



BUILDING JOBS FOR NSW
**THE MISSING PIECE IN NSW'S
AFFORDABILITY PUZZLE**

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SYDNEY HAS AN EMPLOYMENT LANDS PROBLEM

The Urban Development Institute of Australia NSW (UDIA NSW) established an Employment Lands Task Force to provide expert advice on the planning and land use needs for appropriately servicing the supply of new and affordable employment lands in Sydney.

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01 INTRODUCTION

When a multinational company looking to establish a presence in Australia comes to Sydney to purchase land and has less than 5 sites with a lettable area more than 20,000 sqm across all Sydney industrial markets to choose from [Sydney has an employment lands problem](#).

Employment land shortage coupled with increasing user demand have been driving up land values, resulting in higher rents – but industrial rents in NSW are already double that of Victoria making it less attractive for national distribution centres.

The NSW Government's Employment Lands Development Monitor (ELDM), which reviews the existing and future supply of employment lands, states that Sydney has 50 years of supply. The accuracy of this estimate is questioned and whilst the ELDM identifies a suitably large amount of strategy identified employment land, there is no land release policy presented which addresses a strategy for how this land is to be rezoned and serviced (specifically funding and prioritisation).

This paper aims to review demand and supply for employment lands and its drivers, employment trends and provide recommendations to make NSW an attractive market for businesses to locate and invest in.

The Sydney Metropolitan Strategy, A Plan for Growing Sydney forecasts that by 2031 Sydney's economic output will almost double to \$565 billion a year and there will be 689,000 new jobs. For this to be possible there are some major structural reforms needed, namely greater flexibility around zoning employment and land use permissibility as well as a clear and transparent land release policy and infrastructure servicing program.

The Employment Lands Development Monitor is focussed predominantly on industrially zoned lands, or land that permit a range of industrial uses, with some additional analysis in relation to business parks. Whilst the Draft District Plans have altered the label to 'employment and urban services land' they do not change which land they are referring to. UDIA NSW notes however that technology is increasingly driving new industries, meaning that actual employment lands should also consider major retail and business precincts, and that this is now reflected by the inclusion of major business parks in the ELDM since 2014 and the inclusion of B5, B6 and B7 zoned land from January 2016.

02 UNDERLYING DEMAND

Since the year 2000, across Australian capital cities over 1.5 million sqm of industrial real estate is developed annually. This is more than 25 million sqm of new industrial space since the turn of the century. Of this new supply, over 35% (8.4 million sqm) of new supply has been delivered for new facilities in NSW at an average of over 500,000 sqm per annum (peaking at approximately 1 million sqm in 2007). Working with a site efficiency assumption of 50%, this translates into a take up of 100ha per annum. The ELDM states that the take up rate is 160ha per annum.



The outer western markets have absorbed the lion's share of this new supply. The South Sydney and Inner Western Markets have reached capacity and are beginning to experience stock withdrawals for rezoning and redevelopment opportunities.

New supply has historically been demand led, with a combination of pre-committed and speculatively built facilities. According to market analysis by Colliers, vacancy rates in Western Sydney are below 1%. There are 3 sites with a lettable area more than 20,000 sqm available to lease across all Sydney industrial markets. Of this space 60% is classed as A Grade. There is current underlying demand for over 400,000 sqm of floor space from end users (tenants and owner occupiers). This equates to land demand of 80ha – 100ha with infill locations not suitable due to the need to access major road infrastructure. There are currently 8 inquiries requiring over 20,000 sqm.

Over 50% of new leases executed since 2006 have been for buildings more than 15,000 sqm, demonstrating a trend towards larger distribution centres. More recently several distribution centres exceeding 35,000 sqm have been developed. These larger facilities require large parcels of contiguous land for development, typically exceeding 10ha per property.

The market is experiencing an increase of businesses separating their office from warehousing operations due to inadequate amenity in industrial areas to attract and retain staff.

Whilst satisfaction of demand for large facilities is critical for the efficient distribution of freight in NSW, there is also a shortage of land available to smaller scale owner occupiers with only 2 subdivisions accommodating sale of land <5,000 sqm for industrial use. Added to this is the demand being created from supply withdrawals in South Sydney with an estimated 2 million sqm expected to withdraw, as well as markets including St Leonards and the Inner Western markets of Auburn and Granville.

As the South West and Outer West are now carrying the weight of demand that is unable to be satisfied from South Sydney and the Inner West, the infrastructure and servicing program must be ready to meet this challenge.

Some key international forces driving demand include:

Pacific Rim Dominance – There are more people living in Asia than the rest of the world combined, consequently the Pacific Rim is dominating the world trade in terms of container freight. Australia is well positioned to benefit from this shift in global trading patterns.

International Demand on Exports and Imports – China is a significant demand driver for Australian exports and this is only expected to grow larger.

Influence on Free Trade Agreements – Recently negotiated Free Trade Agreements with Japan, Korea and China have the potential to greatly expand Australia's trade in exports and imports.

Connectivity in Asia – There is currently a huge investment in road and rail in Asia. In the next 40 years the world will build more infrastructure than it has done in its previous 400. China's One Belt One Road initiative aims to spur economic development along the overland and maritime Silk Road economic belt that connects China with Southeast Asia, Africa and Europe. This significant investment in the Asian Highway network provides Australia with improved access for markets across this region.

Significance of the Growing Chinese Middle Class – Estimates from the Australian Government are for a rapid increase in the size of the middle class in the Asia Pacific region over the coming two decades. Based on current growth trends, it is expected that as many as 500 million Chinese could enter the global middle class over the next decade.

03 EMPLOYMENT TRENDS

To understand what type of future demand might look like it is instructive to look at the changing nature of Sydney's workforce. Western Sydney is poised to shoulder much of the burden for new employment lands and centres. According to the NSW Department of Planning & Environment:

"The NSW Government established the Western Sydney Employment Area (WSEA) to provide businesses in the region with land for industry and employment, including transport and logistics, warehousing and office space. Located about 50 kilometres from the Sydney CBD, WSEA will give these businesses access to roads and utility services and is close to the planned new airport at Badgerys Creek. This will also provide people living in Western Sydney the chance to work locally so they can spend less time commuting and more time with their families."

From 2016, the area around WSEA – namely the LGAs of Blacktown, Camden, Campbelltown, Fairfield, Liverpool and Penrith – is forecast to have an increase in population of over 400,000 people by 2031. This population growth will need to provide access to a ready and skilled labour force as well as create new demand for products and services generated in WSEA.

WSEA is a logical expansion of industrial uses with a large cohort of local workers coming from the surrounding 6 local government areas. There is a need to strategically reposition this area for white-collar containment. Presently out of the 53,000 white collar workers that live in this catchment 36,000 (68%) of them travel outside of their district each day to work.

In the period 2006-2011 we have seen significant changes in job composition across the manufacturing, transport and wholesale sectors. The manufacturing sector has seen a decline of more than 10,500 jobs, with only 5 out of 16 sub-industries recording employment growth in this time. Over 5,100 new jobs have been created in the transport sector with the 3 largest contributors to this being in road transport, rail transport and warehousing and storage services. While wholesale has seen an increase of more than 2,200 jobs with continued growth expected with the provision of supporting infrastructure. From 2016-2041 transports, postal & warehousing and professional services are projected to provide the bulk of the more than 30,000 new jobs in WSEA. To plan for this demand government needs to understand the new industrial property trends and innovations redefining built form and floor space requirements.

Key employment land use innovations re-defining employment lands demand include:

Upsizing of Distribution Centres and Warehouse Facilities – This has become a defining feature of the modern industrial market. Some estimates suggest that the average floor space of new large format industrial facilities has increased by around 30% in recent years.

Consolidation of Industrial Facilities – Through an increase in shared services and reduced overheads via centralisation of stock control transport flows, consolidation works to maintain profit margins as well as boost property management efficiencies through a reduction in the numbers of facilities. WSEA represents an ideal consolidation location.

Modern Design and Construction – Examples are higher internal clearances (30+ metres), increased automation and mechanisation, concrete tilt panel construction, fully early suppression fast response sprinkler systems, all weather awning spaces, A grade office areas with complete amenities, multiple container height roller doors and loading docks, B-Double access with heavy and light duty pavement, large hardstand areas for truck turning and container handling.

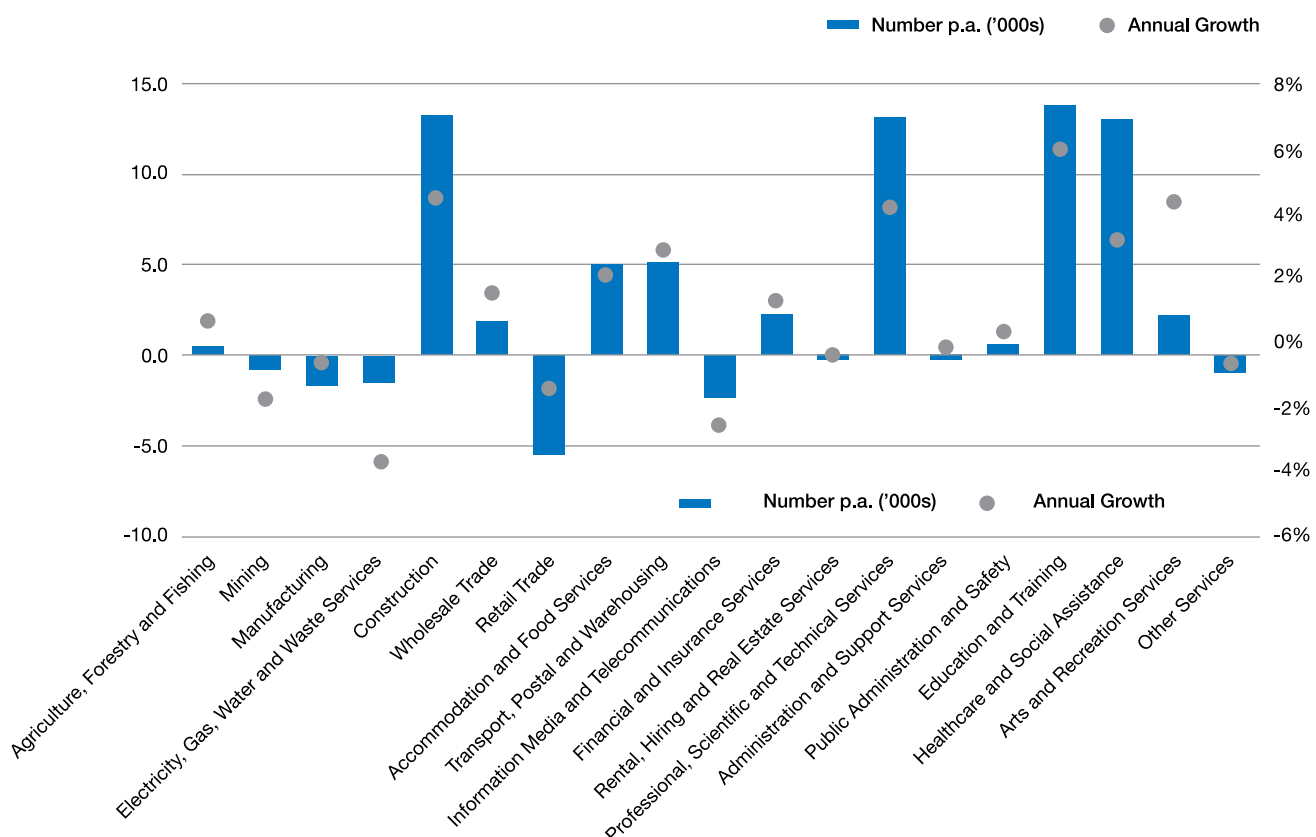
Communication Technology – Consumer expectations to rise due to improvements in information and communication technology (ICT). An increase of ICT CAPEX is required to promote improved productivity and competitiveness. The digital revolution is also enabling an increasing preference towards automation of industrial processes. This is applicable to advanced manufacturing and warehousing and storage services in WSEA.

Strategic Site Selection – Selecting the location of a site has become central to the efficient working of distribution centres at the centre of supply chains. Transport infrastructure facilitating access to markets and labour boost demand for WSEA locations.

Outsourcing of Logistic Functions – Outsourcing provides the dual benefits of devolving responsibilities to external third-party logistics (3PL) experts whilst freeing up occupiers' resources to focus on their core business. With large industrial lots available and strong locational attributes WSEA demand from 3PLs can be expected to intensify.

In addition to these trends, there is a clear direction in the Draft District Plans for employment generating activities in primary locations (such as WSEA) to provide for higher order innovation and technology related industries – including health, medical and technology services sectors.

NSW Employment by Sector, Change between February 2012 and February 2017



Graph Source: Australian Bureau of Statistics Time Series 6291.0.55.003 - Labour Force, Australia, Detailed, Quarterly, Feb 2017

04 SUPPLY

There are three key areas where the ELDM forecasting analysis is inaccurate and potentially misleading in relation to the adequacy of employment lands supply in Sydney:

1. The ELDM includes a large amount of zoned employment land as 'undeveloped' that is either seemingly constrained or otherwise unsuitable for new industrial development, giving a false sense of the actual supply available right now for immediate new industrial development.
2. For the medium and longer-term timeframes, the ELDM indicates that there is an ample supply of 'zoned' employment land and 'Strategy Identified Lands' but this is likely a significant overestimate of the land actually available and does not consider losses that will eventuate because of environmental and infrastructure constraints, particularly in the Broader Western Sydney Employment Area.
3. The employment land supply standards by which the ELDM is measured are not explained nor justified. Other jurisdictions use different metrics and have different supply standards.

Consistent with the ELDM, this analysis focusses on industrial lands. Analysis of business park land follows the industrial land analysis.

This analysis also adopts the same terminology as the ELDM in relation to:

- **Zoned and Serviced Employment Land** – the Department of Planning & Environment ascertain serviced land based on Sydney Water sewerage and potable water services that are available for connection.
- **Zoned Land Not Yet Serviced.**
- **Strategy Identified Land** – being land that is unzoned but identified in long term strategic plans to be zoned in the future for employment lands.

SHORT TERM SUPPLY

The main shortfall is in relation to Zoned and Serviced Employment Land – where Sydney is well below the supply standard of 5-7 years based on the Department's estimates. The ELDM calculates 497ha of 'Zoned Undeveloped and Serviced Land, representing a supply of 3-4 years based on average take up rates over 2009-2016. Given the long lead-in timeframes for securing services to zoned industrial land it is likely that this shortfall will remain for several years.

This shortfall is of major concern, given the need for employment generating industries to establish in Sydney to create employment for the growing population and the fact that Sydney competes with the other capitals to attract these industries. However, whilst the ELDM identifies this shortfall it makes no recommendations in relation to addressing the shortfall.

Further, the situation is likely to be far worse than the ELDM indicates. Of the 497ha identified as being zoned and serviced – only 423ha is located within estates greater than 5ha in total. For significant new industrial or warehouse development sites would need to be larger than what could be accommodated in estates of less than 5ha. As such, the 497ha of 'zoned and serviced' industrial land over-estimates what is actually available in the market.

Table 1 cross references the available employment land identified in the ELDM against the take up of employment land between 2008-2015. In 2015, take-up activity was concentrated in the precincts of Eastern Creek (22.8 hectares), Banksmeadow (13.8 hectares), Yarunga/Prestons (6.0 hectares), Glendenning (5.8 hectares), Marsden Park (5.0 hectares) and Huntingwood West (10.2 hectares) – which provided over 60% of the take up during 2015.

Table 1 – Employment Precincts with Available Land Supply and Recent Take Up

LGA	Precinct	Available per ELDM (Ha) ¹	Take up (Ha, 2008-2015) ²	Comment
Central Sub-Region				
Botany Bay	Banksmeadow	1.3	17.4	Location not for large industrial users
North Sub-Region				
Ryde	Macquarie Park, Wicks Road	10.8	-	Predominantly focussed on office market
South-West Sub-Region				
Camden	Narellan	5.3	-	Not a location for prime user
	Oran Park	18.5	-	Not a location for prime users
	Smeaton Grange	29.7	55.9	Not a location for prime users
	Turner Road	5.2	-	Not a location for prime users
Campbelltown	Campbelltown, Blaxland Road	8.8	28.9	Secondary location
	Ingleburn	12.3	31.4	Smaller parcels only
	Minto	14.8	13.2	Smaller parcels only
Fairfield	Wetherill Park	21.1	21.5	
Liverpool	Casula, Cross Roads	16.9	-	
	Hoxton Park Airport	2.4	38.1	
	Moorebank	11.6	-	Fragmented
	Yarunga/Prestons	10.5	65.8	
West Sub-Region				
Blue Mountains	Katoomba	4	-	No take up. Not in Sydney
	Lawson	10.9	-	No take up. Not in Sydney
Penrith	Emu Plains	9.8	-	No take up. Secondary location, and fragmented
	Erskine Park	108.1	158.3	
	North Penrith	27	20.3	Secondary location, and fragmented
	St Marys	8	-	No take up. Secondary location, and fragmented

1. Per the ELDM land is only shown as available if it is within an estate that had 5ha or more of zoned and serviced land during the reporting period 2008-2014.
2. Per the ELDM take up is only shown for precincts where there was a take up of 5ha or more in 1 or more of the reporting years.

Table 1 – Employment Precincts with Available Land Supply and Recent Take Up (continued)

LGA	Precinct	Available per ELDM (Ha) ¹	Take up (Ha, 2008-2015) ²	Comment
West Central Sub-Region				
Auburn	Clyburn	6.1	-	No take up
Bankstown	Chullora	0.4	11.4	No capacity
Blacktown	Arndell Park	9.1	-	Fragmented
	Eastern Creek	5.9	137.6	
	Glendenning	9.7	41.9	
	Greystanes	7.4	-	No take up
	Marsden Park	22.1	21.7	
	Minchinbury	2	8.6	
	Mount Druitt	5	-	No take up
	The Raceway Precinct	1.6	-	No take up
Holroyd	Greystanes	3.7	51.2	
	Smithfield, North	2.6	-	No take up
Parramatta	Rydalmere	0.1	8.3	No capacity
The Hills	Annangrove	10.3	10.5	
Total		423	742	

Of the 423ha, 12ha is in the Central and North sub-regions, which are identified in the ELDM as being effectively fully occupied and unable to meet significant future demand. A further 15ha is in the Blue Mountains, and some 85ha appears to be residual land within existing estates that is either very small in size or remains stubbornly and persistently undeveloped even though it is within well-established estates, meaning it is likely constrained, undevelopable or otherwise not suitable to meet the requirements of the market. This leaves only approximately 310ha of employment land that appears suitable for meeting immediate demand.

This means that actual zoned and serviced employment land suitable for development is barely enough to cover one year of high demand or 2 years at average take up rates – compared to a supply standard of 5-7 years.



1. Per the ELDM land is only shown as available if it is within an estate that had 5ha or more of zoned and serviced land during the reporting period 2008-2014.
2. Per the ELDM take up is only shown for precincts where there was a take up of 5ha or more in 1 or more of the reporting years.

Image: Ingleburn Distribution Centre

MEDIUM TERM SUPPLY

The ELDM calculates that there is 2,928ha of Zoned Undeveloped Land. Representing a supply of approximately 10 years at high take up rates, compared to a supply standard of 8-10 years.

However, of this – some 400ha is in the Central, North, and South sub-regions or within the Blue Mountains, Wollondilly or Hawkesbury LGAs and so does not readily contribute to meeting demand for significant new industrial development in Sydney.

Of the remaining 2,528ha – approximately 220ha remains stubbornly undeveloped in estates at Emu Plains (46ha), St Marys (50ha), Smithfield (13ha), Mt Druitt (5ha), Rosehill (18ha), North Dunheved (19ha), Arndell Park (17ha), Auburn (20ha), Bankstown (26ha) and Narellan (6ha) – likely representing land that is highly constrained or not being developed for other reasons. In addition, some 40ha is made up of many smaller areas (generally less than 2.5ha) that have not been developed in recent times and are not located in estates where recent take up has occurred. This 40ha likely reflects an accounting anomaly where lots of little amounts add up to a large number. It is suggested that this 40ha does not represent any real employment land supply. Resulting in an estimate of approximately 2,270ha of zoned employment land.

Table 2 provides the breakdown of available zoned land in key precincts extracted from the ELDM.

Table 2 – Zoned Employment Precincts Undeveloped Areas and Key Precincts

LGA / Sub-Region	Undeveloped Zoned Land (Ha)	Key Precincts	Area (Ha)	Comment
Central Sub-Region	44.5	-		
North Sub-Region	40.4	-		
South Sub-Region	115.6	-		
South-West Sub-Region				
Camden	180.2	Leppington North	70.8	Secondary location
		Narellan	5.7	Secondary location
		Oran Park	18.5	Secondary location
		Smeaton Grange	55.5	Secondary location
		Turner Road	29.7	Secondary location
Campbelltown	58.1	Blaxland Road	26.4	Secondary location
		Ingleburn	12.9	
		Leumeah	2.5	Secondary location
		Minto	16.3	
Fairfield	113.5	South of Sydney Water Pipeline	76.6	
		Wetherill Park	33.4	

Table 2 – Zoned Employment Precincts Undeveloped Areas and Key Precincts (continued)

LGA / Sub-Region	Undeveloped Zoned Land (Ha)	Key Precincts	Area (Ha)	Comment
Liverpool	200.4	Warwick Farm Racecourse	12.8	
		Austral	41.8	
		Cross Roads, Casula	16.9	
		Moorebank	11.7	
		Yarunga / Prestons	112	
Wollondilly	125.8	-	-	Not in Sydney
West Sub-Region				
Blue Mountains	39.4	-	-	Not in Sydney
Hawkesbury	23.9	-	-	Not in Sydney
Penrith	669.3	Werrington Road, Werrington	6.9	
		Emu Plains	43.2	No take up. Secondary location, and fragmented
		Erskine Park	122	
		North Penrith	92.4	Secondary location, and fragmented
		South of Sydney Water Pipeline	337.2	
		St Marys	49.2	No take up. Secondary location, and fragmented
West Central Sub-Region				
Auburn	17.1	Clyburn	6.1	No take up
		Silverwater	9	No take up
Bankstown	25.7	Chullora	21.1	
Blacktown	1021.7	Arndell Park	16.3	
		Eastern Creek	335.9	
		Glendenning	21.9	
		Greystanes	20.7	
		Huntingwood	60.8	
		Marsden Park	212.7	
		Minchinbury	22.5	

Table 2 – Zoned Employment Precincts Undeveloped Areas and Key Precincts (continued)

LGA / Sub-Region	Undeveloped Zoned Land (Ha)	Key Precincts	Area (Ha)	Comment
		Mount Druitt	5.1	No take up
		North Dunheved	18.5	
		Riverstone	19.9	
		Riverstone West	87	
		Ropes Creek	185.7	
		Seven Hills	11.3	
		The Raceway Precinct	1.6	No take up
Holroyd	60	Greystanes	44.5	
		Smithfield North	11.5	No take up
Parramatta	21.3	Camellia/Rosehill	17.9	No take up
The Hills	170.6	Annangrove	110.7	
		Box Hill	57.7	
Total	2,927.5		2,492.8	

Based on an analysis of the ELDM, approximately 2,270ha of real zoned employment land in suitable industrial estates is available, comprising.

- 932ha located within WSEA.
- 377ha in the North West Priority Growth Area (NWPGA), including Marsden Park Industrial, Box Hill, Riverstone and Riverstone West precincts.
- 167ha in the South West Priority Growth Area (SWPGA), including Turner Road, Oran Park, Leppington, Austral precincts.
- 30ha in new estates such as Casula Cross Roads (17ha) and Warwick Farm Racecourse (13ha).
- 987ha remaining in the existing estates listed in Tables 1 and 2 (excluding the areas identified above).



Image: Governor Macquarie Drive, Warwick Farm

PHYSICAL CONSTRAINTS

Of the actual 2,270ha of zoned employment lands, a large amount is located within new estates, including the WSEA and the Western Sydney Priority Growth Areas – 1,476ha (or 60%). A large amount of potential employment land within these precincts will be lost to constraints (in particular vegetation and flooding in Western Sydney), services, utilities and infrastructure. Table 3 shows that the years of available supply is sensitive to the significance of the constraints. The 1,100ha of employment lands located within WSEA and SWPGA are likely to be significantly eroded by constraints, utilities, services and infrastructure.

Table 3 – Potential Loss of Employment Lands to Constraints in New Estates

	Area (Ha)	Years of Supply (@ 200ha pa)	Supply Standard
Undeveloped zoned land not serviced	2,270	11 years	8-10 years
25% lost to constraints, services, utilities and infrastructure	2,270 less 25% = 1,703	8.5 years	8-10 years
50% lost to constraints, services, utilities and infrastructure	2,270 less 50% = 1,135	5.5 years	8-10 years

PLANNING CONSTRAINTS

In addition to the physical and infrastructure constraints that might apply to the land, there are planning constraints that reflect the time it takes for a development site to obtain planning approval to the point where servicing required to support development can progress. Planning issues that impact on the timely and efficient development of zoned but un-serviced employment land, include:

Fragmentation – consolidation of multiple small land holdings can be a major factor in the time taken to develop a scheme for planning approval.

Negotiation of Access Arrangements – often requiring liaison with both the local Roads Authority (normally the local council) and the State Roads Authority (Roads and Maritime Services). In WSEA, the Broader WSEA and the Priority Growth Areas, there is often a complex layering of State and local road infrastructure requirements.

Boundary Issues – development of new industrial estates will generally create a new interface between existing residential or rural-residential properties and the new industrial land uses. This can create complex assessment issues and a further erosion of the development potential for the land via the need for additional set-backs and/or boundary treatments (such as noise walls and landscaped buffers).

Major Infrastructure Uncertainty – delays in the delivery of major infrastructure projects can impact on the ability for a developer to progress through the planning approvals system until the major infrastructure projects can be defined or corridors preserved. In this context, rezoning of employment land without previously (or concurrently) identifying and providing for the major infrastructure within or through a precinct can lead to the temporary quasi-sterilisation of zoned land.

MAJOR INFRASTRUCTURE UNCERTAINTY CASE STUDY: THE WSEA PRECINCT KNOWN AS SOUTH OF THE SYDNEY WATER WARRAGAMBA PIPELINE

This precinct comprises some 650ha of land zoned IN1 predominantly held in four large land holdings. The land was zoned IN1 General Industry in August 2009. Of the four major land holdings:

First Land Holding – secured a development approval and undertaken substantial industrial development as part of a 61ha site known as Oakdale Central. It is noted that this site was subject of a planning application under Part 3A submitted before the land was rezoned to industrial. It is also noted that the Oakdale Central site is the least constrained site within the precinct as it is already connected to the existing road network within WSEA and is well separated from residential land uses. The Concept Plan approval was granted in 2009 and the site is now perhaps 50% developed.

The second stage of Oakdale (Oakdale South), is currently under assessment by the Department of Planning and Environment. The 117ha Oakdale South site will generate some 70ha of developable land and 35ha of non-developable land – indicating that approximately 30% of the site has been lost to utilities, infrastructure and other physical constraints.

A third stage of Oakdale (Oakdale West) has just commenced the planning process.

Second Land Holding – secured a Concept Plan approval for a 100ha estate at Horsley Park. The initial application for this site was made in August 2010 and the determination was not granted until October 2013 indicating the planning constraints associated with the proximity of the site near existing residential properties. The approval for the site also established a process for addressing the boundary issues, eventually resulting in the rezoning of 35ha of IN1 zoned land to RU4 Primary Production Small Lots in June 2016. The associated project approval provided for the construction of one 27,000 sqm warehouse building on a 7ha portion of the site.

Third Land Holding – currently undergoing a development assessment process with the Department of Planning and Environment for a masterplan of a 50ha site. The initial application for the development of this site was made in May 2012 – the process has extended over 5 years long and approval time continues to remain uncertain. The delays relate predominantly to the location of the Southern Link Road on part of the site which has impacted the access arrangements resulting in complications associated with infrastructure contributions and assessment of traffic impacts.

Fourth Land Holding – is subject of a development application to Fairfield Council for subdivision, lodged in December 2013 and which remains undetermined.

With consideration of the above since the rezoning of 656ha of land south of the Sydney Water pipelines, only 126ha have benefited from in-principle planning approvals – with 68ha of development approvals (for construction). This equates to 10% of the rezoned land has secured development consent for employment generating development in the 8 years since rezoning occurred. Additionally, there have been significant access and servicing constraints in relation to delivery of these lands subsequent to the issue of development consent.

LONG-TERM STRATEGY IDENTIFIED LANDS

Additional Strategy Identified Lands (i.e. land not yet zoned) of 6,972ha is focussed almost entirely in the Broader WSEA and the SWPGA, with the remainder at the Moorebank Defence Lands and Glen Lee.

- **BWSEA = 4,537ha.** Currently occupied by Kemps Creek landfill, and will be substantially eroded by transport infrastructure for airport (including the M9 and M12 road/freight corridors, and a possible future passenger railway line) as well as flooding and vegetation constraints.
- **SWPGA = 1,950ha.** Part of these lands are already occupied by Ingham's, Boral and other existing uses, and will be eroded by transport infrastructure for airport (including the M9 and M12 road/freight corridors, and a possible future passenger railway line), as well as other utilities and services.
- **Moorebank = 336ha.** It is expected that this will contain the Commonwealth Intermodal Terminal.
- **Glen Lee = 150ha.**

A large amount of future employment land within the BWSEA and new industrial precincts of the SWPGA will be lost to constraints – vegetation, flooding, riparian corridors, and major utilities and infrastructure. A strategic constraints analysis has been carried out on the strategy identified land located within the Western Sydney Priority Growth Area (comprising land formally part of the BWSEA and the South West Growth Centre). It is foreseeable that almost 40% of the strategy identified land within the BWSEA and SWPGA will be lost to constraints (vegetation, riparian corridors and flooding) and major infrastructure. These constraints have been overlaid in the map opposite.

Table 4 shows the impact on the ability of developable employment land to meet the strategy identified supply standard after losses to constraints are factored in, clearly indicating that these losses drastically reduce the long-term forecast supply.

Table 4 – Potential Loss of Employment Lands to Constraints in New Estates

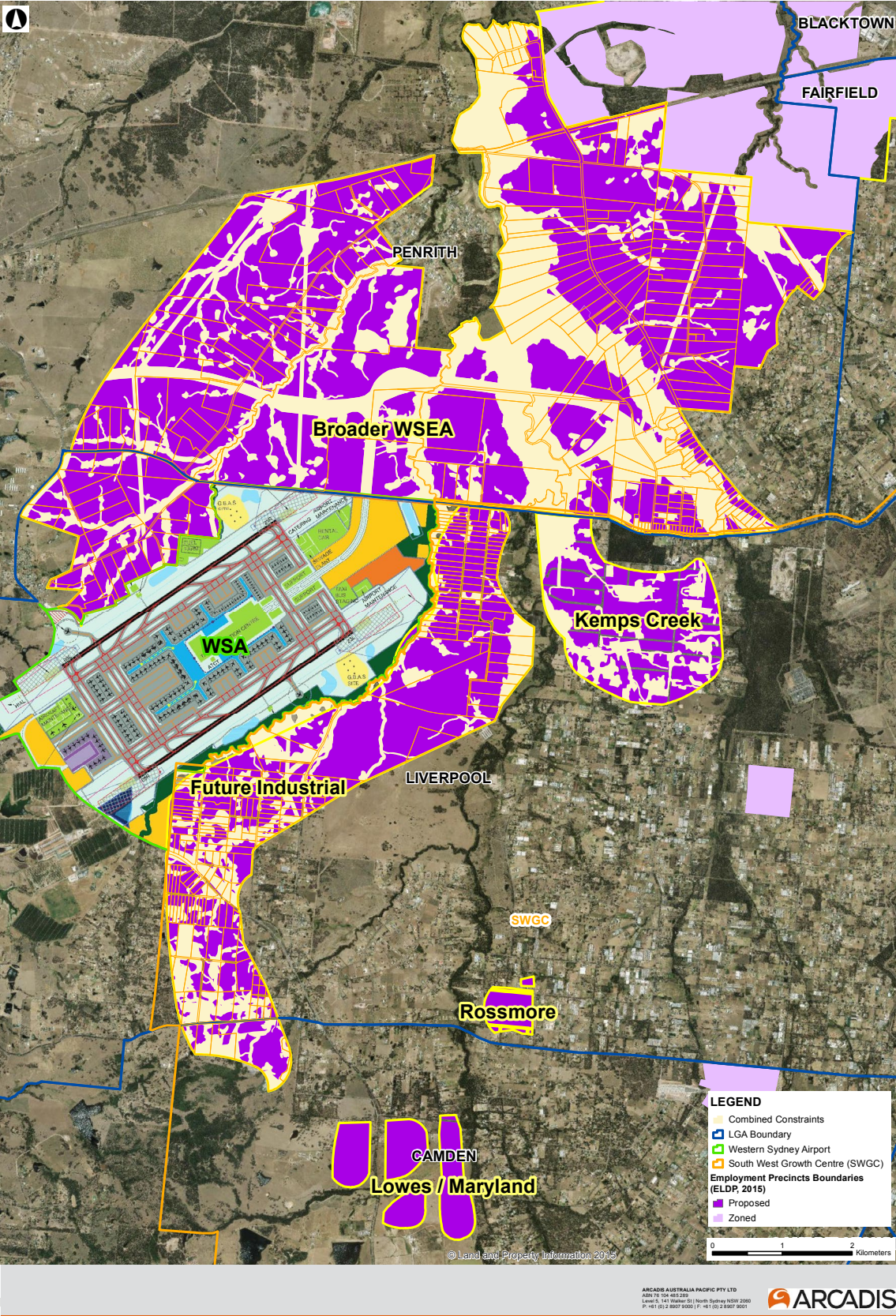
	Area (Ha)	Years of Supply (@ 200ha pa)*	Supply Standard
Strategy Identified Lands	6,285	31 years	20 years
25% lost to constraints, services, utilities and infrastructure	6,285 – 1,571 (25%) = 4,714	23 years	20 years
50% lost to constraints, services, utilities and infrastructure	6,285 – 3,142 (50%) = 3,143	15 years	20 years



* Excludes fragmentation.

Image: Ingleburn Distribution Centre

Map: Sydney Employment Lands Analysis



Map Source: Arcadis Australia Pacific Pty Ltd

BUSINESS PARKS

The ELDM identifies 15 business parks with a total area of over 10ha, seven of which are greater than 50ha.

- **Box Hill (The Hills LGA) – 69ha:** Emerging business park not currently serviced.
- **Frenchs Forest (Warringah LGA) – 56ha:** Mature business park that is fully developed.
- **Leppington North (Camden LGA) – 92ha:** Emerging business park not currently serviced.
- **Macquarie Park (Ryde LGA) – 160ha:** Mature business park with minimal undeveloped land available (14ha). Take up reliant on intensification and refurbishment of existing developed areas.
- **Marsden Park (Blacktown LGA) – 123ha:** Emerging business park with no currently undeveloped serviced land available.
- **Norwest (The Hills LGA) – 157ha:** Maturing business park with minimal undeveloped land available (7ha).
- **Sydney Olympic Park/Rhodes (Auburn and Canada Bay LGAs) – 79ha:** Mature business park that is fully developed.

Whilst there is no established supply standard for business parks, as can be seen in the list above, there is a substantial shortfall in the short-term supply of business park land. Analysis of the historical data indicates an underlying demand for business parks of at least 10ha per annum, meaning that currently available zoned and serviced land within Norwest and Macquarie Park would can meet this demand for only 2 years.

As with industrial employment lands, the delivery of business parks from zoned to zoned and serviced appears to be a fundamental constraint to employment land supply.



Image: Optus Centre Sydney - 1 Lyonpark Road, Macquarie Park

MACQUARIE PARK CASE STUDY: EMPLOYMENT LANDS IN TRANSITION

Macquarie Park is the fourth largest business park in Australia. Development has capitalised on the site's proximity to the central business district, the size of the land available, transaction cost advantages and association with Macquarie University. Macquarie Park has built a reputation as a technology and biomedical precinct, attracting large multinational organisations.

Macquarie University was founded in 1964, triggering development of surrounding land as the Macquarie Park Employment Area. Used initially for warehouse and light industrial uses, an objective for Macquarie Park was to provide opportunities for interaction between industry and the university with a view that a hi-tech industrial area could be developed. Planning policies encouraged technology and biotechnology businesses to the precinct requiring businesses to demonstrate their contribution to research and development.

By the late 1970s, the availability of land, proximity to the central business district and Macquarie University and access to professional labour markets in Sydney's northern suburbs had attracted national and international companies to establish headquarters at Macquarie Park.

Macquarie Park was subsequently connected to the M2 Hills Motorway in 1997 and the Epping to Chatswood Rail Link in 2009.

The task of delivering a future business park like Macquarie Park is too big for a local government. It requires a joint three level government approach with Commonwealth funding, State planning and local government management.



Image: Aerial of Macquarie Park

05 RECOMMENDATIONS

1. Take Up Rates

The ELDM refers to an average rate of employment land take-up across the last 6 years of 162ha per year – prior to this land take-up was between 200ha and 300ha per annum – however, this includes several years of below average growth at a time when domestic manufacturing has been decimated (in part by the unfriendly terms of trade) and when the NSW Government has had a non-existent program to encourage investment in Western Sydney.

The Government has re-focussed in Western Sydney in A Plan for Growing Sydney and substantial catalyst infrastructure development in and around Western Sydney is being planned with significant financial assistance from the Federal Government – including the Western Sydney Airport, the Western Sydney City Deal and associated railway and motorway development.

Recommendation: The Government should aim to be able to accommodate an annual take-up rate of 200ha – 300ha and set a minimum target take-up rate for serviced employment land in NSW of 200ha per annum should be adopted for calculating adequacy of supply.

Further, the NSW Government should investigate programs that encourage the development of employment generating development in Sydney, thereby increasing the competitiveness of Sydney with Melbourne and Brisbane and improving the (existing and future predicted) jobs imbalance in Western Sydney.

2. Infrastructure and Utilities

Infrastructure is the key to unlocking new employment lands. As is often the case there is a chicken and the egg conflict between infrastructure provision and land release. UDIA NSW contends that long term strategic planning which considers land use, infrastructure provision and transport servicing in a holistic approach is required to ensure the strategy identified land can be delivered efficiently and effectively. The release of strategy identified land should include an Infrastructure Delivery Strategy that:

- Provides for the delivery of trunk and lead-in services.
- Identifies major infrastructure corridors, including for roads, rail, pipelines and intermodal terminals.
- Sets out utilities grids for sewerage, water, gas and electricity.
- Provides for sequential upgrades to roads.
- Sets out a long-term framework for funding infrastructure and services.

The new Western Sydney Airport will be a major catalyst for new major trunk and lead-in infrastructure. This infrastructure must be coordinated with planning for the WSEA and the WSPGA to maximise efficiencies and enable the staged delivery of the airport and serviced employment lands. To do otherwise would be a major lost opportunity that would undermine investment for employment generating development.

Delivery of infrastructure in the short to middle term supply of already zoned but un-serviced employment land needs particular attention. The creation of the Housing Acceleration Fund by the NSW Government has played a critical role in boosting the delivery of new homes. UDIA NSW contends that a similar fund targeting employment lands could have the same type of impact on supply.

Recommendation: The Government should establish an Employment Lands Acceleration Fund with \$500 million that finances catalyst trunk and lead-in infrastructure aimed at unlocking employment land in Greater Sydney.

3. Land Release Program

Currently, there is no have a system in place where a short fall of employment land can be properly identified and once identified new zoned and serviced employment lands appropriately delivered.

The ELDM identifies a suitably large amount of 'strategy identified' employment land however, there is no related Government policy for the release (i.e. re-zoning) of this land or the servicing of this land. This is particularly important given the immediate short-term supply shortfall and the long lead terms evidenced in relation to the development of land following its rezoning.

The current land release process is unclear and lacks certainty. This makes it difficult for the private sector to invest and government agencies and infrastructure providers to arrange their capital works programs to effectively provide, prioritise and fund required infrastructure to release and unlock land.

The employment lands release program should focus on the following objectives:

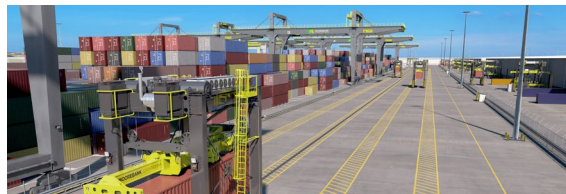
- Employment Attraction
- Management and coordination of infrastructure delivery
- Timely, transparent and affordable land release

Recommendation: The Government should establish a Land Release Program to provide clarity, transparency and investment certainty for industry and delivery agencies.

4. A Western Sydney Champion

Western Sydney needs a champion. Western Sydney is the fastest growing region in the country, within 30 years it will grow to be a city the size of Adelaide. UDIA NSW contends that in order for Western Sydney to responsibly manage its growth there needs to be a dedicated delivery authority which is responsible and accountable for this growth.

Recommendation: Establish a Western Sydney Delivery Authority to handle the growth and prosperity of the region.

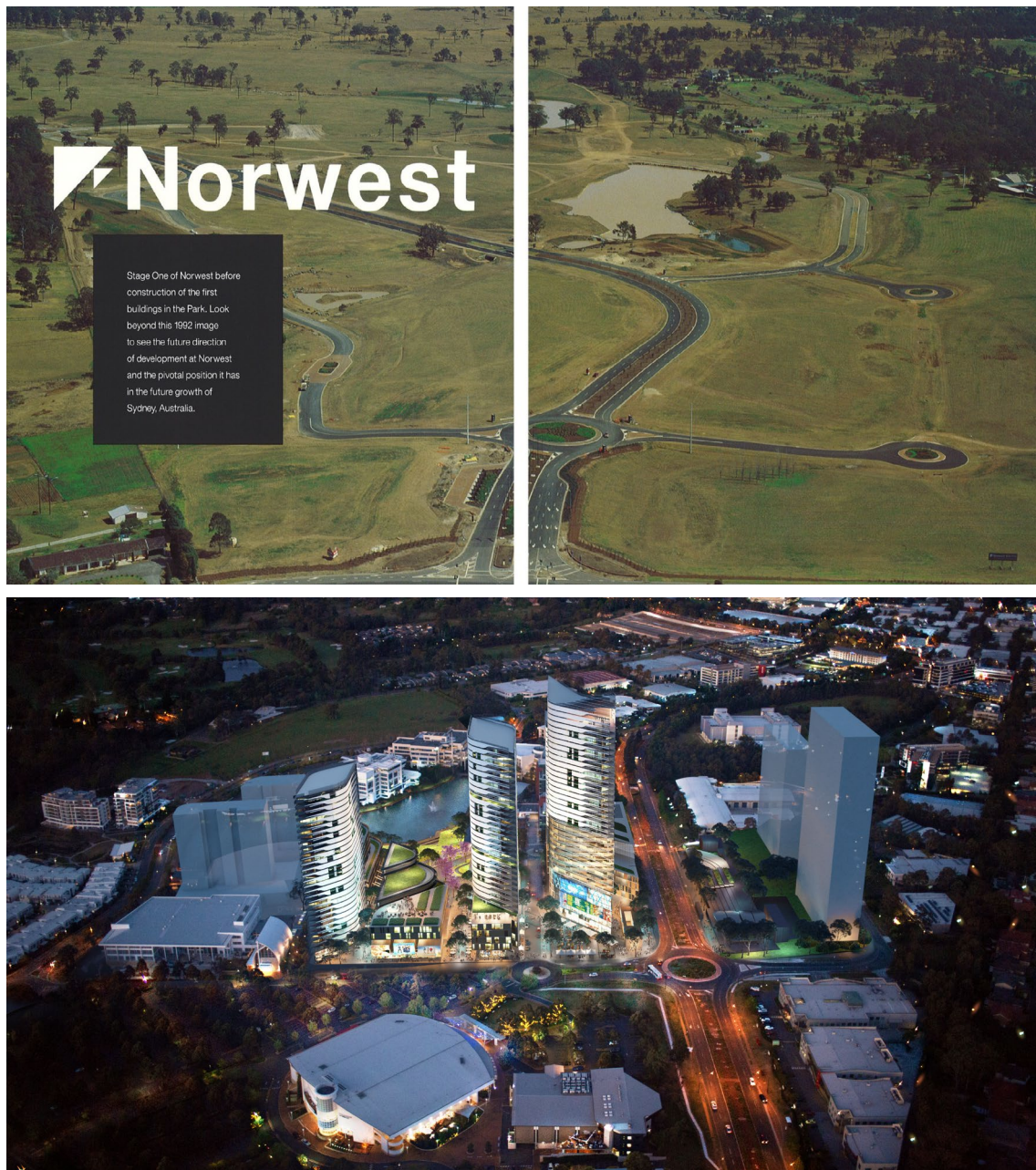


Images: Yennora Distribution Centre

5. Land Use Flexibility

It is important that land use is not too prescriptive as it tends to bring about limitations and a focus on what cannot be done with land. Norwest Business Park is a case study which should be followed when planning for employment lands in Western Sydney. The flexibility in Norwest Business Park's zoning allowed for the evolving market demands and the impact global trends have had on land use and density requirements to be accommodated. Updating and renewal of Norwest Business Park would have been considerably more difficult had it been subject to a rigid, traditional zoning control.

Recommendation: Land in and around WSEA should be subject to a flexible zoning arrangement to allow for multiple and mixed uses to improve amenity outcomes, optimise the employment generating potential and increase delivery efficiencies.



Images: Norwest Business Park circa 1992 & The Future of Norwest Business Park (Marketown Planning Proposal)

06 ABOUT UDIA

Officially established in 1963, UDIA NSW has grown to become the leading industry body representing the interest of the NSW property development sector.

UDIA NSW aims to secure the viability and sustainability of the urban development industry for the benefit of our members and the communities they create by advocating for more liveable, affordable and connected cities.

We represent the leading participants in the industry and have more than 500 member companies across the entire spectrum of the industry including developers, institutional investors, third party logistics providers, financiers, builders, suppliers, architects, engineers, lawyers, town planners, academics and state and local government bodies. A quarter of these members are based in regional NSW.

UDIA NSW members are represented by an elected Council of 13 leading industry practitioners who are responsible for the strategic direction of the Institute. UDIA NSW also has an extensive committee and regional chapter structure that involves more than 300 of the development industry's key stakeholders in policy formulation.

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