly in outer areas of Sydney where there is significantly more industrial land available.

According to consultation with real estate agents, rents in industrial areas in Willoughby range between \$185 – 190 per sqm for A grade stock, and down to \$135 for C grade stock. Rents for A grade industrial floorspace in Artarmon can reach up to \$200 per sqm, plus outgoings.

FIGURE 59. SYDNEY INDUSTRIAL NET FACE RENTS (\$/SQM), 2004-2014



Source: Savills, 2014

Note the precincts include the following industrial areas:

- South Sydney Botany, Mascot, Alexandria, Rosebery, Matraville
- South West Sydney Moorebank, Prestons, Chipping Norton, Liverpool, Revesby, Kingsgrove
- Outer South West Sydney Ingleburn, Minto, Smeaton Grange, Campbelltown
- Central West Sydney Chullora, Homebush, Rydalmere, Silverwater, Granville, Auburn
- Western Sydney Eastern Creek, Erskine Park, Arndell Park, Wetherill Park, Smithfield, Yennora, Girraween
- North West Sydney Seven Hills, Kings Park, Blacktown, Baulkham Hills
- North Shore Artarmon, Lane Cove, St Leonards

However this is also due to significantly constrained supply

Supply of industrial land within Willoughby LGA, as well as the north shore and inner city regions of Sydney more broadly, is constrained. In general, the industrial property market is experiencing a push westwards, into more affordable industrial lands in Western Sydney.

The Artarmon industrial precinct continues to play a local, subregional and strategic role.

There are limited alternative industrial areas in the region, and none of them play as significant role as Artarmon, in part because they do not offer the same locational benefits for a range of industries. This is reflected in rents which are on a par with the Alexandria / South Sydney area and the highest for industrial land anywhere in metropolitan Sydney.

Artarmon plays a key role in the Lower North Shore context, hosting local service industry (e.g. auto repairs, domestic storage etc.) as well as hosting strategic industry servicing the sub-regional population (e.g. postal distribution) or other businesses and development in the Lower North Shore strategic centres (e.g. St Leonards, Chatswood, North Sydney).

It is important to preserve a role for the industrial areas in this regard. This includes for example businesses critical to the construction industry, such as concrete batching plants.

Given the range of important roles it plays and the severe lack of alternative industrial precincts in the region, the Artarmon industrial precinct should be considered critical to the area.

Current floorspace profile

The Artarmon industrial precinct contains a number of significant concentrations of industrial and commercial uses including freight and logistics, integrated office/warehouse and local service industrial uses with a range of employment industries located throughout the precinct.

The Artarmon industrial precinct contains 63 hectares of land which accommodates 896,000 sqm of floorspace (refer to Table 22).

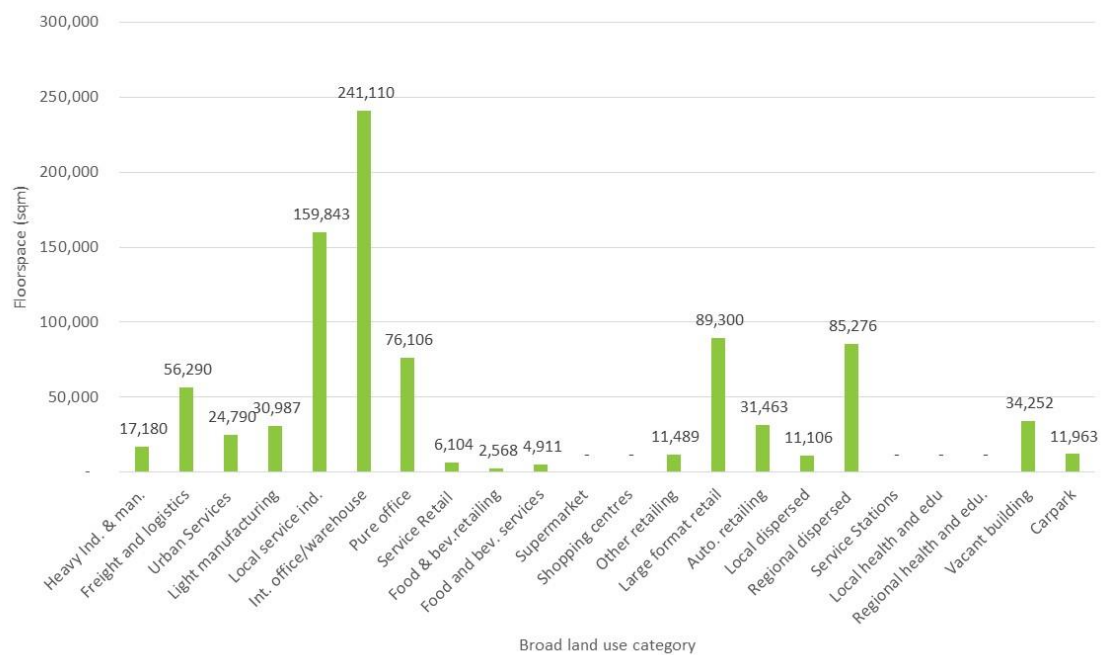
TABLE 22. OVERVIEW OF ARTARMON INDUSTRIAL PRECINCT

Total land	63 ha
Current floorspace	895,719 sqm
Current FSR	1:1
Max floorspace	1,029,422 sqm
Vacant floorspace	44,847 sqm
Floorspace capacity	133,982 sqm
Control FSR	1:1 - 1.5:1 (lot size > 1,000 sqm)

Source: SGS Economics and Planning, 2015

The Artarmon industrial precinct contains a significant concentration of integrated office and warehouse uses, local service industrial uses and pure office uses (refer to Figure 60) which is reflective of the objectives of the industrial zoning of the precinct and permissible land uses. The vacant floorspace represents less than 10 percent of total floorspace which is considered to be a standard benchmark.

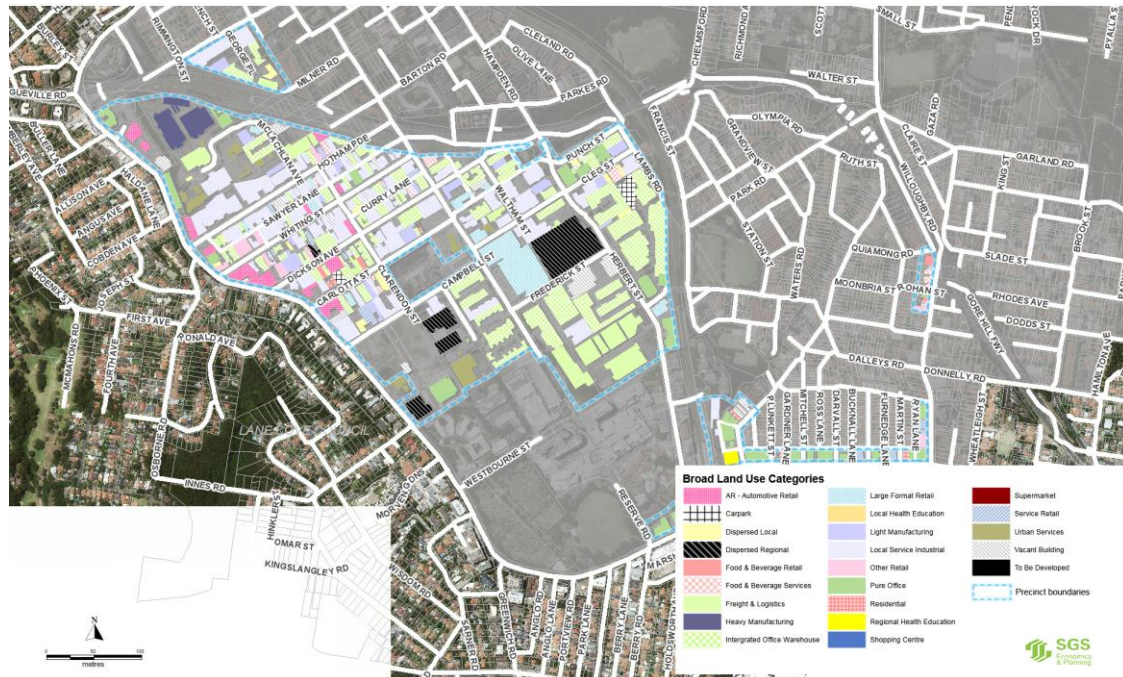
FIGURE 60. ARTARMON INDUSTRIAL PRECINCT CURRENT FLOORSPACE BY BLC



Source: SGS Economics and Planning, 2015

There is evidence of clustering of uses throughout the Artarmon industrial precinct with freight and logistics and integrated office/warehouse uses located in the south east of the precinct and local service industrial uses located in the west of the precinct (refer to Figure 61).

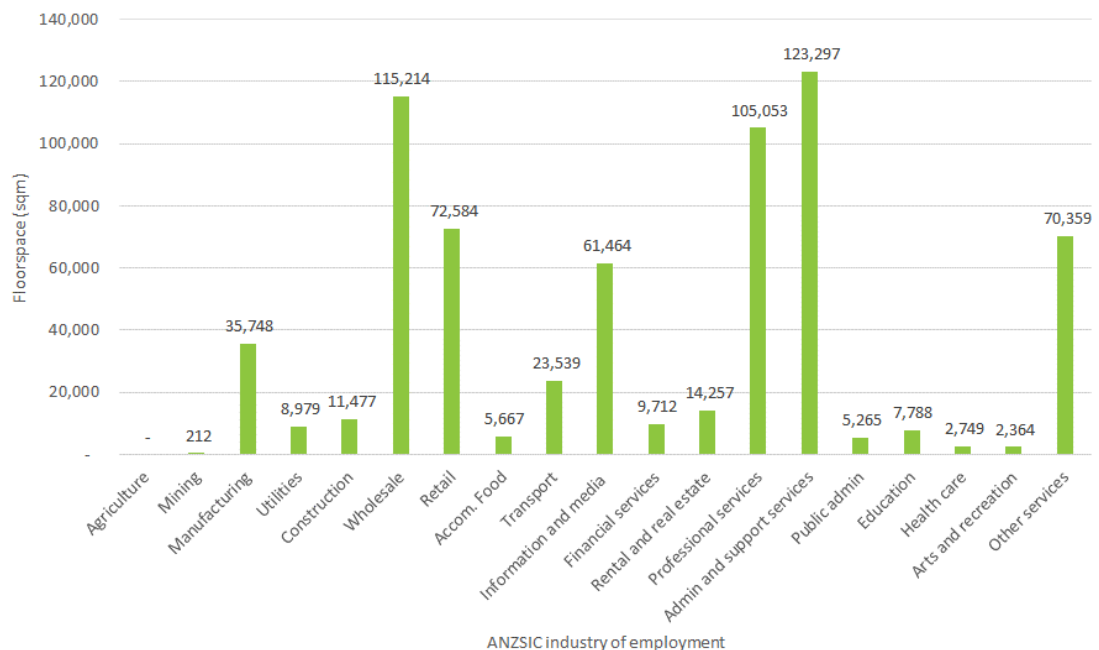
FIGURE 61. ARTARMON INDUSTRIAL PRECINCT LAND AUDIT MAP



Source: SGS Economics and Planning, 2015

The Artarmon industrial precinct contains a range of employment uses, as identified above. This is also reflected in the breakdown of floorspace by industry of employment (refer to Figure 62). This includes a mix of industrial and professional services employment.

FIGURE 62. ARTARMON INDUSTRIAL PRECINCT CURRENT FLOORSPACE BY ANZSIC INDUSTRY OF EMPLOYMENT



Source: SGS Economics and Planning, 2015

Analysis of the clustering of employment was undertaken by mapping floorspace by industry (ANZSIC 3 digit) for a range of industries located across the Artarmon industrial precinct based on the land audit. There was limited evidence of spatial clustering of one specific industry within the precinct which is likely

due to the diversity of industries located in the precinct. The results for three industries are detailed below. Firstly, there is evidence of employment in data processing clustering in the east of the precinct (refer to Figure 63).

FIGURE 63. CLUSTERING OF EMPLOYMENT IN DATA PROCESSING



Source: SGS Economics and Planning, 2016

Employment in building installation has been observed to be clustering primarily within the western half of the Artarmon industrial precinct, however there is a significant concentration in the north east of the precinct as well (refer to Figure 64).

FIGURE 64. CLUSTERING OF EMPLOYMENT IN BUILDING INSTALLATION



Source: SGS Economics and Planning, 2016

Small spatial clusters of employment in automotive services are evidence across the entire precinct (refer to Figure 65).

FIGURE 65. CLUSTERING OF EMPLOYMENT IN AUTOMOTIVE SERVICES



Source: SGS Economics and Planning, 2016

Employment and floorspace projections

There is projected to be 131,000 sqm of additional floorspace demand within the Artarmon industrial precinct. With existing capacity estimated to be around 134,000 sqm based on existing vacancies and development potential under existing controls, there is just enough capacity to accommodate the demand to 2041.

The Artarmon industrial precinct is forecast to grow to 11,000 jobs by 2041 (refer to Table 23). This is an additional 2,000 jobs over 30 years between 2011 and 2041. The growth in employment in the Artarmon industrial precinct translates to demand for an additional 131,000 sqm of floorspace (refer to Table 23).

With an existing floorspace capacity estimated to be around 134,000 sqm, there is just enough capacity to accommodate the demand to 2041.

TABLE 23. EMPLOYMENT AND FLOORSPLACE PROJECTIONS FOR ARTARMON INDUSTRIAL PRECINCT

	Current	Baseline 2041	Scenario 1	Scenario 2	Scenario 3
Employment	8,824	11,297	11,297	11,297	11,297
Change in employment relative to baseline		0	0	0	0
Existing floorspace capacity	133,982				
Additional floorspace demand		131,172	131,172	131,172	131,172
Gap		2,810	2,810	2,810	2,810

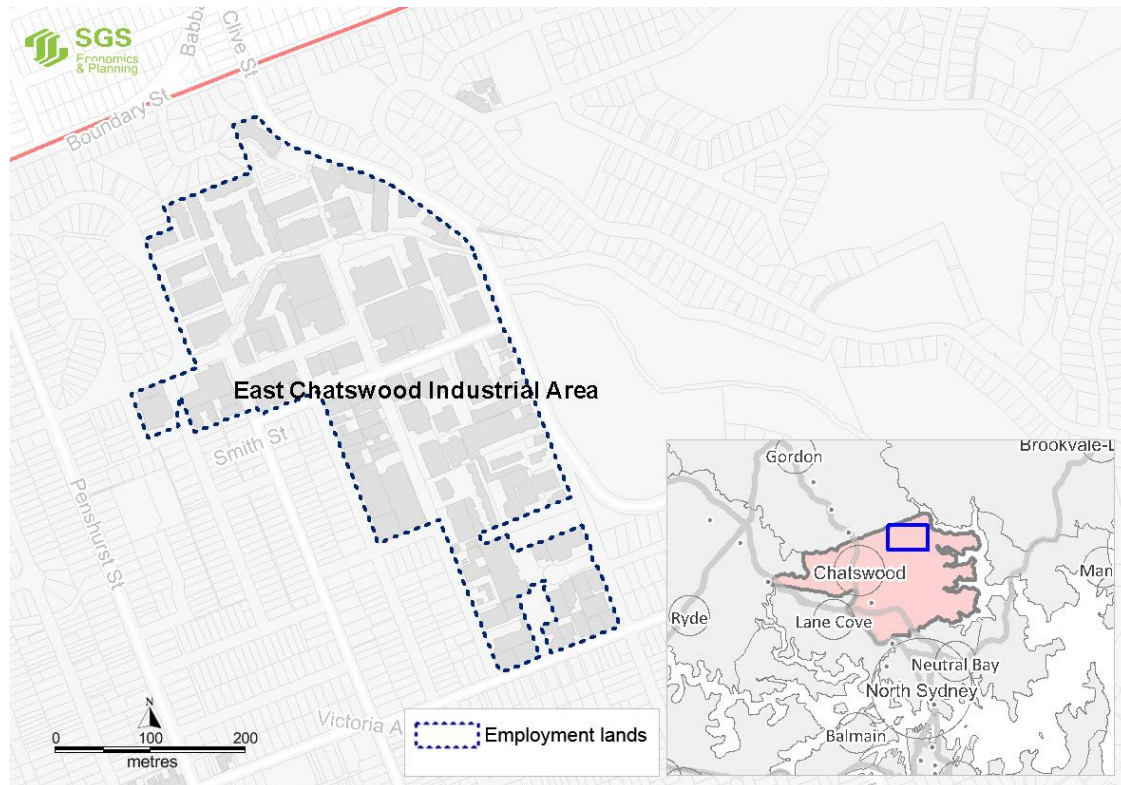
Source: SGS Economics and Planning, 2015

6.2 East Chatswood industrial precinct

Location and zoning

The East Chatswood industrial precinct is located in the north east of Willoughby LGA, to east of Chatswood (refer to Figure 66).

FIGURE 66. LOCATION OF EAST CHATSWOOD INDUSTRIAL PRECINCT

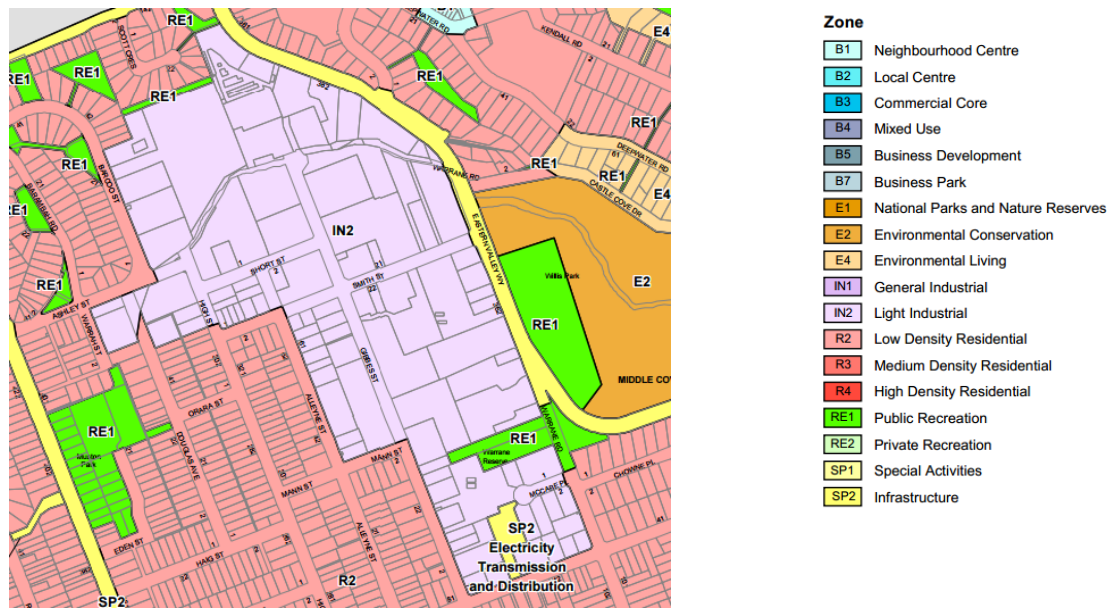


Source: SGS Economics and Planning, 2015

The East Chatswood industrial precinct contains 26.5 hectares of employment land including local services, manufacturing and ancillary office. The precinct is located around Scotts Creek near the intersection of Eastern Valley Way and Boundary Street.

The East Chatswood industrial precinct is entirely zoned IN2 Light Industrial zoning (refer to Figure 67). The zone provides for a wide range of industrial and warehouse land uses, as well as convenience uses and ancillary office uses which support the function of industrial uses located within the precinct.

FIGURE 67. EAST CHATSWOOD INDUSTRIAL PRECINCT ZONING MAP

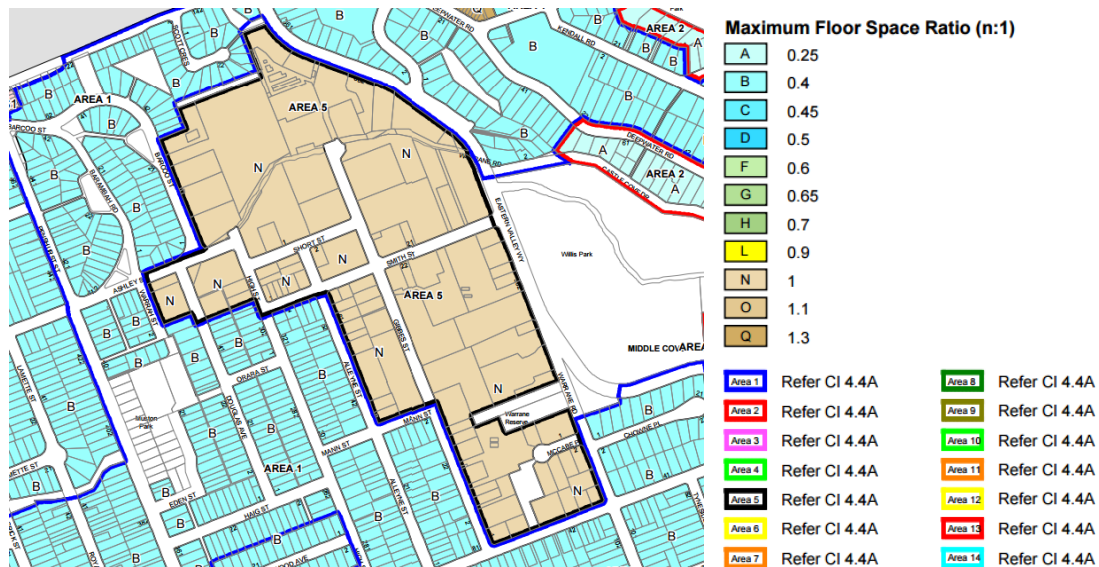


Source: Willoughby City Council, 2012

The East Chatswood industrial precinct also has an FSR control of 1:1. As with the Artarmon industrial precinct, under Clause 4.4 of the Willoughby LEP, the maximum FSR a building on land identified as “Area 5” or “Area 6” on the Floor Space Ratio Map (refer to Figure 68) may exceed 1:1 if:

- the site area is greater than 1,000 sqm, and
- the floor space ratio will not exceed 1.5:1, and
- if the building is on land in Area 6—the site coverage will not exceed 45 percent of the site area.

FIGURE 68. EAST CHATSWOOD INDUSTRIAL PRECINCT FSR CONTROL MAP



Source: Willoughby City Council, 2012

There are no height controls for the East Chatswood industrial precinct.

Strategic context

Whilst smaller than the Artarmon industrial precinct, East Chatswood remains a significant industrial precinct within the local area and subregion.

SGS undertook an industrial study for Willoughby City Council in 2004. The study highlighted that the East Chatswood industrial area is comparatively remote from the metropolitan arterial road network, from commercial activity centres and from major public transport corridors (when compared to Artarmon). It is a rather small concentration of industrial activities within what is otherwise an established residential area.

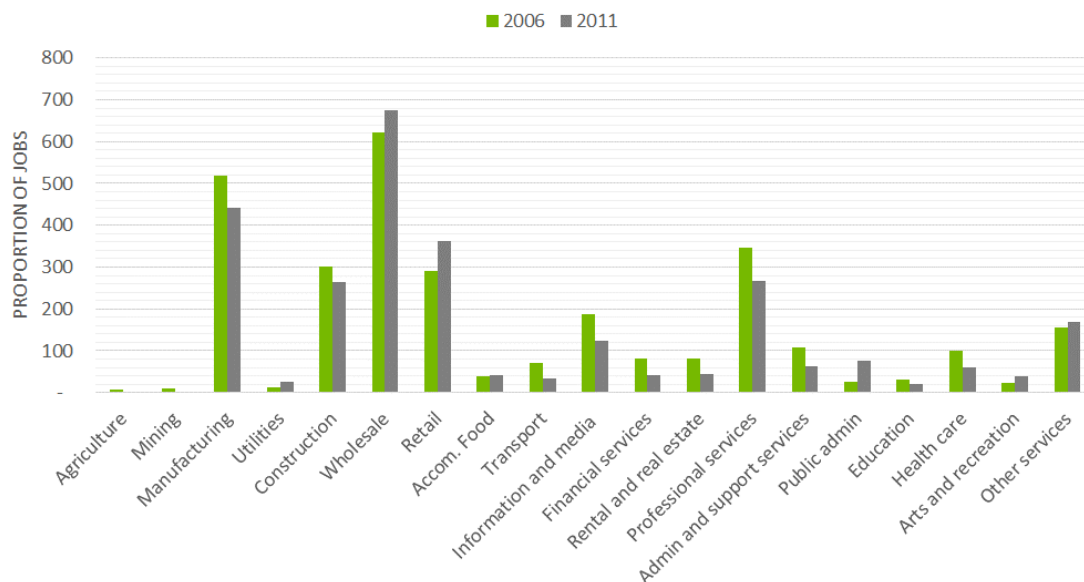
The study noted that East Chatswood had recently experienced poor or modest performance in service sectors, however an increase in personal and household goods wholesaling activities. There has been growth in some niche areas of manufacturing (but significant declines in machinery and equipment manufacturing). Motor vehicle trades and services were performing well, retail activity and communication services activities were increasing whilst media activities were declining.

Employment profile

East Chatswood primarily contains wholesale and manufacturing industries of employment and experienced declines in employment between 2006 and 2011

The East Chatswood industrial precinct contains around 2,900 jobs, down from 3,100 in 2006. The precinct primarily contains wholesale and manufacturing jobs with some retail, construction and professional services jobs also contained here (refer to Figure 69).

FIGURE 69. EAST CHATSWOOD INDUSTRIAL PRECINCT INDUSTRY OF EMPLOYMENT, 2006-2011



Source: raw data source from Bureau of Transport Statistics (2006 and 2011) Journey to Work data

Market assessment

Similarly with the Artarmon industrial precinct, and notwithstanding the overall 2006-11 employment decline, there is solid demand for properties and somewhat constrained supply within the East Chatswood industrial precinct which is reflected in high net face rents.

Current floorspace profile

The East Chatswood industrial precinct contains a cluster of integrated office/warehouse uses which contains wholesale and retail employment which are both industries that experienced growth in employment between 2006 and 2011.

The East Chatswood industrial precinct contains 26.5 hectares of land which accommodates 346,000 sqm of floorspace which was audited as part of this study (refer to Table 24).

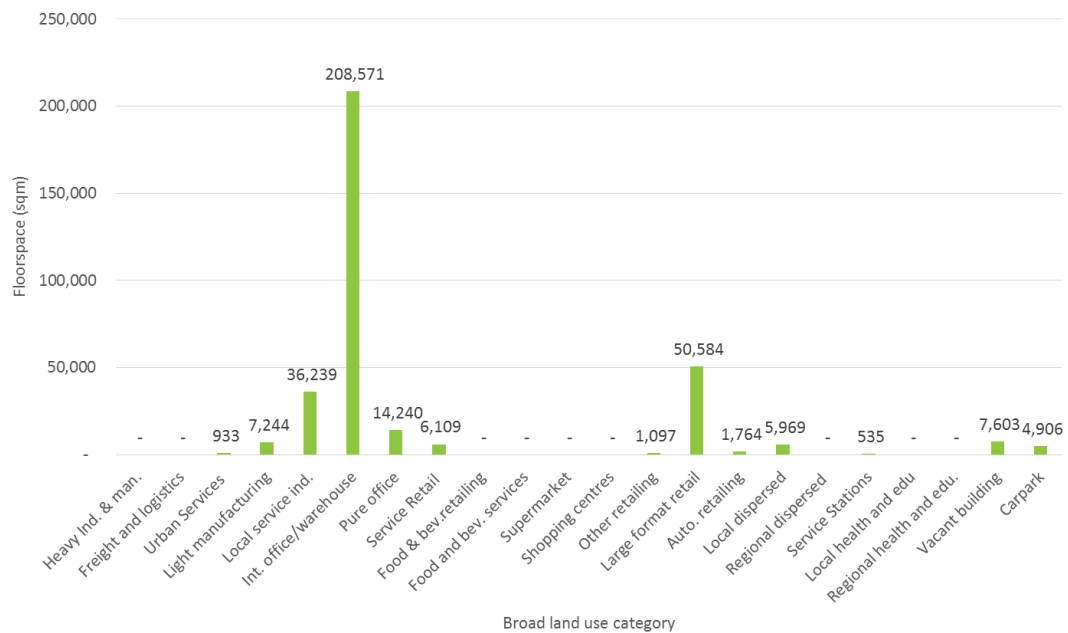
TABLE 24. OVERVIEW OF EAST CHATSWOOD INDUSTRIAL PRECINCT

Total land	26.5 ha
Current floorspace	345,795 sqm
Current FSR	1:1
Max floorspace	400,137 sqm
Floorspace capacity	50,867 sqm
Vacant floorspace	18,028 sqm
Control FSR	1:1 - 1.5:1 (lot size > 1500 sqm)

Source: SGS Economics and Planning, 2015

The land audit results highlight that East Chatswood contains a concentration of integrated office and warehouse uses with some large format retail, and local service industrial uses (refer to Figure 70). This is reflective of the flexible industrial zoning of the precinct.

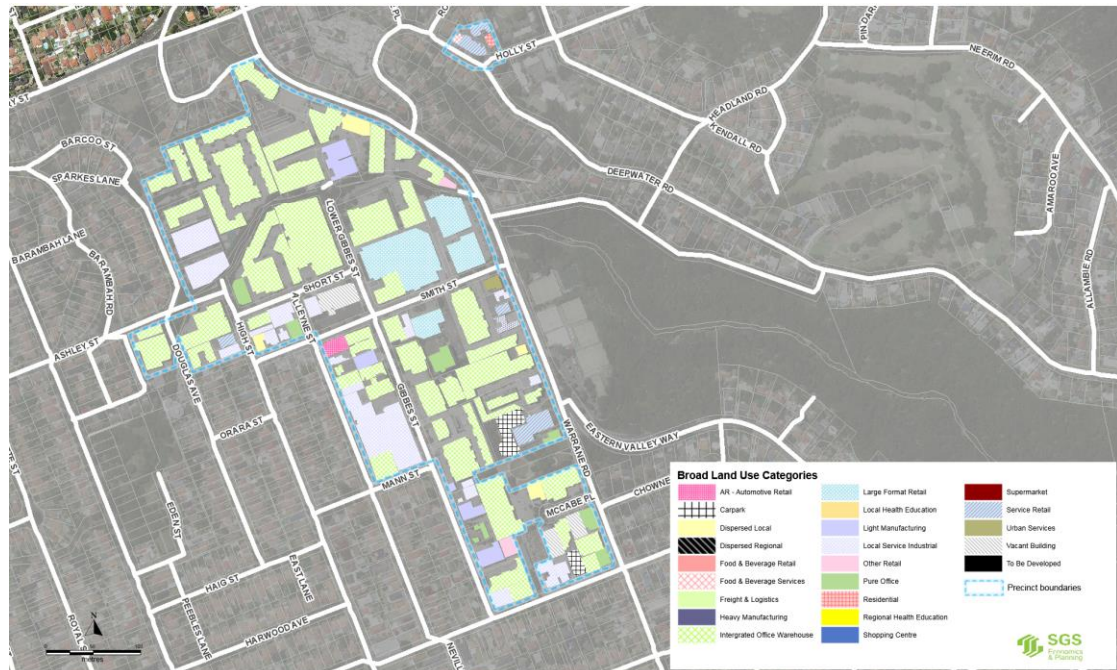
FIGURE 70. EAST CHATSWOOD IND. PRECINCT CURRENT FLOORSPACE BY BLC



Source: SGS Economics and Planning, 2015

The integrated office/warehouse uses are spread throughout the East Chatswood industrial precinct with the large format retail and local service industrial clustered in areas of the precinct (refer to Figure 71).

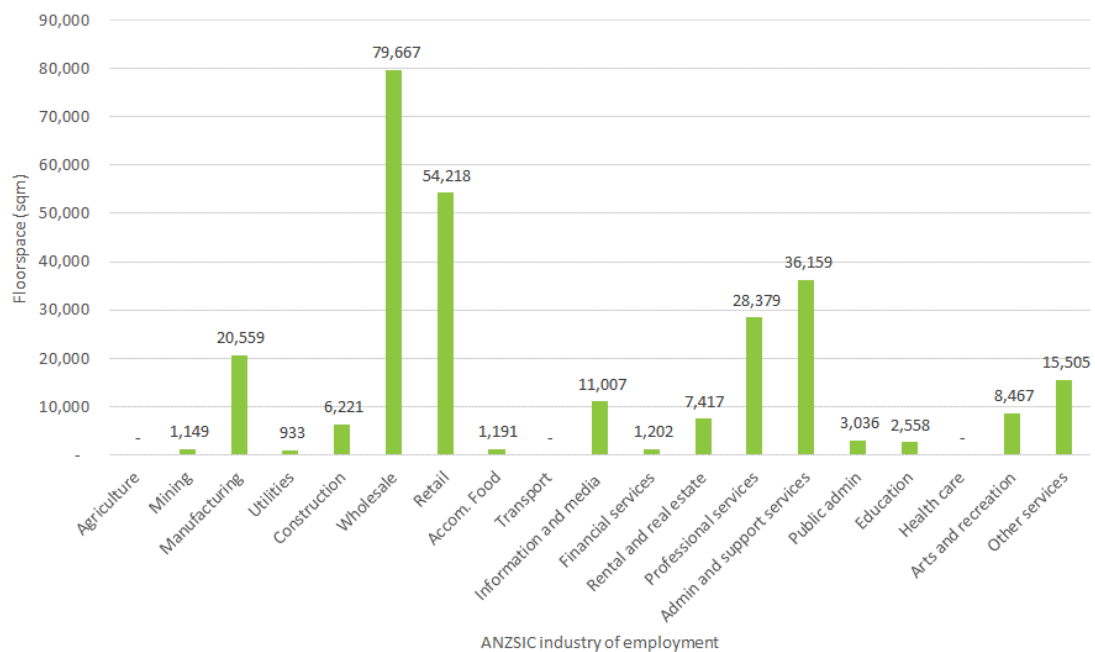
FIGURE 71. EAST CHATSWOOD INDUSTRIAL PRECINCT LAND AUDIT MAP



Source: SGS Economics and Planning, 2015

The East Chatswood industrial precinct contains a range of employment uses, as identified above, this is also reflected in the breakdown of floorspace by industry of employment (refer to Figure 72) with wholesale as the largest industry of employment based on floorspace as well as total employment. Retail is another large industry of employment based on floorspace which includes employment within motor vehicle retailing, as well as bulky goods retail industries such as furniture, floor coverings, houseware and textile goods retailing, electrical and electronic goods retailing, hardware, building and garden supplies retailing.

FIGURE 72. EAST CHATSWOOD INDUSTRIAL PRECINCT CURRENT FLOORSPACE BY ANZSIC INDUSTRY OF EMPLOYMENT



Source: SGS Economics and Planning, 2015

Employment and floorspace projections

There is forecast to be demand for an additional 42,000 sqm of floorspace within the East Chatswood industrial precinct by 2041. Existing capacity is estimated to be around 51,000 sqm, which is slightly more than the projected demand.

East Chatswood is forecast to grow to 3,900 jobs by 2041 (refer to Baseline 2041 column in Table 25). This is an additional 700 jobs over 30 years between 2011 and 2041. The growth in employment in East Chatswood translates to demand for an additional 42,000 sqm of floorspace (refer to Table 25).

With an existing floorspace capacity estimated to be around 51,000 square metres, there seems to be enough capacity in East Chatswood to accommodate this demand.

Employment scenario modelling was also conducted to understand how deviations from the employment forecasts may impact on some centres, including East Chatswood (also see Table 25). Appendix 4 contains more information on the scenario modelling and scenarios. East Chatswood is impacted by scenario 2 and scenario 3.

TABLE 25. EMPLOYMENT AND FLOORSPACE PROJECTIONS FOR EAST CHATSWOOD

	Current	Baseline 2041	Scenario 1	Scenario 2	Scenario 3
Employment	3,253	3,859	3,859	4,629	3,630
Change in employment relative to baseline		0	0	769	-229
Existing floorspace capacity	50,867				
Additional floorspace demand		41,516	41,516	108,047	32,288
Gap		9,351	9,351	-57,180	18,579

Source: SGS Economics and Planning, 2015

Under scenario 2, East Chatswood grows to 4,629 jobs by 2041, an increase of 769 jobs above the baseline estimate for 2041. This is assumed to be growth that would have been accommodated in the Northern Beaches under the baseline assessment. Under this scenario, additional floorspace demand is forecast to be 108,000 sqm which is significantly higher than the existing capacity available within East Chatswood (gap of 57,000 sqm) based on current vacant floorspace and development capacity existing controls.

Under scenario 3, East Chatswood grows to 3,630 jobs by 2041, 229 fewer jobs than that under the baseline assessment. These jobs have been redirected to Lane Cove, Northern Beaches and Western Sydney (76 additional jobs each by 2041). Under this scenario, additional floorspace demand is estimated to be around 32,000 sqm which is less than the existing capacity available in East Chatswood. If this scenario were to occur, East Chatswood would have 18,500 sqm of floorspace capacity after accommodating demand to 2041.

Proposed supermarket for East Chatswood

Woolworths are proposing to develop a supermarket at 17-19 Smith Street, Chatswood within the East Chatswood industrial precinct. Since the site is currently zoned IN2 Light Industrial, this use is not currently permissible under the LEP and therefore a planning proposal is required to amend this.

The planning proposal seeks to amend Schedule 1 of Willoughby LEP 2012, to allow the additional use of a supermarket and liquor store to be permissible within the IN2 Light Industrial zone at 17-19 Smith Street, Chatswood.

The planning proposal was approved at Gateway by DP&E in March 2014, however it is still with DP&E for final assessment.

In 2012, SGS was commissioned by Willoughby City Council to undertake a review of the planning proposal and supporting documentation (SGS Economics and Planning 2012). In 2013, SGS was again commissioned by Willoughby City Council to respond to a report prepared by AEC Group for Woolworths in relation to the proposed supermarket (SGS Economics and Planning 2013).

SGS takes the view that it would be wrong to allow the supermarket as an isolated retail development within the IN2 zone. The supermarket development would be likely to catalyse further retail development such that a centre by default would be created. In this case the industrial area would be affected by encroaching and higher land value development, with unmanaged consequences.

Nevertheless Council should contemplate what this supermarket proposal might mean for the future of the precinct if approved. Any evolution to a more complex employment area should be based on a planned approach which might include a small complex of supporting retail and enterprise activities, and potentially even key worker or integrated work-live residential development (the City of Sydney has recently pioneered this type of development in its southern employment lands¹⁴). The demarcation with the existing industrial uses would need to be strongly drawn to minimise land use conflicts and protect its continued function as an enterprise employment area. At the moment, East Chatswood is not well serviced by feeder buses. Better transport connections to Chatswood and beyond would be necessary to support any intensification of activity.

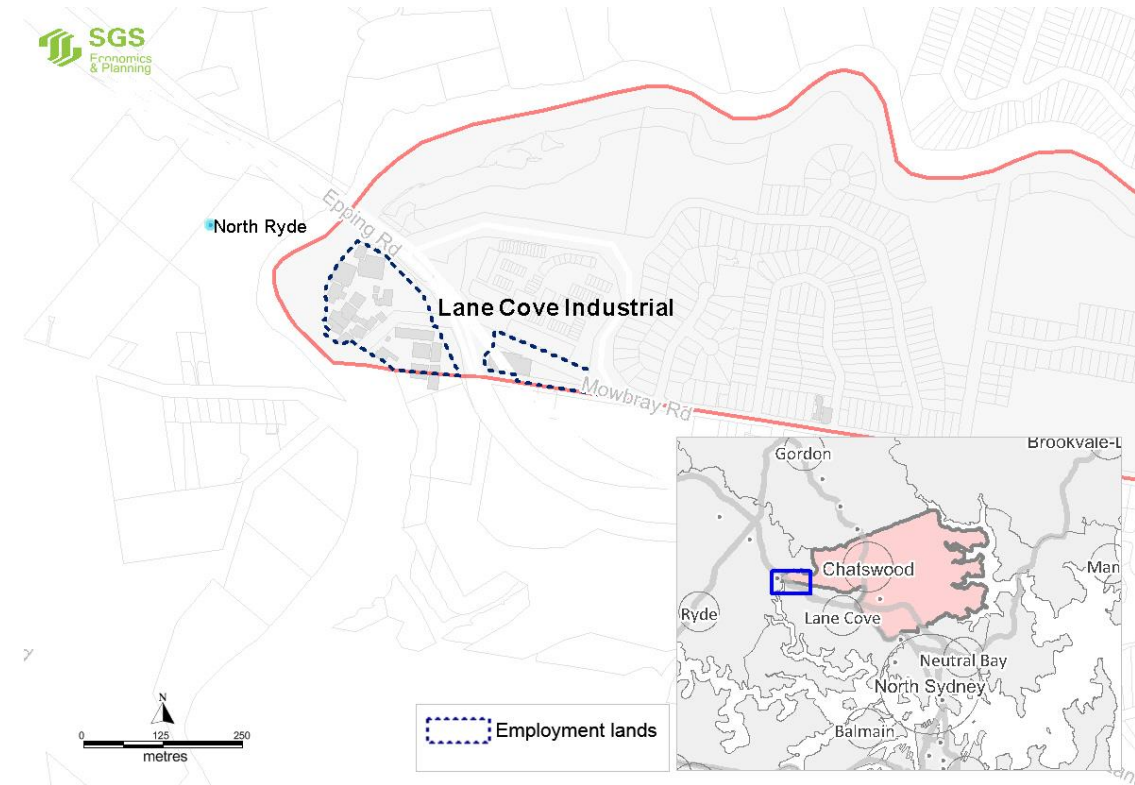
¹⁴ Refer to <http://www.cityofsydney.nsw.gov.au/vision/major-developments/southern-employment-lands>

6.3 Lane Cove West industrial precinct

Location and zoning

A small section of the Lane Cove West industrial precinct is located within the boundary of Willoughby LGA, along the border of Willoughby and Lane Cove LGAs (refer to Figure 73).

FIGURE 73. LOCATION OF LANE COVE WEST INDUSTRIAL PRECINCT

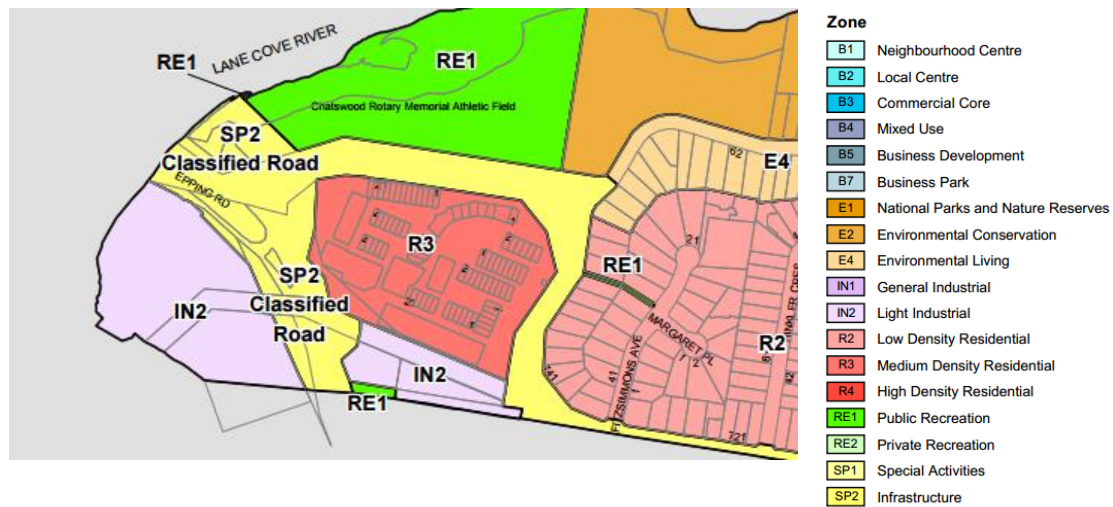


Source: SGS Economics and Planning, 2015

The broader Lane Cove West industrial precinct contains 56 hectares of employment land which is primarily light manufacturing uses including warehouses and related ancillary offices, with some traditional industrial businesses which provide local services such as car repairs and panel beating. According to the 2007 *Inner North draft Subregional Strategy*, the precinct contains significant modern buildings, several small complexes of factory/office units and a high proportion of technology-related businesses. The precinct is located to the south of Epping Road and as mentioned above, a small proportion of the precinct is located within Willoughby LGA.

The portion of the Lane Cove West industrial precinct located in Willoughby LGA is zoned IN2 Light Industrial (refer to Figure 74). The zone provides for a wide range of industrial and warehouse land uses, as well as convenience uses and ancillary office uses which support the function of industrial uses located within the precinct.

FIGURE 74. LANE COVE WEST INDUSTRIAL PRECINCT ZONING MAP

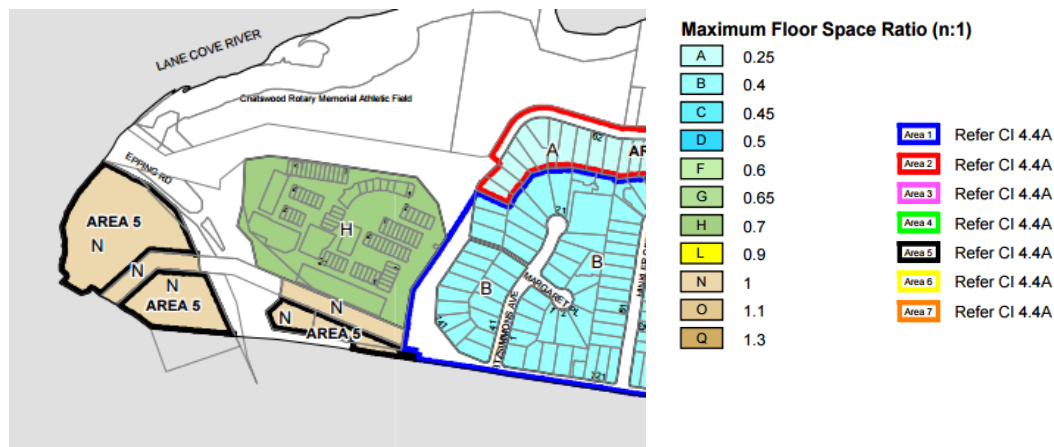


Source: Willoughby City Council, 2012

These sites also have an FSR control of 1:1. As with the other industrial precincts within Willoughby LGA, under Clause 4.4 of the Willoughby LEP, the maximum FSR a building on land identified as “Area 5” or “Area 6” on the Floor Space Ratio Map (refer to Figure 75) may exceed 1:1 if:

- the site area is greater than 1,000 sqm, and
- the floor space ratio will not exceed 1.5:1, and
- if the building is on land in Area 6—the site coverage will not exceed 45 percent of the site area.

FIGURE 75. LANE COVE WEST INDUSTRIAL PRECINCT FSR CONTROL MAP



Source: Willoughby City Council, 2012

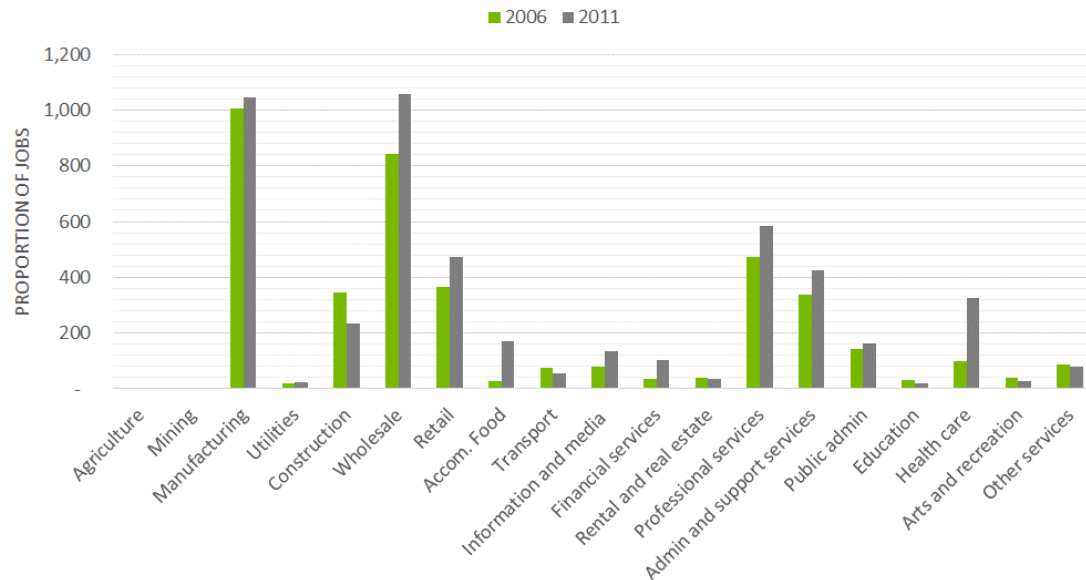
Employment profile

Lane Cove West (Willoughby LGA) is dominated by manufacturing and wholesale industries and experienced strong growth between 2006 and 2011.

As mentioned previously, a small proportion of the Lane Cove West industrial precinct is located in Willoughby LGA. The analysis below only applies to Willoughby LGA. In 2006, the precinct contained 4,100 jobs and in 2011, this grew to 5,100 jobs. The precinct is dominated by manufacturing and

wholesale and includes other support industries such as retail and admin and support services as well as some professional services jobs (refer to Figure 76).

FIGURE 76. LANE COVE WEST INDUSTRIAL PRECINCT INDUSTRY OF EMPLOYMENT, 2006-2011



Source: raw data source from Bureau of Transport Statistics (2006 and 2011) Journey to Work data

Current floorspace profile

The portion of the Lane Cove West industrial precinct which is located in Willoughby LGA contains a cluster of heavy industry and manufacturing land uses which accommodate manufacturing and wholesale employment.

The Lane Cove West industrial precinct which is contained within Willoughby LGA is 3.5 hectares of land, which contains 13,000 sqm of floorspace (refer to Table 26).

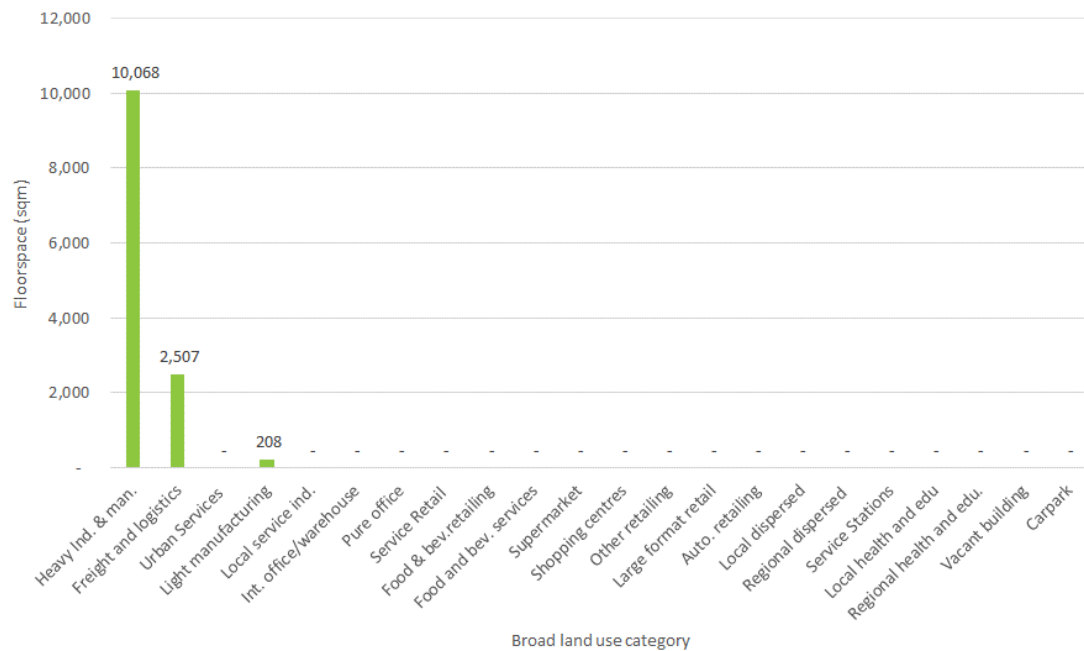
TABLE 26. OVERVIEW OF LANE COVE WEST INDUSTRIAL PRECINCT

Total land	3.5 ha
Current floorspace	12,783 sqm
Current FSR	0.4:1
Max floorspace	35,604 sqm
Vacant floorspace	0 sqm
Floorspace capacity	31,041 sqm
Control FSR	1:1

Source: SGS Economics and Planning, 2015

The industrial precinct primarily contains heavy industry and manufacturing uses with some freight and logistics and light manufacturing (refer to Figure 77).

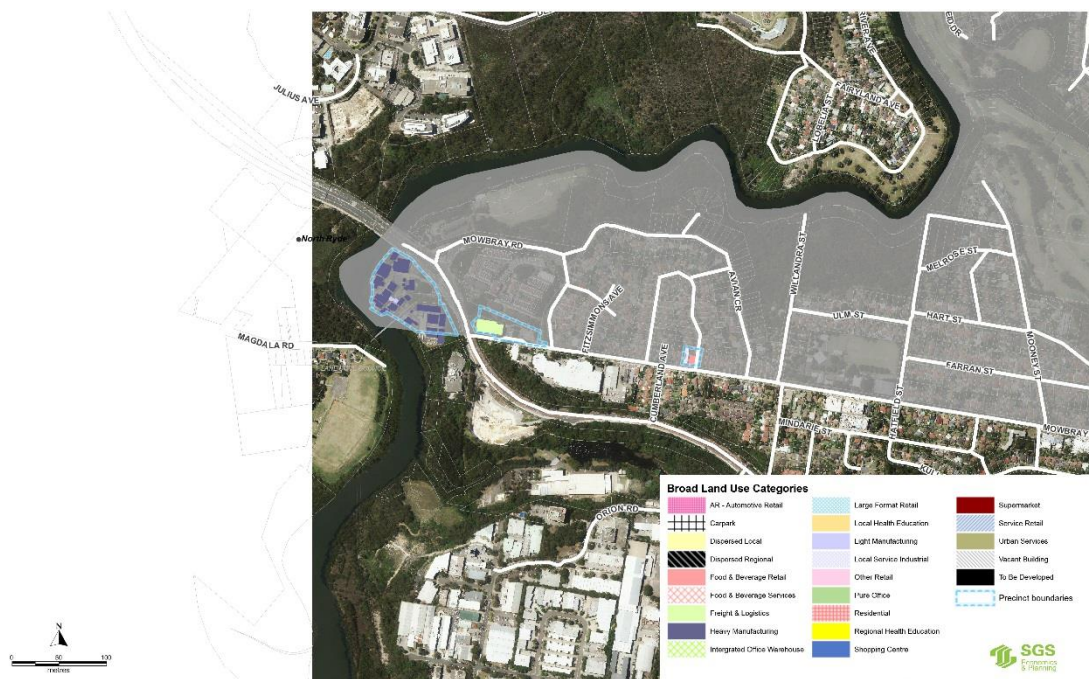
FIGURE 77. LANE COVE WEST INDUSTRIAL PRECINCT CURRENT FLOORSPACE BY BLC



Source: SGS Economics and Planning, 2015

The proportion of the Lane Cove West industrial precinct which is located within Willoughby LGA represents a cluster of heavy industry and manufacturing uses which is separated from the rest of the industrial precinct by roads and vegetation (refer to Figure 78).

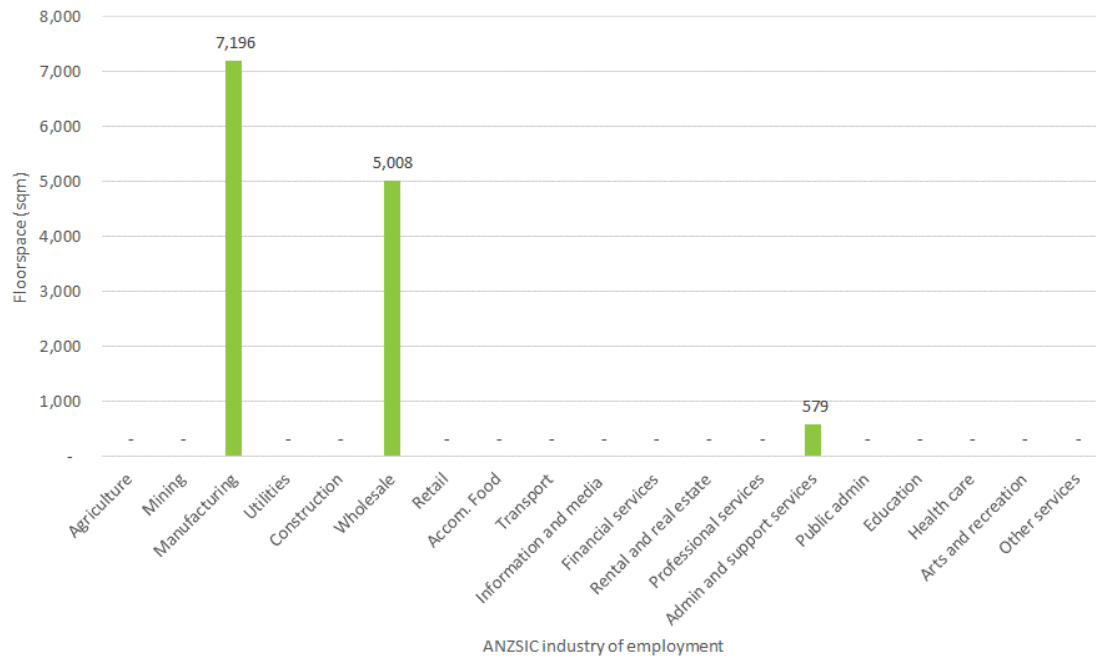
FIGURE 78. LANE COVE WEST INDUSTRIAL PRECINCT LAND AUDIT MAP



Source: SGS Economics and Planning, 2015

In terms of floorspace by employment, the precinct contains manufacturing, transport and a small amount of administrative and support services industries of employment (refer to Figure 79). This is generally consistent with the employment profile described above.

FIGURE 79. LANE COVE WEST INDUSTRIAL PRECINCT CURRENT FLOORSPACE BY ANZSIC INDUSTRY OF EMPLOYMENT



Source: SGS Economics and Planning, 2015

Employment and floorspace projections

There is forecast to be demand for an additional 2,200 sqm of floorspace within the Lane Cove West (Willoughby LGA) industrial precinct by 2041. Existing capacity is estimated to be around 31,000 sqm which is well above the forecast demand, however demand and capacity should be considered in the broader context of the entire centre to better understand constraints and opportunities for growth.

Lane Cove (Willoughby LGA) is forecast to grow to 7,100 jobs by 2041 (refer to Table 27). This is an additional 1,300 jobs over 30 years between 2011 and 2041. The growth in employment in Lane Cove translates to demand for an additional 2,200 sqm of floorspace (refer to Table 27).

With an existing floorspace capacity estimated to be around 31,000 sqm, Lane Cove West (Willoughby LGA) has more than sufficient capacity to accommodate the additional demand.

TABLE 27. EMPLOYMENT AND FLOORSPACE PROJECTIONS FOR LANE COVE WEST

	Current	Baseline 2041	Scenario 1	Scenario 2	Scenario 3
Employment	5,834	7,137	7,137	7,137	7,213
Change in employment relative to baseline		0	0	0	76
Existing floorspace capacity	31,041				
Additional floorspace demand		2,195	2,195	2,195	2,195
Gap		28,846	28,846	28,846	28,846

Source: SGS Economics and Planning, 2015

Employment scenario modelling was also conducted to understand how deviations from the employment forecasts may impact on some centres, including Lane Cove West. Appendix 4 contains more information on the scenario modelling and scenarios. Lane Cove West is impacted by scenario 3 (which is detailed below).

Under scenario 3, Lane Cove Industrial grows to 7,213 jobs in 2041, 76 additional jobs above the baseline. These additional jobs have been redirected from East Chatswood. However, since only a small proportion of the industrial land in Lane Cove Industrial Precinct is within the Willoughby LGA, we expect this scenario will have minimal impact on the additional floorspace demand projected for the Willoughby part of the Lane Cove industrial area.

6.4 Summary of key findings

Artarmon

There is strong demand for industrial properties in Willoughby LGA, particularly within the Artarmon industrial precinct. This is reflected by typically high net face rents, though this is also driven by a somewhat constrained supply.

The Artarmon industrial precinct is strategically significant given its location, including proximity to the St Leonards strategic centre, the Royal North Shore Hospital and superior arterial road and rail access. It is one of the few relatively unconstrained and intact areas of industrial land within the subregion. The precinct contains a wide variety of industries of employment and has experienced growth in a number of these industries. There is projected to be 131,000 sqm of additional floorspace demand within the Artarmon industrial precinct. Based on existing vacancies and development potential, capacity is estimated to be 134,000 sqm, which is just enough to accommodate demand. Any loss of industrial land for other uses such as residential or bulky goods (outside the already designated precinct) should be resisted.

East Chatswood

The East Chatswood industrial precinct contains a cluster of integrated office/warehouse uses including wholesale and retail employment. These are both industries which have experienced growth in employment between 2006 and 2011. East Chatswood situated in a much more remote location compared to the Artarmon industrial area and access is an issue. Whilst smaller than the Artarmon industrial precinct, East Chatswood remains a significant industrial precinct within the local area and subregion.

Whilst the precinct experienced some declines in employment between 2006 and 2011, there is expected to be demand for an additional 42,000 sqm of floorspace within the East Chatswood industrial precinct by 2041. Existing capacity is estimated to be around 51,000 sqm which suggests that there would be 9,000 sqm of floorspace capacity after meeting the demand to 2041.

The scenario testing and NCB highlighted that where East Chatswood loses industrial employment compared to the base case (associated with the displaced jobs relocating to western Sydney, Northern Beaches and Lane Cove industrial) there is a minor though negligible community 'cost'. This is a much smaller cost compared to losing employment in Chatswood (strategic centre).

While rightly opposing the proposed supermarket in the East Chatswood area, given the potential impacts and unmanaged consequences, Council should contemplate what it would mean for the future of the precinct if approved. Any evolution to a more complex employment area should be based on a planned approach. At the moment, East Chatswood is not well serviced by feeder buses. Better transport connections to Chatswood and beyond would be necessary to support any intensification of activity.

Lane Cove West

The portion of the Lane Cove West industrial precinct which is located in Willoughby LGA contains a cluster of heavy industry and manufacturing land uses which accommodate manufacturing and wholesale employment. There is forecast to be demand for an additional 2,200 sqm of floorspace within

the Lane Cove West (Willoughby LGA) industrial precinct by 2041. Existing capacity is estimated to be around 31,000 sqm which is well above the forecast demand. However, demand and capacity should be considered within the broader context of the entire industrial precinct to better understand constraints and opportunities for growth and coordinate any actions with Lane Cove Council.

Consultation with Lane Cove Council revealed that it has a strong position on retaining the Lane Cove West industrial precinct as employment Lands. Council is looking at increasing the maximum height or floorspace controls for specific strategically located sites which are accessible and can accommodate an increase in density. The precinct is below capacity under current controls as a whole, however the focus is on trying to identify sites where there is potential. Lane Cove is strong on protecting the land for industrial uses. Lane Cove West may have some theoretical capacity if FSRs are increased.

Overall, Artarmon is constrained to accommodate growth while East Chatswood has a modest surplus of capacity given projected growth. Artarmon is also of strategic significance, while East Chatswood has an important though more locally focussed role. Council may need to look at increasing capacity in Artarmon in particular to accommodate future industrial demand.

Transport accessibility

All three industrial precincts are not well serviced by public transport. The Artarmon Loop shuttle bus run by Council recognises this fact. The Sydney Metro offers the opportunity to revise the local route bus services regardless of whether a station is included in the Artarmon Industrial Precinct.

The Artarmon and East Chatswood precincts will need to rely on improved bus services if a sustainable growth in industrial employment is to be achieved.

7 RECOMMENDED PLANNING DIRECTIONS

7.1 Strategic centres

Chatswood

Protect commercial core and maintain employment potential

- Underlying future projected employment growth (and the high level ‘net community benefit’ evaluation of different employment scenarios) suggests that the commercial core zoning in Chatswood should be protected, with no future rezoning of commercial core sites to mixed use dominated by residential.
- If residential is entertained on commercial core sites it should be used to underpin office development in genuine mixed use developments. For example, on any particular site an office component equivalent to the floorspace allowed in the current controls should be required before residential is permitted (in a vertically or horizontally separated built form).

Enhance amenity and activation in fringe, lesser performing retail precincts

- Retail is performing strongly, though traffic congestion and movement within the centre during peak periods is identified as an issue. There are some ‘lesser performing’ fringe areas (east end of Victoria Ave for example) and activation in these precincts from changes to development controls (to allow select mixed use for example in fine grain areas) or specific precinct interventions and public domain planning may be worth considering.

Reduce Chatswood pressures and congestion by facilitating mixed use elsewhere and constraining traffic growth

- Chatswood carries a ‘burden’ of development given its multiple roles. This pressure could be eased in relation to retail and residential development at least, if other centres in Willoughby were developed or expanded for these uses (see directions for other retail centres). This might ease the pressure for conversion to residential and mixed use of commercial core sites in particular.
- While expected retail and employment growth and potential mixed use developments will place more pressure on traffic congestion, it is recommended to maintain (but not increase) the existing capacity on roads providing access to the centre. Instead, travel demand should be managed through a suite of measures, including land use planning, parking management policies and maintaining road capacity.
- With increased public transport access and a greater use of active transport modes, parking provision should be reduced over time to relieve traffic congestion in the peak periods. Innovative parking policies, such as shared parking between retail, office and residential uses (monitored by time of day for peak utilisation) and unbundling parking and offering as a rental option (meaning that stand alone car parks are developed separately from other developments based on cash contributions and available for rent by residents or office based businesses), should also be promoted. While restricting parking may put the centre at a disadvantage compared to say Macquarie Park the centre should be promoting its amenity and public transport offer as a comparative advantage.

St Leonards

Resolve the future role of St Leonards with Lane Cove and North Sydney councils and the Department of Planning and Environment

- *A Plan for Growing Sydney* suggests a direction to retain a commercial core in St Leonards for long-term employment growth, however the role of the centre needs to be further clarified due to a number of factors including the lack of a specialised centre category within the new metropolitan strategy, fragmentation of the centre across three different council areas, apparently modest current demand for pure office development in this location and pressures for rezoning to other non-employment uses.
- Redevelopment prospects are constrained because of strata title holdings and a lack of future prospects to underpin financing. It may be that prospects for a major employment revival of St Leonards are slipping. In this case a strategy that allows for higher density residential development with ground floor activation could be pursued. The aim would be to create a high quality but mixed residential environment with, for example, restricted car parking to encourage use of the available high quality public transport and given the strength of employment nearby at the RNSH, in the Artarmon industrial area and in Crows Nest (in the North Sydney LGA).
- As part of the subregional planning process, it is suggested that a review of St Leonards Centre as a whole should be completed jointly by Willoughby Council and Lane Cove and North Sydney councils. In addition to the directions set out above, this review needs to consider the concept plan prepared for the RNSH site as part of a Part3A application, which proposes development for high rise office, housing, retail and adaptive reuse of heritage items.

7.2 Retail centres

Directions

Provide new opportunities for retail and employment floorspace in the smaller retail centres

- The basic aims for retailing in Willoughby should be to:
 - De-concentrate retailing which is currently overly focussed on Chatswood, which contributes to congestion and competition for well-located sites in the centre
 - meet generally increasing demand for retail floorspace in new or existing centres (outside Chatswood).
- The detailed demand and capacity analysis highlights that a review of controls to make provision for new employment floorspace is warranted for the Village and Small Village centres of Northbridge, Artarmon, Castlecrag, Victoria Ave/ Penshurst St, Penshurst St/Mowbray Rd. The review should consider four basic options for change.
 - Ensure employment floorspace within current FSR envelope.
 - Increase overall FSR and quarantine a share for employment.
 - Expand footprint and quarantine a share for employment.
 - Establish new or expand existing centres (particularly where options 1, 2 and 3 are not possible in any centre where employment floorspace is required).
- The aim would be to set the controls to encourage development that will create additional or more efficient retail and employment floorspace. Options 2 and 3 (and perhaps 4) are most likely to be favoured because this will create the incentives for redevelopment that will provide the required new retail and employment floorspace.

- Car parking innovations (including using Council's at grade car parks creatively) and built form control reforms will inevitably need to be part of facilitating appropriate development outcomes. The neighbourhood centres may also provide opportunities for 'overflow' or revitalisation and should not be excluded from the review (in particular High Street, Denawen Ave, Castle Cove, Cnr Boundary and Penshurst, Northbridge East).

Provide for additional food, grocery and supermarket floorspace to meet existing and future demand

- Sites adjacent to all of the Willoughby retail centres sites should be reviewed for their potential for retail and in particular as supermarket sites, with above ground residential if necessary to encourage development. If large single ownership sites are not in evidence then multiple single house sites may be appropriate to be incorporated into adjacent centres if they have appropriate characteristics. Developers may seek to aggregate such sites. Desirable site characteristics might include:
 - aggregate area of say 1 to 2 hectares, to provide for retail building and parking
 - potential for integration with existing centre to strengthen the 'main street' component
 - main road access and exposure
 - potential to be served by existing or future public transport
 - potential to minimise conflicts with surrounding land uses including residential.

Undertake further analysis to develop pursue the above recommended directions

- Further study and analysis would be required to advance the above agenda, including refining the scope of a study brief based on the directions outlined.

7.3 Industrial precincts

Artarmon

Protect existing and investigate potential to increase employment capacity

- The Artarmon industrial or employment lands precinct is identified as strategically important, with significant capacity constraints given future project floorspace demand. It is therefore important that Willoughby Council retain the existing industrial zonings and protect it from rezoning to non-employment uses, though it is expected there may be an increasing business 'flavour' to some of the uses on some sites (particularly the larger and less constrained sites in the southern portion of the area).
- Council should investigate the potential to increase development potential within the precinct to accommodate additional demand for employment floorspace to 2041 – recognising that there are limitations on the extent to which increases in FSR, for example, will facilitate additional industrial or business development in a precinct like Artarmon, where required building typologies may not be more than 2 or 3 storeys.
- Reinforce and strengthen existing internal public transport services.

East Chatswood

Protect existing employment capacity

- It is important that the industrial zoning be retained, while continuing to allow for modified and mixed business formats through a flexible planning approach.

Consider and plan for future evolution associated with a possible supermarket development

- While rightly opposing a supermarket which has been proposed in the East Chatswood area, given the potential impacts and unmanaged consequences, Council should contemplate what it would mean for the future of the precinct if approved (by the state government). Any evolution to a more complex employment area should be based on a planned approach which might include a small complex of supporting retail and enterprise activities, and potentially even key worker or integrated 'work-live' residential development. The demarcation with the existing industrial uses would need to be strongly drawn to minimise land use conflicts and protect its continued function as an enterprise employment area. At the moment, East Chatswood is not well serviced by feeder buses. Better transport connections to Chatswood and beyond would be necessary to support any intensification of activity.

Lane Cove West

Protect and expand employment capacity and work with Lane Cove Council across the precinct

- Willoughby Council should retain the existing zoning for the Lane Cove West industrial precinct and work with Lane Cove Council to ensure there is enough capacity across the industrial precinct to accommodate future demand for employment floorspace.