Attachment A1

City of Sydney Enterprise Area Review



CITY OF SYDNEY ENTERPRISE AREA REVIEW





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EXECUTIVE SUMMARY

Introduction

SGS Economics and Planning has been commissioned by the City of Sydney (the City) to undertake a strategic review of the City of Sydney Enterprise Area, comprised of the IN1 General Industrial, B5 Business Development, B6 Enterprise Corridor and B7 Business Park zones.

The previous strategic framework for the Enterprise Area was set in the City's *Employment Lands Strategy 2014-2019*, which was informed by SGS's *Employment Lands Study (2013)*. The review is intended to inform the preparation of an updated *Enterprise Area Strategy* by the City. The updated strategy will guide future land use decisions and policies, including any more detailed precinct-specific work.

Since the creation of the Employment Lands Strategy 2014-2019, the strategic planning policy landscape has changed substantially. The primary shift in direction relevant to the Enterprise Area is the recognition of the need to protect industrial and urban services uses throughout inner Sydney, including in the City of Sydney. As a result, the Greater Sydney Region Plan and Eastern City District Plan direct that *all* enterprise land to be protected from conversion to residential or mixed use. By contrast, in the past some policies have used the imperatives of increasing housing density in established parts of cities and economic transition to justify the progressive redevelopment of formerly industrial areas.

Current and future economic role of the Enterprise Area

Alignment with previous strategic direction

The findings of this review strongly support the previous vision for the Enterprise Area. In its 2013 *City of Sydney Employment Lands Study*, SGS recommended facilitating a range of businesses and sectors, with 'mixed business areas' that were translated into the current B6 zone

Economic and floorspace profiling shows that the diversity of activity and sectors in the Enterprise Area has increased between 2012-2017, and that it is one of the most diverse employment areas in Greater Sydney. This diversity is a key economic strength feeding a virtuous cycle of economic development and links to other parts of the Global Economic Corridor. In this sense, **previous strategic directions are working as intended**. However, as part of the diversity of floorspace in the Enterprise Area it is important to ensure that truly industrial uses continue to be accommodated, as well as premises combining flexible industrial floorspace with office space.

The Central Enterprise District

SGS's research highlights the Enterprise Area's role as Sydney's 'Central Enterprise District' (CED), the industrial/enterprise equivalent of a Central Business District. This includes features such as:

- Excellent access to the labour market (the best of any Enterprise Area)
- Agglomeration of inter-dependent high-value businesses who value the central location, increasing productivity
- Very high property rents, leading to diversification in use and relocation of those without a strong rationale for locating in the District
- Proximity and supply chain relationships to a wide range of economic anchors



The role and presence of the CED is critical in supporting the CBD, as well as a network of smaller centres and industrial and enterprise areas, through a range of supply chain and urban services relationships. As economic development continues, increased density of employment through multi-storey industrial and commercial development may occur, and smaller boutique parts of larger industrial businesses may appear.

Economic contribution

The Enterprise Area has a gross value add over half that of Parramatta CBD and surrounds (approximately \$3.7 billion vs \$7.1 billion). This comparison highlights the strong direct economic contribution of the Enterprise Area. However, this statistic quantifies only the direct economic output of the Enterprise Area, rather than its vital role within the supply chain and value chain of the broader economy. The broader economic functions of the Enterprise Area include:

- Accommodating critical urban services that underpin broader productivity and liveability
- Accommodating strategic industrial uses with a compelling economic argument for their location, for example highly productive freight and logistics uses that need to be near Sydney Airport and Port Botany and that support a high-density residential catchment
- Accommodating businesses that need diverse or semi-industrial floorspace but have important supply chain or business to business links to the CBD and other nearby employment areas
- Providing space for businesses that wouldn't fit in office precincts either through their price sensitivity or use profile (particularly creative businesses), but that make a significant economic contribution and benefit from agglomeration economics, excellent access to labour markets and the cultural milieu of the inner-city
- Providing relatively affordable and diverse floorspace (compared to office districts) to accommodate smaller businesses as they evolve
- Providing services to the local population in high density residential areas although this use must be balanced against the need for other employment functions
- Providing space for commercialisation of innovation and for emerging high-value industries like boutique advanced manufacturing.

This wide-ranging set of economic functions support the continued retention and diversification of the Enterprise Area, which is a thriving, diverse, dynamic and creative modern employment precinct.

Changing and diversifying land use profile

Between 2012-2017 employment in the Enterprise Area shrank by 2% while total floorspace grew by 6%. At the same time, property prices and rents increased substantially, with the South Sydney industrial land market now significantly more valuable, and therefore expensive, than any other industrial land market in Australia. In combination, these factors indicate that a decline in employment in the Enterprise Area is a result of a shifting industry and space use profile rather than a decrease in economic performance. Increasing land prices and rents illustrate the economic success of the Enterprise Area and the intense competition for space within it.

There has been a broad diversification in the industry profile in the Enterprise Area between 2012-2017. There is seen in a notable shift in the employment and floorspace profile from traditionally industrial sectors like manufacturing towards office and knowledge based sectors as well as population services, although manufacturing, transport and logistics and other traditionally industrial sectors remain an important part of the economy. Economic



diversification and growth is likely to be driven by multiple spatial drivers including Green Square and proximity to the CBD and surrounds (driving growth in office and knowledge based employment), Port Botany and Sydney Airport (creating demand for logistics and industrial uses) and the innovation community.

Different trends in employment and floorspace change are visible in different industries, with factors like automation increasing floorspace per worker in transport and logistics while predominately office-based industries use much less space per employee. Pressure for redevelopment of sites with an industrial character for office-based use is likely to continue in the future as employment in high-value add sectors increases. Population growth will also place increasing pressure on traditionally industrial uses by increasing demand for population-serving businesses.

The importance of economic diversity

Economic diversity is one of the key and emerging economic strengths of the Enterprise Area. The Southern Enterprise Area has a greater diversity of industries present than the Parramatta CBD and specialised centres such as the Randwick Health and Education precinct.

Economic diversification creates an enterprise ecosystem which enables value-adding relationships through agglomeration and business supply chains across sectors. These value adding relationships reinforce competitiveness and growth, fuelling diversity and improving accessibility of labour, suppliers and customers from the Enterprise Area. However, this virtuous cycle requires a diversity of floorspace in the first instance and a sustained supply of floorspace to continue to support the high value industries that benefit from location within the Enterprise Area.

The competitive position of the Enterprise Area

Modelling shows that the Enterprise precinct's location and access to public transport gives it by far the best competitive position of any of Sydney's industrial or mixed enterprise precincts in terms of its access to labour market and other supplier and customers. This advantage applies across a range of sectors from traditionally industrial, through population serving and to knowledge-based jobs.

Spatial factors that will influence the future development of the Enterprise Area include:

- The Enterprise Area is uniquely positioned near the Sydney CBD and City Fringe business area centred around Surry Hills and Camperdown which contains a wide range of creative businesses. This creates opportunities for businesses in the Enterprise Area with relationships with business in the CBD and City Fringe. There are signs of movement of offices south from Sydney CBD to the City South market, and into the Enterprise Area. This trend most benefits North Alexandria near Green Square Station, due to the excellent public transport accessibility.
- Population growth in and around Green Square will drive demands for demand for population-serving functions in the Enterprise Area such as restaurants, cafes, gyms and services. Parts of North Alexandria, South Alexandria and Rosebery are nearest to Green Square, where population growth is expected.
- The proximity of the trade gateways of Sydney Airport and Port Botany create strong competitive prospects for the Enterprise Area in particular sectors. WestConnex will increase accessibility to and from other Metropolitan centres and precincts. In combination these factors will drive trade and logistics uses most strongly in the South Alexandria Industrial Precinct which is located next to the WestConnex interchange. However, WestConnex will also shorten journey times to Sydney CBD from other industrial precincts, recreating some of the competitive advantage of the Enterprise Area.
- Education institutions surround the precinct and create opportunities for innovative businesses to locate in the Enterprise Area. Camperdown is located next to the



University of Sydney, but the effect of this spatial driver otherwise is likely to depend on the kind of floorspace needed to commercialise new products and the availability of this space in different precincts.

Land use and economic trends and drivers

The Enterprise Area is impacted by global, national and metropolitan trends in employment and industrial land use in addition to local factors. This includes macroeconomic effects as well as major, city-shaping infrastructure projects. Relevant trends and drivers are summarised below.

Locational trends and drivers

LOCATIONAL TRENDS AND DRIVERS IMPACTING LAND USE IN THE ENTERPRISE AREA

Local trend or driver	Industry-specific effects on Enterprise Area	Commentary
Locational sensitivities Many businesses need to be in the Enterprise Area to be near suppliers, clients, a specialised labour pool or specific infrastructure (e.g. Sydney Airport)	A range of industrial sectors need to be in this area to be competitive.	Displacement of industrial businesses for offices could compromise urban services and supply chains.
Population growth Continued population growth drives demand for certain industries.	 ↑ Food and drink ↑ Retail (especially large format) ↑ Other population services (leisure etc) ↑ Related urban services (e.g. recycling, vehicle servicing, last mile logistics) 	Pressure will increase as population continues to grow and the service sector continues to grow in importance.
Agglomeration of knowledge- intensive industries Businesses tend to cluster together to be able to take advantage of agglomeration	↑ Professional and business services ↑ Finance, property development etc ↑ Some creative industries	There are signs of movement of offices south from Sydney CBD to the City South market, and into the Enterprise Area.
Increased global competitiveness and economic growth in Sydney CBD and nearby	↑ Data centres and businesses in supply chain of knowledge-intensive industries in Sydney CBD and surrounds	The Southern Enterprise Area is becoming a key location for data centres supporting the financial industry in Sydney CBD.
Med tech and bio-tech Australia is specialised in the med-tech and bio-tech sectors, which are growth sectors	↑ Medical and bio-tech, particularly in Camperdown	This driver is principally related to proximity to anchor institutions and precincts, including innovation precincts, hospitals, and innovation incubators like the Cicada Incubator.
Growth in aviation sector There is long-term growth in passenger numbers and air freight through Sydney Airport (until COVID-19)	↑ Freight and logistics ↑ Airline supply chains ↑ Hotels and accommodation	
Shifts in the profile of established industrial areas The economic composition of industrial and enterprise areas is changing	 ↓ Large scale manufacturing, freight and logistics moving West in Greater Sydney ↑ Diversification in established precincts in Eastern Sydney 	This is a Greater Sydney-wide trend but is particularly notable in the Enterprise Areas due to very high land prices and competition for space.



Broader trends and drivers

BROADER ECONOMIC TRENDS AND DRIVERS IMPACTING LAND USE IN THE ENTERPRISE AREA

Trend or driver	Industry-specific effects on Enterprise Area	Commentary
Advanced manufacturing There is an opportunity for the manufacturing sector to transition a focus on adding higher value in the supply chain	↑ Small-scale manufacturing and R&D	Advanced manufacturing may not be able to compete on price for space in the future.
Effect of globalisation on trade and changing distribution pathways Globalisation has increased competition from interstate and offshore for non-location specific industrial functions	↓ Large-scale manufacturing	
Emergence of online retail Online retail is booming, with related industrial land uses needing to be near population centres	 ↑ Last mile distribution centres ↑ Smaller warehousing and distribution ↑ Dark kitchens and other emerging uses 	The need for these land uses is likely to continue to increase as the online retail market share grows, and the population grows.
Technological change A range of new industries emerging with the potential for future jobs growth, such as the fintech sector and biotechnology.	↑ Emerging industries (e.g. Fintech, biotech) and associated supply chains → Changes in space use and need for employees in established industries (e.g. automation decreases employment density)	
Rise of creative industries Many creative industries locate in enterprise and industrial areas, but inner- city space for creative industries is becoming scarcer over time.	↑ Creative industries	Creative industries often need affordable rents and may be displaced by increasing property prices or office development.
Circular economy Increased awareness of environmental issues has increased awareness of the need for circular supply chains that recover and repurpose waste products.	↑ Opportunities for new industries ↑ Urban services like depots	
Multi-storey warehousing Multi-storey warehousing is often discussed as a logical next phase in the industrial land market.	→ Most appropriate for freight and logistics sectors	This is a potential direction to accommodate certain industrial sectors at higher land use density. Past studies have shown multi-storey industrial use to be mostly unfeasible in Australia, but South Sydney is cited as a logical location for multi-storey warehousing, given current land constraints and a limited supply of available sites

COVID-19

The COVID-19 crisis has reshaped some of the established narrative that underpinned urban economic development in Sydney. Potential impacts on the Enterprise Area include:

- Increasing the awareness of the need for local supply chains for critical goods, with industrial land needed to facilitate local production and distribution,
- Flexibility is needed to allow precincts and firms to pivot to respond to changes to working environments and methods,
- Demand for land may be reduced by an overall reduction in economic activity



 Demand for office space may decrease with people working from home more often, but more office space may be needed per employee to allow increased space between people

Irrespective of the short-medium term implications of the COVID-19 pandemic and associated economic shock, the trends, drivers and principles laid out in this report will continue to apply and form a good basis for strategic planning over the longer term. Similarly, while some kinds of floorspace demand are likely to be reduced, the modelling conducted in this report still forms a solid basis for planning over a 20-year timeframe.

Floorspace demand and capacity

Demand modelling

SGS modelled the future demand for floorspace in the Enterprise Area based on forecast employment growth and the current relationship between land use, employment and industry sector.

The accuracy of this modelling is limited by the difference between recent employment growth rates and projections for the Enterprise Area. Given that projections are based on Greater Sydney-wide economic trends, they may not reflect the specific economic context of the Enterprise Area. They instead provide a *baseline* demand projection showing the floorspace implications of natural industry growth without significant levels of industry movement to or displacement from the Enterprise Area.

Given the results of employment, market and economic research, it is likely that there would be demand for much higher amounts of floorspace in the Enterprise Area than suggested by the baseline analysis or than could be accommodated in a reasonable development scenario.

Capacity modelling

Floorspace capacity in the Enterprise Area has been modelled under three scenarios:

- City of Sydney's Development Capacity Study 2019 (the DCS) results
- High scenario: An upper limit for capacity with all sites included, reflecting the
 potential for exclusion criteria in the DCS to remove sites that may be able to
 redevelop.
- Medium scenario: The capacity if sites unlikely to be feasible to develop are excluded from the DCS results.
- Low scenario: The capacity if a lower FSR (generally 1:1) instead of permissible FSR is
 used and sites unlikely to be feasible to redevelop are excluded from the DCS results.
 The lower FSR reflects the approximate maximum realisable for industrial floorspace
 without multi-level industrial development.



Capacity and demand alignment

FLOORSPACE CAPACITY AND DEMAND (SQM)

Floorspace demand			
	Broadly industrial land use categories	Office, retail and other land use categories	Total
Demand	314,467	150,147	464,614
Vacant floorspace	130,131	31,355	161,486
Remaining demand (Demand – Vacant floorspace)	184,336	118,792	303,128
Floorspace capacity			

Floorspace capacity

	Broadly industrial BLCs	Office, retail and other BLCs	Total
Capacity - low	69,499	197,422	266,921
Capacity - medium	274,630	369,182	643,812
Capacity - City of Sydney results	543,283	555,503	1,098,786
Capacity - high	1,258,522	883,805	2,142,326

Demand modelling shows increased floorspace demand in the future, for broadly industrial as well as office, retail and other types of land use. As noted above, this modelling only provides a baseline may underestimate demand, particularly in growing industry sectors.

The low capacity scenario is considered the most likely capacity scenario without substantial changes in building types including widespread adoption of multi-storey industrial (which would only be appropriate for some industry sectors). Under the low scenario, comparison of supply and development capacity shows that there is a shortfall of around 115,000 sqm of industrial floorspace (and so in land on which floorspace can be developed). As some of the currently vacant floorspace may be not fit for purpose (leading to its vacancy), the actual figure may be higher. These findings highlight the need to retain the capacity for industrial uses where possible.

There is enough capacity in the office, retail and other BLCs under this modelling. However, there are likely to be opportunities to capture more demand for office use around Alexandria North where there is a developing commercial submarket and developer interest.

Recommendations

Recommendation	Justification		
Economic role of the Enterprise Area	Economic role of the Enterprise Area		
Reinforce current planning approaches and visions which encourage a wide diversity of businesses and employment in the Enterprise Area	Recent economic trends are in line with the previous vision and reinforce the economic strength and competitive offer of the Enterprise Precinct as a location accommodating a wide range of businesses, including industrial uses.		
Continue to review planning controls to provide flexibility in land uses to accommodate emerging enterprise, innovative and light industrial uses that reinforce the economic value of the Enterprise Area to the District and Region	Flexibility to accommodate emerging land uses is critical to support the continued evolution of the Enterprise Area but should be balanced against the need to retain and not displace industrial uses in parts of the Enterprise Area.		



Recommendation	Justification
North Alexandria (B7 Business Park Zone)	
Create a business core with higher-rise office buildings in a limited extent concentrated around Green Square Station. The current B7 land zone is appropriate for this role.	Recent employment trends and development interest show that demand for commercial development will likely exist in the future and exceed modelled base-case demand.
	Accommodating a concentrated higher-density business core would capture some of the office demand of businesses displaced from areas closer to Sydney CBD, reducing the pressure for redevelopment and likely industrial displacement elsewhere in the Enterprise Area.
	The business core should be focused on commercial and innovative uses, and should not seek to replicate the broader range of retail and service functions that would be expected in a traditional town centre, as this would detract from the focus of those activities in Green Square's mixed use core.
Create a creative precinct providing small offices and other diverse employment spaces north of the business core	A creative precinct between the business core and the northern boundary of the Enterprise Area on McEvoy Street would provide flexible floorspace for high value creative industries. This part of the Enterprise precinct retains an industrial feel, yet benefits from good proximity to Green Square Station and is therefore attractive to businesses that place a premium on employee accessibility.
Retain the existing use profile and facilitate a more gradual transition in uses in the remainder of the Precinct, including boutique industrial uses and smaller scale offices	It is unlikely that the whole of the North Alexandria Precinct will be needed to provide capacity for redevelopment in the short term. It would be appropriate instead to allow current uses to continue in the part of the Precinct outside of the business core and future creative precinct, with a gradual transition of uses, without being highly prescriptive as to the future use.
Undertake further urban design work to inform changes to planning controls which facilitate development of a business core around Green Square. The extent should be limited to concentrate traditional commercial activity and retain a mix of uses elsewhere in North Alexandria	Urban design is needed to ensure that a cohesive and permeable business core is developed with a pleasant public domain supported by appropriate scaled buildings.
Create a night-time entertainment district along Wyndham Street, Hiles Street, McCauley Street and Stokes Avenue, as previously announced by the City of Sydney	This block is separated from surrounding residential uses and other uses sensitive to noise but is also easily accessible from residential areas. It has a high level of amenity given the fine-grain industrial architecture and street trees. These features would lend themselves well to nigh-time entertainment uses which utilise formerly industrial spaces such as micro-breweries.
	Provision of night-time entertainment uses in this precinct would also increase the amenity of the adjacent proposed creative district for businesses.
Protect the fine grain industrial heritage along Wyndham Street, Hiles Street, McCauley Street and Stokes Avenue using design controls	The fine-grain industrial architecture provides a high level of amenity and is relatively unique in this area.
Improve road/pedestrian permeability to train stations from across the precinct, subject to further urban design study	It is difficult to walk from the northern to the southern parts of the North Alexandria precinct. Adding road or pedestrian connections as part of any redevelopment would improve access, particularly to the fine grain industrial premises to the north, particularly along McCauley Street and Hiles Street.
Retain the current B7 zone in North Alexandria as well as the currently permissible uses	The objectives and implementation of the B7 zone corresponds well with the recommended vision for this precinct. The B7 zone currently permits a wide range of uses, including office premises. Expanding this list to include retail premises (for example) would risk reducing the retail focus on the Green Square Town Centre.



Recommendation Justification

South Alexandria & Rosebery (B7 Business Park Zone)

Retain the vision for this precinct to provide an evolving range of employment uses including creative businesses, some higher density employment and some industrial uses.

This vision reflects the current evolution of the precinct, its amenity, its potential land use conflict between residential and employment uses.

Consider this precinct as a future creative employment

Retain the current B7 zoning and planning approach in The B7 zone provides a high degree of flexibility regarding use and accurately

encodes the City's vision for the future evolution of these precincts.

the South Alexandria & Rosebery Precinct

The emerging mix of sectors and uses is consistent with a vision for this area as a creative mixed enterprise precinct including a range of population services. Given that evolution is already occurring, and the area is performing well (there appear to be relatively few vacancies), prescriptive intervention is unlikely to be needed at this time.

Retain the industrial heritage of the South Alexandria & Rosebery Precinct as part of any proposed redevelopment

Existing large warehouse and former industrial buildings in Rosebery provide a distinctive local character and a high degree of amenity conducive to the evolution of the precinct as a mixed creative enterprise area

Establish principles for redevelopment of key sites which are currently vacant (notably the block bounded by Hayes Road, Dunning Avenue, Harcourt Parade and Mentmore Avenue) including:

There are some remaining large industrial and enterprise uses in this precinct that may redevelop in the future (including the highlighted sites).

- Provision of diverse employment space Accommodating creative uses and small
- Provision of affordable housing

It is recommended that the City consider North Alexandria as a higher priority area for enterprise development and evolution through master planning than this precinct. However, redevelopment has the potential to catalyse the evolution of this precinct as a home for creative industries. Creating principles that could underpin a constructive relationship with development proponents would respond to this opportunity.

Botany Road Corridor

businesses

Retain existing permissibility of apartment development above the ground floor, but require provision of flexible employment floorspace rather than retail floorspace at the ground floor level

Many of the properties along Botany Road have already been developed for the purpose of shop top housing so removing permissibility for this development would likely create limited employment capacity. The ability to develop has likely already been factored into land prices.

There is unlikely to be demand for retail premises all the way along Botany Road, and they would not form a cohesive centre. Retail energy in this area should rather be directed to the existing centre (around Queen Street and Morley Avenue).

Further apartment development could instead provide extra-high flexible employment spaces accommodating enterprise area demand. This would be preferable to rezoning to B4, which would remove the ability for some kinds of low-impact enterprise area businesses to locate along this corridor.

Camperdown (B7 Business Park Zone)

Plan for use of the Camperdown Precinct in line with the Camperdown Innovation Precinct Plan and Biotechnology Hub being led by Inner West Council with support from the City of Sydney

Given the limited amount of enterprise land in the City of Sydney in the Camperdown Precinct and its strategic relationship with land the adjoining Inner West Council, a coordinated and joint vision and approach to planning for this area is needed.

Additional B7 Zone Recommendations

Retain the existing flexible list of permissible uses in the B7 zone, facilitating land use transition

Flexibility in land zones is essential to facilitating continued evolution of enterprise uses in the B7 zone given the vision for its development. SGS has not identified any particular uses whose permissibility should be changed, but continued monitoring by the City is necessary as new uses emerge that are not yet reflected in land use instruments.

Retain permissibility of affordable housing in the B7 zone, but do not permit any other housing development

Supply and demand modelling showed higher levels of demand for non-office uses than are likely to be able to be accommodated in the Enterprise Area, making it essential to retain land zoned for employment purposes. The



Recommendation

Justification

Enterprise Area has a highly strategic location, making it one of the most competitive locations in Greater Sydney for a variety of employment functions, both industrial and non-industrial. Residential development would likely fragment land ownership, inhibiting future conversion back to employment use, and raise land values above the level at which large-scale employment use of the land use viable.

It is also important to consider potential land needs beyond the 20-year timeframe for the modelling in this study. As laid out in the Greater Sydney Region Plan and Eastern City District Plan, a precautionary approach is needed which recognises that there is likely to be an increased need for inner-city land for a variety of employment generating uses and other critical economic uses in the future, which would be compromised by conversion for residential use.

IN1 General Industrial Zone

Review principal planning controls to facilitate multistorey industrial development (an increase in the allowable building height is likely to be needed in line with existing proposals) Base-case demand modelling showed increasing demand for industrial floorspace in the Enterprise Area. This is likely to include demand for urban services uses, freight and logistics uses driven by accessibility to WestConnex and trade gateways and demand form other sectors.

However, SGS's modelling showed that there's unlikely to be much additional floorspace capacity in this zone unless a step change in development typology occurs. Multi-storey industrial development presents one such change. There are examples of this development elsewhere, and the land values in the Southern Enterprise Area means that development is likely to be close to feasibility.

The design of most multi-storey industrial developments would cater predominately to freight and logistics users. They are unlikely to cater to all users of the IN1 zone.

Retain current IN1 zone and a similar set of permitted uses

Current uses in this zone reflect the industrial land zoning, and any change to a more permissive zone could create a risk of facilitating development with a larger and non-ancillary office component (which is likely to command a higher rent), displacing industrial uses.

B6 Enterprise Corridor Zone

Retain the vision for evolution of B6 zones into mixed business areas, facilitated by flexible land use controls

The B6 zone currently reflects the broad range of land uses that existing in this zone, and the future vision for this zone. The flexibility of the zone is important to allow continued evolution in employment uses.

Recent development in the B6 zone has included mixed industrial and commercial premises which accommodate a diversity of uses. If this changes in the future and there are signs that more predominately office-based uses are proposed, a shift in land use or design controls to facilitate a diverse range of uses (similar to those investigated in case studies in this report) may be necessary. In the meantime, there is a risk that introducing prescriptive controls could restrict economic evolution, and so this action is not recommended at this time.

Do not make broad changes to principal planning controls to facilitate multi-storey industrial development in the B6 zone Large increases in allowable floorspace or height across the B6 zone could create a risk of encouraging pure office development given the permissibility of the B6 zone. This would displace industrial and semi-industrial uses and decrease the economic diversity of this area.



Recommendation	Justification
O'Riordan St Corridor	
Retain the bulky goods and vehicle retailing corridor along O'Riordan Street, but do not expand retailing permissibility to other areas	There is likely to be continued demand for these uses, driven in part by population growth. However, expanding the area that could be developed for bulky goods or car retailing would risk displacing other valuable employment generating uses.
Moore Park (B5 Business Development Zone)	
It is recommended that the current land use planning approach be retained in the B5 zone.	The Moore Park Precinct continues to be used for the purpose of bulky goods retailing, which is aligned with the intention and implementation of the B5 zone. The Precinct is not proximate to a train station and is isolated on the eastern side of South Dowling Street. As the population grows, there is likely to be continuing demand for bulky goods retailing even if the online mode share increases. If a transition of uses away from bulky goods were permitted on this site, the demand for large format retailing would likely need to be accommodated elsewhere. As there are few sites which could accommodate this volume of activity, this demand may need to be accommodated in the B6 zone in the Enterprise Area, displacing other employment generating uses.



1. INTRODUCTION

SGS Economics and Planning has been commissioned by the City of Sydney (the City) to undertake a strategic review of the City of Sydney Enterprise Area, comprised of the IN1 General Industrial, B5 Business Development, B6 Enterprise Corridor and B7 Business Park zones.

The previous strategic framework for the Enterprise Area was set in the City's *Employment Lands Strategy 2014-2019*, which was informed by SGS's *Employment Lands Study (2013)*. The review is intended to inform the preparation of an updated *Enterprise Area Strategy* by the City. The updated strategy will guide future land use decisions and policies, including any more detailed precinct-specific work.

As set out in the Request for Quotation, specific objectives of study include to:

- Provide an evidence base for the preparation of the City's Enterprise Area Strategy, an update of the Employment Lands Strategy 2014-2019. The updated Strategy is to:
 - maintain Sydney's Global City status and contribute to the vitality of the economy;
 - align with the directions, priorities and actions of the Greater Sydney Region Plan and Eastern City District Plan, Sustainable Sydney 2030 and draft City of Sydney Local Strategic Planning Statement;
 - establish an evidence-based long-term strategy for managing growth and change in the City's enterprise lands.
- Quantify, analyse and understand the Study Area's employment, economic and productivity contribution in the context of the metropolitan area, the Eastern Economic Corridor, the Eastern City District, the Green Square to Mascot Strategic Centre and its location between Central Sydney and the international trade gateways of Sydney Airport and Port Botany.
- Understand the individual character of each sub-area, including its unique social and built form characteristics as well as economic function.
- Quantify, analyse and understand how each sub-area has changed and will change over time.
- Quantify, analyse and understand future industry-specific demand, the emergent and dominant industry sectors and clusters, and their functional linkages and dependencies in the Study Area.
- Analyse and understand how factors including infrastructure and planning decisions
 affect locational choice for identified industry sectors and clusters in the Study Area and
 how they influence employment space demand, supply and development context in the
 short, medium, and long term.
- Identify the various risks and opportunities that may arise in the sub-areas, given identified external and internal influences, and outline strategies to best support sustainable economic growth and harness the unique characteristics of business clusters with each sub-area and their surrounds. Strategies may pertain to, but not be limited to, planning interventions, necessary infrastructure provision, built form controls, and so on.
- Identify how the opportunities for the Study Area can be maximised to contribute towards meeting the productivity directions and targets set out in the Greater Sydney Region Plan and Eastern City District Plan and local priorities and actions in draft City of Sydney Local Strategic Planning Statement and Sustainable Sydney 2030.



Document structure

This main body of this review contains the following sections:

- Chapter 2: Policy context, which sets out the existing Enterprise Area planning framework, the broader policy context and potential lessons from other cities
- Chapter 3: Trends and drivers, which discusses spatial, economic and land use shifts occurring in and around the Enterprise Area
- Chapter 4: Market & policy profiling, which contains a portrait of the economy and property market in the Enterprise Area and implications for future planning
- Chapter 5: Stakeholder engagement, which summarises the views of stakeholders consulted in the preparation of this review
- Chapter 6: Competitive positioning, which discusses the competitiveness of the Enterprise Area compared to other employment areas and its competitive roles
- Chapter 7: Sub-precincts, which identifies sub precincts in the Enterprise Area and profiles them at a high level through spatial analysis
- Chapter 8: Floorspace capacity and demand, which contains the results of floorspace capacity and demand modelling for the Enterprise Area
- Chapter 9: Vision and recommendations, which synthesises the previous sections to provide a recommended vision and directions for each sub-precinct

The following appendices contain additional more detailed information:

- Appendix A: Strategy and policy review
- Appendix B: Case studies of enterprise area planning
- Appendix C: Feasibility modelling



2. POLICY CONTEXT

2.1 Existing planning framework

The Enterprise Area includes parts of the suburbs of Alexandria and Rosebery as well as the site of the Moore Park Supa Centa and a small precinct in Camperdown. These areas are zoned with either the IN1 General Industrial Zone, the B5 Business Development Zone, the B6 Enterprise Corridor Zone or the B7 Business Park Zone. These land zones are shown in Figure 1.

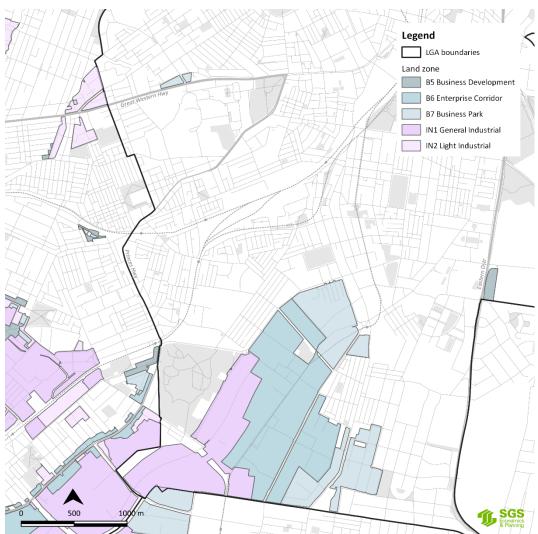


FIGURE 1: ENTERPRISE ZONES IN AND NEAR THE CITY OF SYDNEY

Source: DPIE 2020, Land Zones

Employment Lands Strategy 2014-2019 (2014)

The City of Sydney Employment Lands Strategy 2014-2019 was developed to guide the planning of the Enterprise Area to 2030. This review is intended to inform an update of the Employment Lands Strategy 2014-2019.

For all of the precincts considered, the objectives under the Employment Lands Strategy 2014 - 2019 were to ensure that they continue to be able to accommodate productive uses,



facilitate new business and industry opportunities, provide employment across a range of sectors, and protect strategic industrial activity and urban services.

Strategic actions in the strategy are listed in the table below, along with changes since the strategy was created

TABLE 1: STRATEGY DIRECTIONS IN THE EMPLOYMENT LANDS STRATEGY 2014-2019

Strategy direction	Notable changes since the strategy was created
Advocate a subregional approach to the protection of employment lands	The Greater Sydney Region Plan and Eastern City District Plan have been created and protect all remaining industrial land in the Eastern City District.
	The Greater Sydney Commission has released <i>A Metropolis</i> that Works, a thought leadership paper that discusses the various economically important roles of well-located employment land.
Recognise and address traffic and transport issues in the Southern Employment Lands	WestConnex is likely to exacerbate traffic issues in parts of the Southern Employment Lands, while some public transport connections have been placed under strain by continued population growth nearby.
	Many traffic and transport access issues remain. Among these, Botany Road has continued to function as a major freight route. It has limited capacity and its use for freight causes amenity impacts to residential uses located along and permitted along parts of the corridor.
Recognise and address flooding issues in the Southern Employment Lands	Trunk drainage work has enabled development of the Green Square Town Centre, but parts of the Southern Enterprise Area are still subject to flooding.
Improve the public domain in the Southern Employment Lands	The City continues to invest in the public domain. The number of office workers in the Southern Employment Lands has continued to grow, increasing the likely demand for a high level of amenity.
Implement planning solutions that work towards the objectives and targets provided by Sustainable Sydney 2030	Changes to land zones, design controls and development contributions were put in place to implement the Strategy.
Encourage a sustainable, high quality and functional built form that respects the history of the Southern Employment Lands	The City of Sydney has completed a variety of other work supporting the sustainability of the built form.
Ensure the Southern Employment Lands are adequately serviced by public infrastructure	A new metro station at Waterloo has been announced. There are relatively frequent bus services along Botany Road, although these do not constitute the quality of service that would be expected to facilitate significant land use intensification.
Ensure that key workers can access affordable housing	The proposed changes to planning controls have been made, along with the introduction of the Southern Employment Lands affordable housing levy. Affordable housing development is permitted in the B7 zone and there are developments proposed, but none have yet occurred.

Source: SGS 2020, City of Sydney 2014, City of Sydney Employment Lands Strategy 2014-2019

Aspirations for zones

The Strategy proposed new land use and planning controls, with included long term aspirations for each of the primary land use zones included in the study areas.

For areas zoned **IN1 General Industrial**, the aspiration was for this to be a 'pure industrial' area, with minimal ancillary uses. For areas zoned **B5 Business Development** (South Dowling



sub-area), the intention was to have a focus on bulky goods. The **B6 Enterprise Corridor** zone was intended to deliver a mixed business precinct through a flexible approach to land use, remaining largely industrial in character over the short term and evolving to higher-value non-residential uses over time.

In the **B7 Business Park** zone, the aspiration was to facilitate a wide range of economic activities, and over the long term to have a relatively higher density mixed business precinct. The Strategy notes that as Green Square developed, there would be new businesses seeking out flexible spaces with high amenity but with 'out-of-centre' rents. More flexible zoning was proposed for Rosebery, and over time it was intended that the B7 zone would become a buffer between the industrial and planned residential areas.

Recognising the need to provide for affordable housing as the population and workforce increased, the Strategy also proposed allowing affordable housing in the B7 zone where appropriate, and where it would not undermine the zone's employment objectives.

2.2 Land use strategies and policies

Key directions from the primary strategic plans applying to the Enterprise Area (aside from the Employment Lands Strategy 2014-2019 which is discussed in the previous section) are summarised in the table below. A more detailed discussion is provided in Appendix A.

TABLE 2: HIGH LEVEL SUMMARY OF DIRECTIONS FROM STRATEGIC PLANS

TABLE 2. HIGH LEVEL SUMINANT OF DIRECTIONS PROMISTRATEGIC PLANS		
	Strategic plan	Key directions relevant to the Enterprise Area
Metropolitan and NSW strategies	Greater Sydney Region Plan (2018) Eastern City District Plan (2018)	 Emphasises the importance of economic connections within the Eastern Economic Corridor, which contains the Sydney CBD and in which the Enterprise Area sits Aims to grow the innovation corridor stretching from Walsh Bay to Redfern and including Camperdown Protects all industrial and urban services land in the Eastern City District Highlights economic role of Sydney Airport and Port Botany and nearby strategic industrial land Aims to grow employment in Green Square-Mascot from 59,500 jobs in 2016 to between 75,000-85,000 jobs in 2036
	Future Transport 2056 (2018)	Multiple transport projects listed which could improve accessibility of Enterprise Area and address some of the traffic constraints including: - WestConnex (Under construction and partly open) - Sydney Metro City and South-West (Under construction) - Sydney Gateway (Committed) - Rapid bus links between Green Square and La Perouse (potential project) - Eastern suburbs to Inner West rapid bus links (potential project) - Harbour CBD to Green Square Mass Transit Link (potential project)
City of Sydney strategies	Sustainable Sydney 2030	Sets overall strategic direction for City of Sydney including: - Attracting growth across multiple sectors including professional services, health and education and specialised shops and tourism - Strengthening globally competitive clusters and networks promoting innovation
	City Plan 2036: City of Sydney Local Strategic Planning Statement (2019)	 Notes importance of Southern Enterprise Area, its strategic location and the need to retain industrial and urban services uses Aims to protect industrial and urban services uses in the Southern Enterprise Area and evolving businesses in the Green Square-Mascot Strategic Centre Identifies North Alexandria as an area for transition to knowledge intensive and creative industries and South Alexandria as a continued location for industrial business



- Identifies that the Green Square-Mascot Strategic Centre (which includes the Southern Enterprise Area) may accommodate up to 11,400 additional jobs by 2036.

Place-specific strategies

Camperdown-Ultimo Collaboration Area Place Strategy (2018) Aims to make Camperdown-Ultimo Australia's innovation and technology capital, and noted the need for employment generating space. Actions include to:

- Safeguard business zoned land from conversion to permit residential development
- Advocate for and deliver a minimum percentage requirement for affordable space in developments for tech start-ups, innovation, creative industries, cultural uses, community uses and artists within and beyond the collaboration area

Source: SGS 2020

Since the creation of the Employment Lands Strategy 2014-2019, the strategic planning policy landscape has changed substantially, reflected in the recent release of almost all of the documents listed above. The primary shift in direction relevant to the Enterprise Area is the wholesale recognition of the need to protect industrial and urban services uses throughout inner Sydney, including in the City of Sydney. As a result, policy directs *all* enterprise land to be protected from conversion to residential or mixed use. By contrast, in the past some policies have used the imperatives of increasing housing density in established parts of cities and economic transition to justify the progressive redevelopment of formerly industrial land uses.

Other notable themes from multiple strategic plans include:

- The strategic position of the Enterprise Area for a range of enterprise uses
- The connection between trade gateways at Port Botany and Sydney Airport and the need for surrounding industrial land, as well as the need to minimise land use conflict that may result with residential uses (for example through residential development along freight corridors like Botany Road).
- The value of economic links between the Enterprise Area and the Sydney CBD and other parts of the Eastern Economic Corridor
- The potential for economic development following from health, education and innovation

2.3 Policy lessons from other cities

Greater Sydney faces challenges planning for continued industrial uses within a rapidly growing global city. In the past, industrial uses have been viewed as belonging to a prior economic period and no longer needed in a modern economy, resulting in the large-scale redevelopment of brownfield sites. More recently, the importance of industrial uses and urban services to a modern economy has been recognised, with strategic planning policy set by the NSW Government to retain and manage inner-city industrial land. Sydney is at the forefront of industrial land use planning in this respect, although the same issues are being grappled with in other global cities.

SGS have considered several local and international examples of how industrial lands are managed through zoning, strategic plans and planning instruments, and what lessons these case studies can provide for Sydney. The City of Sydney's enterprise area accommodates a highly diverse and complex mix of businesses and uses, including traditional industrial premises, urban services, a retail corridor, offices and mixed enterprise uses. Due to the diversity of land uses within the Enterprise Area and the position of Greater Sydney as a leader in industrial planning, it is difficult to identify best-practice case industrial planning case studies upon which the City of Sydney's response can be modelled. Rather, examples from other world cities were considered of how industrial land use planning is evolving, from which specific lessons for the City of Sydney can be drawn.



The following case studies were considered, and are explored in more depth in Appendix B:

- Melbourne's Commercial 3 Zone, pilot enterprise areas and planning for the Fishermans Bend Employment Precinct,
- San Francisco's Production, Distribution and Report (PDR) Zone, and
- Portland Oregon's Central East Side Industrial Precinct.

The following themes emerge from these case studies which are relevant for the Enterprise Area.

Zoning flexibility

Increased flexibility in zoning controls and processes in Portland and in the Commercial 3 Zone in Melbourne is intended to facilitate economic transition and growth and a wide mix of uses in enterprise areas. San Francisco supports PDR businesses by reducing fees and administrative application requirements.

The B6 and B7 zones in the City of Sydney LEP are already relatively permissive of a wide variety of uses. Nonetheless, as potential uses evolve and emerge, it will be necessary to ensure that zones remain flexible. Encouraging economic transition would not be appropriate in the IN1 zone which intends to retain capacity for important industrial and urban services functions.

Public domain, amenity and transport connections

Facilitating economic growth and transition where appropriate requires more than flexible zoning controls. Demand from businesses which employ knowledge and creative workers will be highest in precincts with high amenity, a high-quality public domain and good transport connections (including active transport). These factors were a focus of the initial planning work undertaken in Cremorne, while one of the potential outcomes of Portland's central employment zone would be to create greater amenity and vibrancy through a more diverse mix of uses.

Public domain improvements were one of the strategic directions identified in the City of Sydney's *Employment Lands Strategy 2014-2019* and will likely continue to be relevant as development occurs.

The need for inner-city industrial and diverse enterprise uses

There is a need for inner-city industrial uses, which has been established in strategic planning policy in Greater Sydney as well as in the San Francisco and Portland examples. As well as accommodating vital urban services and industrial uses, the lower rents and diverse built forms of these areas can accommodate creative businesses and small-scale producers which could not be accommodated elsewhere. This is a focus of the Portland case study.

Residential redevelopment

Residential redevelopment is permitted within formerly industrial zones in some of the case studies, however, it is not intended to wholly replace employment use. This does not comply with the strategic planning direction from the *Eastern City District Plan*, or the background work informing it which established the shortage of inner-city industrial land in Greater Sydney, and so is not appropriate in the Enterprise Area. There is a large amount of residential development which is expected to occur around the edges of the Enterprise Area, which is likely to serve the purpose of increasing the potential for activation without requiring residential redevelopment.

Anchor institutions

Anchor institutions may be able to catalyse economic development and transition in precincts. This is an aim being sought in the Fishermans Bend area with the University of



Melbourne committing to an establishment in the Employment Precinct and the Biotechnology Hub at Camperdown.

Anchor institutions like that proposed at Fishermans Bend and Camperdown are most suitable in specialised precincts which can develop with a clear and specific role and identity. The targeted attraction of an anchor institution is also often geared at establishing an identity of a newly emerging precinct that requires a catalyst to build from The Southern Enterprise Area already fills a wide range of economic roles, contains a wide range of industries and is performing well economically (explored in Chapters 4 and 7). The vision for this precinct (explored in the Recommendations) is focused on supporting diversity and opportunity rather than the coalescing of one industry specialisation. It is therefore not considered necessary to artificially create an anchor in this case. However, Council could work constructively with potential innovate anchors if they express interest in North Alexandria as it may influence future planning and economic identity development.

The southern parts of the Enterprise Area do not have large vacant sites where redevelopment similar to Fishermans Bend is proposed currently. However, this case study underlies the potential of the Camperdown part of the Enterprise Area as part of the Camperdown Innovation Precinct in collaboration with major institutions.

Innovation planning provisions

The San Francisco case study illustrates the potential of innovative planning requirements to ensuring the continued supply of inner-city floorspace suitable for industrial businesses. San Francisco's innovative planning provisions include:

- Creation of a Production, Distribution and Repair (PDR) Zone which prohibits
 residential development in the PDR zone and allowing retail, office and hotel uses
 only when ancillary to PDR use,
- Permitting commercial redevelopment of large vacant industrial floorspace in the PDR zone only where 33% of new development would be for PDR uses, and
- Allowing PDR as-of-right in mixed-use districts,

Some of these approaches are already taken in Sydney, including protecting urban services land from redevelopment through planning controls.

Light industrial and enterprise uses with minimal amenity impacts could be facilitated in cases where mixed use development is anticipated but there is likely to be limited demand for traditional retail and office uses on the ground floor, like along Botany Road through the Southern Enterprise Area. However, this approach should not be used to advocate for residential development in places where it is not currently permitted as this would create a risk of negatively affecting or displacing existing industrial users.

Provisions requiring a proportion of floorspace to be industrial in certain areas are also used in other cities including New York City, although the proportional requirement varies depending on the local context. Such a provision could be applied in parts of the Enterprise Area if there were clear signs that commercial development was occurring to the exclusion of other employment uses. This does not appear to be occurring, and so this approach is not recommended at this time.



3. TRENDS AND DRIVERS

Being at the heart of the Harbour CBD and the focus of Sydney's global competitiveness means that the City of Sydney and its Enterprise Area are impacted by global and national trends in addition to local factors. This includes macroeconomic effects as well as major, city-shaping infrastructure projects.

3.1 Locational trends and drivers

Locational sensitivities

There are several locational sensitivities which require industrial and other businesses to locate in inner-city places where land prices are high. At a high level, a business may have locational constraints to a certain area if:

- They need to be physically near their suppliers,
- They need to be physically near their clients,
- They need to accessible to a concentrated and specific labour pool, including professional
 workers who may live near the city and creative employees who may be highly
 concentrated in particular inner-city areas with a particular social milieu, or
- They need to be located near a particular piece of infrastructure.

Businesses may also be located in a precinct like the Enterprise Area in the City of Sydney for predominately historical reasons, which may include that they have an established labour force or supply chain.

Industrial and enterprise precincts also provide a more attractive business location than other areas for businesses which cannot afford the higher rents elsewhere, which require large amounts of space, or which are incompatible with other residential or employment land uses. Some businesses in enterprise and industrial areas face these constraints more than others. Increasing attractiveness of the City of Sydney Enterprise Area for offices and other businesses which could locate in centres may displace businesses which need to locate in an industrial area, but which face locational pressures requiring confining them to the inner-city or an even more specific area.

Population growth

Continued population growth increases the demand for many different sectors, but particularly population serving industries and facilities, including retail, gyms, and health and education facilities. Similarly, population growth drives increased demand for freight and transportation, with more goods needing to be moved, and more sites needed for warehousing and logistics purposes.

The City of Sydney remains an attractive location for people to live in, attracting both international and domestic migrants with concentrations of employment opportunities, amenities, and access to higher education. With the City's population expected to increase from around 259,000 in 2020 to over 350,000 by 2041, there are likely to be additional pressures to accommodate these population serving uses alongside other industries, creating the potential for land use conflicts. This will be particularly important in areas which are expected to see significant future growth, such as Green Square.

¹ Forecast .id, 2020, 'City of Sydney Population Forecast,' https://forecast.id.com.au/sydney/home



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Agglomeration of knowledge intensive sectors

Businesses tend to cluster together to be able to take advantage of agglomeration, where firms are able to benefit from sharing inputs, knowledge spillovers, and labour market pooling. Agglomeration tends to benefit knowledge-intensive sectors the most. These are those sectors that rely heavily on professional knowledge and have high levels of value add, such as professional, scientific and technical services; information technology; and financial services. The City of Sydney is a prime location for these sectors due to its density of employment. Amenities, including the physical environment, transport accessibility, and proximity to services, are also important to agglomeration economies.

The attractiveness of the City for higher-order employment uses means that existing industrial precincts located close to the CBD and other centres are under pressure to be rezoned for other uses, including residential and less-intensive employment sectors.

Increased global competition

As a global city, Sydney faces additional pressures in having to compete with other cities across the Asia-Pacific for investment, particularly for higher-order jobs. In line with shifts in the economy, this competition may see further demand for building stock and land to accommodate more knowledge intensive jobs, placing pressure onto industrial lands for rezoning.

Med tech and bio-tech

Australia is specialised in the med-tech and bio-tech sectors. Innovative businesses are being started from research occurring in particular precincts, and will require floorspace nearby. The Cicada Incubator in the Australian Technology Park is relatively specialised in these sectors, and could create demand for nearby floorspace which is affordable and flexible. The bio-tech and med-tech sectors are also a strong focus for the Camperdown Innovation Precinct.

Growth in aviation sector

Continued growth in the aviation sector is likely to increase demand for a number of industries that support it, such as logistics and warehousing among others. The Sydney Airport Master Plan has forecast a 51 per cent increase in passenger numbers by 2039, and a 58 per cent increase in air freight.² The relative proximity of the Enterprise Lands to Sydney Airport may present opportunities to cater demand from these sectors in future. Globally, growth in air travel is also projected to continue, however, this could also change with consumer attitudes over time as more is given to the contribution of the aviation sector to climate change and other environmental issues.

Shift in the profile of established industrial precincts

Continued industrial development and land release in Western Sydney where land is considerably cheaper than in the inner-city, is causing larger manufacturing and transport and logistics businesses to relocate west if they do not face strong locational sensitivities. This trend could be intensified by the development of the Western Sydney Airport and proposed transport infrastructure projects including motorways and intermodal terminals. The establishment of the WSA may also see a broader range of businesses cluster in the area, particularly those in complementary and aviation related industries, such as aerospace, defence, agribusiness and advanced manufacturing.

The movement west in Greater Sydney of heavier industries and those requiring very large floorplates is occurring at the same time as the diversification of uses in established industrial

² Sydney Airport Corporation Limited, 2019, 'Sydney Airport Master Plan 2039,'
https://downloads.ctfassets.net/v228i5y5k0x4/6BdjDg1hDpubx2F8817Nrl/597809341db00e0953a2df403a53136c/Sydney_Airport_Master_Plan_2039_F.pdf



and enterprise precincts. Many industrial areas house companies from a diverse and complex mix of industries. Companies may use floorspace in diverse ways, for example fashion companies combining head-office functions with some warehousing.

3.2 Broader trends and drivers

Advanced manufacturing

The manufacturing sector continues to undergo change globally, with the industry in Australia expected to continue to evolve and become a more integrated and export focused system within global value chains. Also emerging is the concept of 'advanced manufacturing,' which has been defined by the CSIRO as the technologies, systems and processes that will transition the traditional manufacturing sector into one that focuses on adding value to supply chains.

Existing trends in the advanced manufacturing space include:

- Supply chain transformation specialisation promoting collaboration and vertical integration.
- Sustainable operations resource scarcity and more importance being places on environmental and social outcome is driving efficiency and sustainability measures.
- Smart and connected advances in data and analytics is helping to optimise operations.
- Service expansion manufacturers are expanding roles in the value chain.
- Made to measure shifts from mass production to bespoke products/solutions responding to consumer expectations and technology.³

The Committee for Sydney has noted that Sydney is well-placed to lead the shift towards an advanced manufacturing sector, given recent investments that have been made in infrastructure, the innovation agenda of many of the city's universities, its role as a hub for tech start-ups and fintech, and proximity to talent to underpin this transformation.⁴

Effect of globalisation on trade and changing distribution pathways

Advances in communications have meant that the world is increasingly connected, with the ability for producers to connect directly with customers. These shifts in turn have created more dispersed supply chains, creating greater demand for freight and logistics and associated industries. Advances in transportation technologies also have the potential to make freight operations cheaper, however, there are also increasing challenges in delivering 'last mile' logistical services, particularly in areas close to CBDs and population centres where land use contestability is high. This is at a time when industrial land values are also high due to the limited availability of sites due to continued population growth in Australia's major cities.⁵

Emergence of online retailing

The emergence of online retailing has been well documented, with online spending estimated to account for around 10 per cent of all retail sales in 2018.⁶ In a weak spending environment, growth in online sales continuing to outpace growth in retail spending overall, with the takeaway food sector seeing the largest increase in spending in recent years (likely linked to the emergence of food delivery apps). Among the reasons for the growth in online spending are the flexibility to shop at any time, the time savings (rather than having to travel to a physical store), and the ability for shoppers to compare prices and find the cheapest option.

 $[\]underline{https://auspost.com.au/content/dam/auspost_corp/media/documents/inside-australian-online-shopping-ecommerce-report.pdf}$



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³ CSIRO, 2016, 'Advanced Manufacturing – A Roadmap for unlocking future growth opportunities for Australia,' November 2016, https://www.csiro.au/en/Do-business/Futures/Reports/Advanced-manufacturing-roadmap

⁴ Committee for Sydney, 2017, 'Manufacturing 4.0 – Cracking the Code for Western Sydney,' Western Sydney University, November 2017, http://www.sydney.org.au/wp-content/uploads/2015/10/Manufacturing-4.0.pdf

 $^{^{\}rm 5}$ Colliers International, 2019, 'Industrial – Second Half 2019,' Research & Forecast Report,

https://cmimport.colliers.com.au/en-AU/Research/Industrial-Research-and-Forecast-Report-Second-Half-2019

6 Australia Post, 2019, 'Inside Australian Shopping – 2019 eCommerce Industry Report,'

The growth of the sector has also been illustrated by the establishment of Amazon in Australia, which some have predicted will reduce spending in bricks and mortar stores even further.

Retailers and shopping centre owners are responding to the threat from online retail through diversifying their retail offering, delivering unique products and customer service, and focusing on the overall experience of shopping for customers – which cannot necessarily be replicated by the experience of online shopping.

Continued increases in online retailing has the potential to further increase demand for logistics, warehousing and related businesses in industrial lands, particularly in areas that are close to population centres, such as the City of Sydney's Enterprise Lands.

Changes in freight logistics

The growth of online retailing has had implications for a number of industries. For freight and logistics, this has increased the expectations that customers have of the speed with which goods can be delivered. Previous research has identified that around a quarter of consumers are willing to pay a premium for same-day delivery. With the overall increase in popularity of online retailing and e-commerce, 'last mile' logistics has become a priority. In terms of land, this places an even higher value on logistics, industrial services and dispatch lands in areas close to populations.

'Last mile' delivery is the final part of a product journey from warehouse to the customer doorstep. It is also often the most expensive and time-consuming part of the shipping process. This is due to factors such as traffic congestion, which is an issue particularly for urban areas. 'Last mile' delivery costs are estimated to account for around 28 per cent of the total cost of shipping.⁸ Customers have also become less willing to pay delivery fees with the presence of some 'free shipping' options.

Retailers and logistics companies are seeking new, technological solutions to improve the last leg of this process and overcome geographical challenges. Some of these solutions have included drones or crowdsourcing local delivery sources. However, the value of industrial, logistics land and dispatch centres close to urban areas is still clear and remains highly valuable to the speed of delivery – particularly when land uses are highly contested and land prices are high.

Technological change

Today's fast pace of technological change means that there are a range of new industries emerging with the potential for future jobs growth, such as the fintech sector and biotechnologies. The emergence of these opportunities has the potential to change how the Enterprise Area is used, as these sectors may require new of different forms of space to deliver their products and services from current building stock.

Automation is also shifting the landscape of industrial employment, with robotic, automatic, and mechanised processes replacing the need for manual human labour. As a result, employment is decreasing in some industrial sectors without a decrease in output. Automation also means that the skill mix of traditional industry is shifting, with high-skilled jobs operating and maintaining automated systems replacing manual jobs.

⁸ R. Goodman, 2005, 'Whatever you call it, just don't think of last-mile logistics, last', https://trid.trb.org/view/779227
⁹ Business Insider, 2018, 'The Challenges of Last Mile Logistics & Delivery Technology Solutions', https://www.businessinsider.com/last-mile-delivery-shipping-explained/?r=AU&IR=T; Strategy + Business, 2018, 'Convenience is key in last-mile delivery around the world', https://www.strategy-business.com/article/Convenience-Is-Key-in-Last-Mile-Delivery-around-the-World?gko=bef84



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⁷ McKinsey & Company, 2016, 'How customer demands are reshaping last-mile delivery', https://www.mckinsey.com/industries/travel-transport-and-logistics/our-insights/how-customer-demands-are-reshaping-last-mile-delivery

Rise of creative industries

Recent years have seen a resurgence in the creative industries sector, which can be broadly defined as industries where business use creativity to create value for their clients or customers, and where the products and services created are intellectual property. 10 Creative industries cover a variety of sectors including music, performing arts, visual art and design, TV and film, marketing, software development and print publishing among others. The contribution of creative industries is being increasingly recognised.

These types of uses have different needs in the space that they occupy and tend to require smaller and more affordable spaces. A traditional office environment may not be suited to such uses, which has seen increased demand for unique and quality spaces at the fringe of CBDs in recent years. With limited supply, as well as competition for space from other sectors, such as IT, rents in these areas have increased significantly, including in locations like Surry Hills. The popularity of these types of spaces may have implications for how the City's Enterprise Lands could be utilised in future.

Circular economy

Increased awareness of environmental issues has given more attention to the impact that pollution and resource wastage from manufacturing and other processes have had, and continue to have, on our environment. In turn, this has given more attention to the concept of the 'circular economy,' which seeks to create a circular supply chain where waste products are recovered and repurposed into design and manufacturing processes. The concept is also applied in the context of water and energy systems, such as through water recycling and the use of renewable energy sources.

The circular economy is likely to present a range of new opportunities for new businesses and employment growth alongside traditional sectors, in addition to reducing the environmental harm being caused by those industries.¹¹

Industrial precincts have a role to play in establishing circular economy practices across Greater Sydney. Cities are both major consumers of goods and major creators of waste. Greater Sydney is no exception. A detailed look at the volume of goods freighted out of the Sydney Inner City SA3 identifies that 12 per cent of goods are in the form of commercial and industrial waste alone.

Waste is often transported to centralised metropolitan waste depots or regional landfills. This represents not just a high transport cost but also a significant opportunity cost as the constituent components of that waste are often recoverable with the right processes. The circular economy model considers this waste a resource for future generations of manufactured products.

Multi-storey warehousing

Multi-storey warehousing is often discussed as a logical next phase in the industrial land market. Multi-storey warehouses have been well-established in other countries for a number of years, particularly in Asia in cities with high population concentrations. 12

There are a number of drivers contributing to growing interest in the multi-storey model, including:

Increased demand for faster and 'last mile' deliveries, meaning that companies need sites suitable for warehousing and distribution in close proximity to customer bases

¹² JLL, 2019, 'Multi-storey warehouses to gain traction globally,' 8 July 2019, https://www.jll.com.au/en/trends-and- $\underline{insights/investor/multi-storey-warehouses-to-gain-traction-globally}$



¹⁰ SGS Economics and Planning' 2013, 'Valuing Australia's Creative Industries,' Final Report, prepared for Creative Industries Innovation Centre, December 2013.

¹¹ See for example, Domenech, 2014, 'Explainer: What is a circular economy?' The Conversation, 25 July 2014, https://theconversation.com/explainer-what-is-a-circular-economy-29666

- Increasing competition for land between different uses, with residential encroachment reducing the availability of industrial sites
- High land values, particularly in well-located precincts and areas with substantial constraints, with owners looking for more efficiency and value for money in how sites are developed.

One of the benefits of the multi-storey typology in an inner-city location compared to a single storey development further from the CBD is reduced transport costs for occupiers (compared to operating from an outer-lying location).

The limited take-up of the idea in Australia has been attributed to several factors, including that land values have historically not been high enough to make the model viable, and the availability of cheaper land in outer lying areas. One estimate suggests that the cost of developing a six storey warehouse in Sydney is 83 per cent higher per square metre than for a single storey.¹³ Costs and floorplate efficiency are also affected by the choice of access option, with lifts to upper levels more expensive than ramps, however ramps are less efficient in terms of space, which impacts on the leasable area.

The additional rent gained from the additional floors in a multi-level warehouse needs to be high enough to outweigh the increased construction cost. A general 'rule of thumb' is that if the land costs associated with a site are more than 50 per cent of construction costs, then it makes financial sense to consider the multi-storey option. Previous analysis has estimated that with existing rents and land values in Sydney, three and four storey warehouse typologies are likely to be more feasible than two storeys when factoring in construction costs.

The multi-storey warehouse model doesn't necessarily appeal to all types of industrial land users. This may include occupiers with particular technical requirements, such as those who rely on heavy machinery, which may require more expensive reinforcement of floors if they were to occupy a space on an upper level. The reduced accessibility of upper floors in a multistorey warehouse means that rents on upper levels are generally lower than those with ground level access.

South Sydney is cited as a logical location for multi-storey warehousing, given current land constraints and a limited supply of available sites. ¹⁴ However, this is likely to be at a smaller scale than what is seen overseas, limited to around five storeys.

3.3 Aligning land use and value chain

Understanding the value chain

One of the most important roles that industrial precincts play is also one of the less visible. This is the role of value *translation*. The value chain explains the process along which goods and services pass, with value (almost always economic value) being added at each stage. By way of example, raw minerals are extracted at the beginning of the value chain, they are then refined, which adds value. These refined materials are now suitable for inclusion in the electrical componentry which form part of a mobile phone, which is ultimately sold to an enduser. At each stage of this process, value is added. In general, the more complex the process and the further along the value chain, the more value is added and the higher the labour costs are that are required to do this.

Industrial precincts accommodate businesses that play various roles along such value chains and it is important that their role is understood, because it is in this role that the true value of industrial precincts is made manifest. One way to illustrate this is through the business

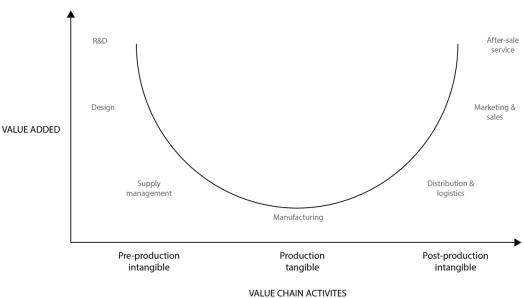
¹⁴ Cheung, 2019, 'South Sydney to see multi-level sheds spring up to five storeys by 2023, experts say,' 17 April 2019, https://www.commercialrealestate.com.au/news/south-sydney-to-see-multi-level-sheds-spring-up-to-five-storeys-by-2023-experts-say-53276/



¹³ CBRE, 2019, 'On the Up and Up – The Rise of Multistorey Warehousing in Australia,' CBRE Research, https://www.cbre.com.au/research-reports/on-the-up-and-up

management concept known as the 'Smiling Curve' 15. The Smiling Curve illustrates the relative value added by the various activities in the value chain. It contends that relatively more value is added in the pre and post-production phases of the value chain than in the manufacturing process itself (Figure 2).

FIGURE 2: THE SMILING CURVE CONCEPT



Source: CSIRO, 2016 (Adapted from Stan Shih's 'Smiling Curve')

In the value chain, the least valuable part, in terms of value-adding, is the manufacturing component, with much higher levels of value added in knowledge intensive activities such as R&D and After-sales service. What this concept does not fully recognise however, is the transformational role that manufacturing plays by enabling *pre-production* value to metamorphosise into *post-production* value. While the singular manufacturing link in the value chain may be low value in and of itself, it is a highly valuable process in the creation of downstream value.

Why this relates to industrial lands is that when considering the Smiling Curve spatially, the role of industrial precincts becomes clear.

¹⁵ The Smiling Curve was developed by Stan Shih, the founder of Acer, to reflect the relationship between value adding process and the supply chain



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VALUE ADDED

Design

Marketing & sales

Supply Management

LAND USE TYPE

Manufacturing

After-sale service

Distribution & logistics

Office
Industrial

Production

tangible

VALUE CHAIN ACTIVITIES

Post-production

intangible

FIGURE 3: SMILING CURVE - DEMONSTRATING THE ROLE OF INDUSTRIAL PRECINCTS IN THE VALUE CHAIN

Source: SGS Economics and Planning, 2020, building on Smiling Curve derived from CSIRO Futures Advanced Manufacturing: A Roadmap for unlocking Future Growth Opportunities for Australia, (2016) and originally adapted from Stan Shih's 'Smiling Curve').

Pre-production

intangible

Figure 3 overlays the typical land use profile of these value chain activities to the Smiling Curve. At either end of the curve, the higher value-adding activities are those that locate in areas of high employment density such as CBDs, where competition for floorspace is high and so are land values. Manufacturing, at the bottom of this curve, and supply management and distribution and logistics on either side, tend to locate in industrial precincts that often have both lower economic productivity and lower land values. The City of Sydney's Enterprise Area contains a wide variety of uses including those at the bottom of the curve as well as those with higher value adds where offices do not need to be located in the CBD.

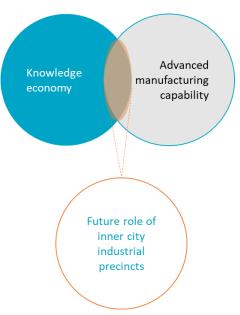
In inner urban economies such as the Eastern City and the City's Enterprise Lands, the complex network of business-to-business relationships and the cluster of deep pools of labour, finance and R&D capabilities mean that Sydney's inner city industrial precincts will increasingly play a role in the translation of the pre-production value created in the District's Health and Education Precincts and Creative clusters into the post-production value of those jobs in major commercial centres. Proximity to both markets presents a compelling competitive advantage that can only be sustained and nurtured through the retention and pro-active management of these inner-city industrial precincts.



Co-location of knowledge, production and logistics

The intersection between advanced manufacturing processes and knowledge-rich and highly skilled labour forces requires the right type of precinct to support its growth. Industrial precincts, and particularly those in inner city locations close to concentrations of research and development capability will be critical in spatially enabling the alignment of advanced manufacturing capabilities with knowledge economy services and intelligence.

This intersection is Australia's competitive advantage in the emerging advanced manufacturing sector, and particularly in fields such as medical and bio-technology and robotics that have been identified as areas of strength in Australia by government, private sector, and institutions such as the CSIRO.



Inner city industrial precincts adjacent to innovation and health and education precincts will play an important role in enabling this future. It is also important to zoom out from the precinct level and understand the potential District-level opportunities Greater Sydney has to capitalise on this emerging advantage.

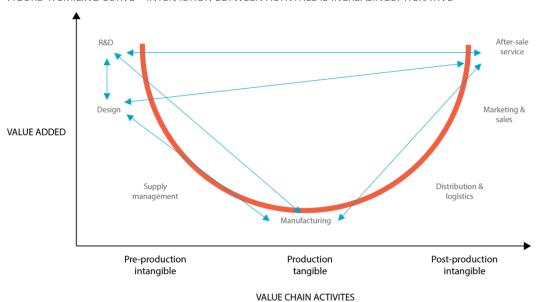
Aligning advanced manufacturing and knowledge sector to create competitive advantage

The changing demand for skills and the increased skill level required of businesses in the advanced manufacturing sector point to a change in the traditional skill acquisition to job continuum. Whereas manufacturing skills were traditionally obtained in TAFE or on-the-job apprenticeships and were done at the beginning of a career, the increasing complexity and diversity of skills indicates that skill acquisition is likely to come in the future from both changed TAFE courses as well as more traditional university-obtained skills (such as engineering, data science and business).

Additionally, it is likely that the change of pace in technological advancement in the sector will necessitate a move towards lifelong learning. In turn, this will increase the demand for industry and education to be co-located. Industrial precincts near to universities and TAFEs will be vital drivers of knowledge growth in the advanced manufacturing sector. Applying this back to the Smiling Curve introduced above illustrates that as the advanced manufacturing sector becomes increasingly part of the R&D process, there is a blurring of the traditional value chain (Figure 4) which results in a commensurate blurring of skills acquisition (Figure 5).

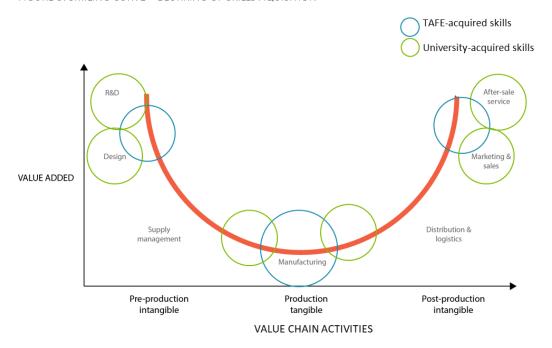


FIGURE 4: SMILING CURVE - INTERACTION BETWEEN ACTIVITIES IS INCREASINGLY ITERATIVE



Source: SGS Economics and Planning, 2020, building on Smiling Curve derived from CSIRO Futures Advanced Manufacturing: A Roadmap for unlocking Future Growth Opportunities for Australia, (2016) and originally adapted from Stan Shih's 'Smiling Curve').

FIGURE 5: SMILING CURVE - BLURRING OF SKILLS AQUISITION



Source: SGS Economics and Planning, 2020, building on Smiling Curve derived from CSIRO Futures Advanced Manufacturing: A Roadmap for unlocking Future Growth Opportunities for Australia, (2016) and originally adapted from Stan Shih's 'Smiling Curve').

This has spatial implications right across Greater Sydney, with inner city precincts close to established universities and TAFEs driving demand in certain sectors that rely on established industry partnerships. In Western Sydney, the future role of the Aerotropolis will also necessitate the integrated planning of education and industry. One example of this already in practice in Sydney is the recently established UTS Tech Lab in Botany. The Tech Lab was opened in 2019 with a focus on supporting the translation of R&D into prototyping of a range of high-tech products. The facility provides 9,000sqm of floorspace across two floors to



support research and prototyping for both research and industry partners. The facility provides a mix of lab and flexible industrial floorspace to support a range of R&D scales. The Tech Lab works with research, private and public sector stakeholders to support R&D and product translation.

FIGURE 6: UTS TECH LAB, BOTANY



Source: https://www.jhaservices.com/project/uts-tech-lab/

3.4 Impacts of COVID-19

Prior to COVID-19

The COVID-19 crisis has reshaped some of the established narrative that underpinned urban economic development in Sydney. Prior to the COVID-19 pandemic, Sydney faced additional pressures in having to compete with other cities across the Asia-Pacific for investment, particularly for higher-order jobs.

In line with shifts in the economy, this competition was driving further demand for building stock and land to accommodate more knowledge intensive jobs, placing pressure onto industrial lands for rezoning.

The changing landscape

The COVID-19 crisis has causes Australia to re-think its role in the global supply chains. The pandemic has exposed the fragility of global supply chains and emerging geo-political tensions between Australia and China risk further destabilising the established production supply chain this trade partnership provided.

Recognition of competitive advantages

Australia's continued manufacturing capabilities and knowledge intensive economy create strong criteria for the successful support of an advanced manufacturing sector. The currency of the medical technologies sector in light of the pandemic can play to Australia's strengths. Facilities co-located with research institutes presents an opportunity to support the growth in a diverse and high value advanced manufacturing precinct in the Eastern City District, with the City's Enterprise Area at its core.

The need for flexibility

The current COVID-19 crisis has created significant uncertainty and affected every economy both nationally and locally. It has also created or exacerbated industry trends, from increasing remote working to speeding up the decline of bricks-and-mortar retail. Solutions to economic



recovery will be diverse and precincts that are adaptable are the ones that can support emerging businesses and even sectors in the coming years.

Impacts on industrial and office demand

COVID-19 will have an impact on the real estate market and the demand for floorspace in the Enterprise Area, however, there is currently limited data available to quantify the exact size of this impact and how it is changing through the course of the pandemic.

With many people moving to working from home, office spaces have been unused for some time. This is likely to decrease demand for office space and their asking rents. In the longer term, an increased number of people may work from home some of the time, slightly reducing office requirements. However, more space per worker may be required in offices, counteracting this effect. The benefits of physical offices for agglomeration and interaction will remain in the future, meaning that people are likely to return to offices at least some of the time and demand for well-located office space will continue to exist in the future.

Some parts of the industrial property market have been more insulated from COVID-19 as a result of the essential nature of many industrial and urban service businesses and the inability of them to be conducted remotely.

Irrespective of the short-medium term implications of the COVID-19 pandemic and associated economic shock, the trends, drivers and principles laid out in this chapter will continue to apply and form a good basis for strategic planning over the longer term. Similarly, while some kinds of floorspace demand are likely to be reduced, the modelling conducted in this report still forms a solid basis for planning over a 20-year timeframe.



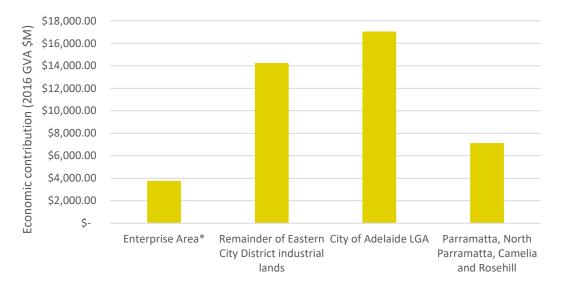
4. MARKET & ECONOMIC PROFILING

4.1 Economic data

Economic contribution

Recent work done for the GSC by SGS dispels the myth that industrial and enterprise precincts are low value. The Eastern City district's industrially zoned land alone has a higher GVA than the Adelaide CBD. The Enterprise Area has a GFA over half that of Parramatta CBD and surrounds (approximately \$3.7 billion vs \$7.1 billion).

FIGURE 7: ECONOMIC CONTRIBUTION OF ENTERPRISE LANDS COMPARED TO OTHER MAJOR EMPLOYMENT AREAS



Source: SGS 2020 using ABS National Accounts and 2016 Census data

While economic activity is more concentrated in the City of Adelaide and Parramatta CBD than in industrial lands, this comparison highlights the strong economic contribution of the Enterprise Area and other inner-city enterprise areas in the Eastern City District, and the potential economic consequences of large-scale losses of inner-city industrial land.

These measures highlight only one part of the economic contribution of industrial lands in the Eastern City District, including the City of Sydney Enterprise Area. They do not capture the vital nature of urban services underpinning liveability and economic activity, or the connections of Enterprise Area businesses to supply chains throughout the Eastern Economic Corridor. This concept will be explored in more detail in Section 4.2 below.



^{*} Note that the Enterprise Area's economic contribution from 2017 is provided to align with the FES data, while 2016 economic contributions are shown for other areas to align with the census.

Economic contribution by different industries

Economic contribution provides one measure of the economic role of each industry. The value add of each sector in the Enterprise Area (each sector's contribution to gross regional product) are show in Figure 8 below.

1,200.0 1,000.0 Value add (\$m) 800.0 600.0 400.0 200.0 Fin. & Fin. Serv's Food & Drink Motor Vehicle Profess. & Bus. Serv's Retail & Pers. Serv's Fourist, Cultural & Leisure Utilities Community Government Life Sc. (Bio-tech) M'facturing Property Dev. & Creative Ind. Health Higher Ed. & Research Social Capital Fransp. & Logistics ₽ Operation

FIGURE 8: ECONOMIC CONTRIBUTION OF THE ENTERPRISE AREA BY INDUSTRY (2017)

Source: SGS 2020 based on SGS 2019, Economic Performance of Cities and Regions, City of Sydney FES data

Multiple sectors make a large contribution to the Enterprise Area's and City of Sydney's economy. Transport and logistics makes the greatest economic contribution to the local economy on dollar terms, followed by retail and personal services and property development and operation.

Distinction between industry sector and industrial activity

This report categorised industry sectors according to either the City of Sydney's industry classification or the Australian and New Zealand Standard Industrial Classification (ANSIC), which is used by the Australian Bureau of Statistics and other government agencies in their statistics. The classification used in each section depends on data availability.

There is a difference between industry sectors which are regarded as traditionally industry and industrial activity. While industrial employment is often considered to fall within sectors like mining, manufacturing, utilities and wholesale trade, these categories provide a relatively poor reflection of modern land uses in industrial zones and premises. In part this reflects how the Australian economy has evolved, with emerging land use types like factory door retailers, craft and artisanal production and creative industries appearing in industrial spaces outside of traditional industrial sectors.

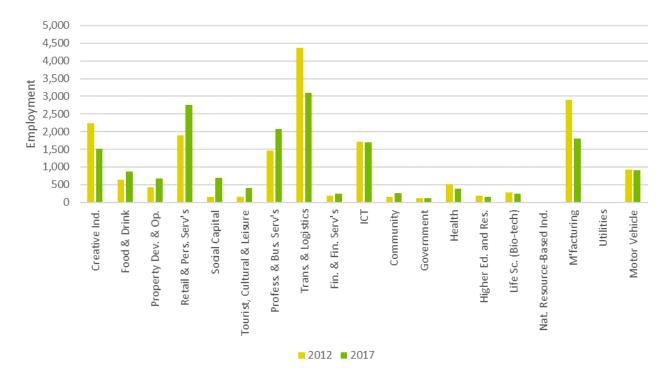
Instead, uses from a wide range of ANZSIC and industries categories are found in industrial areas. While the City of Sydney industry categorisation provides a better indication of the kind of activity occurring than ANZSIC categories, businesses from a wide range of City of Sydney categories also have industrial or semi-industrial activities. While this section and report discusses industry composition by sector, it should be viewed as only one indication of the way the economy is structured.

Employment

Employment provides another measure of the performance and importance of each sector in the broader economy. Employment in the Enterprise Area is shown by industry (using the City of Sydney's industry classification) in Figure 9 below.



FIGURE 9: EMPLOYMENT IN THE ENTERPRISE AREA BY CITY INDUSTRY



Source: City of Sydney FES data, SGS Economics and Planning 2020

The Enterprise Area accommodates businesses employing people from a wide range of industries. Employment shrank by 403 (or 2.2%) in the Enterprise Area between 2012-2017, from 18,365 to 17,962.

The traditionally industrial sectors of transport and logistics and manufacturing are the largest in the Area, although retail trade and knowledge intensive sectors like ICT, professional and business services and creative industries are also common.

There was a notable shift in sectoral employment composition between 2012-2017. Employment in the traditionally industrial sectors of transport and logistics and manufacturing declined substantially between 2012-2017, while employment in professional and business services and a range of other knowledge-intensive industries increased. Population-serving sectors including food and drink and tourist, cultural and leisure also grew between 2012-2017, but off a relatively low base.

Employment specialisation

Location quotient analysis is a measure of relative industry specialisation of a local economy compared with a larger area. In this case, this measures the Enterprise Area industry employment profile against Greater Sydney (Figure 10) to determine the relative specialisation of each industry. The location quotient score directly compares the proportional size of employment in the industry in the Enterprise Area to the benchmark area. For example, an LQ of 2 means that the Enterprise Area has twice the proportion of employment in a particular industry when compared to the benchmark area.

Sectors are illustrated by dots on the LQ chart below, with total employment illustrated by the size of the dot. The vertical black line separates industries of relative specialisation from those relatively unspecialised. The horizontal black line shows the average employment growth rate of the Enterprise Area, and so industries above this line are become more common compared to those below it.



Utilities 40 ocial Capital Average annual employment growth rate 2012-2017 (%) 30 Tourist, Cultural & Leisur 20 Community Property Dev. & Op. 10 Retail & Pers. Serv's Profess. & Bus. Serv's ood & Drink Fin. & Fin. Serv Government Motor Vehicle

FIGURE 10: INDUSTRY SPECIALISATION OF THE ENTERPRISE AREA COMPARED TO GREATER SYDNEY BY CITY INDUSTRY

Source: SGS 2020, City of Sydney FES data, ABS Census 2011, 2016

Higher Ed. and Res.

Health

This analysis reveals employment specialisations of the Enterprise Area in:

 Traditionally industrial sectors (transport and logistics, manufacturing and motor vehicles),

LQ

- Creative industries,
- Retail and person services, and

Life Sc. (Bip-tech)

1.0

• The knowledge intensive sectors of professional and business services and information and communications technology.

1.5

Of these specialised sectors, manufacturing, transport and logistics and creative industries contracted slightly between 2012-2017. By contrast, there was strong growth in professional and business services and retail and personal services. These sectors which are both specialised and growing are likely to become even more specialised in the Enterprise Area over time.

Smaller sectors in the Enterprise Area including property development and operation, food and drink, tourist, cultural and leisure are less specialised, but many had high rates of growth between 2012-2017. The large number of industries with low specialisation but high rates of growth reflect the significant diversification of the overall employment composition of the Enterprise Area.

Competitive Shift



0

-10

Trans. & Logistics

reative Ind. M'facturing

2.0

Shift-share analysis paints a picture of how well the region's current industries are performing by systematically examining the regional, local, and industrial components of employment change. It provides a dynamic account of total regional employment growth that is attributable to growth of the national economy, a mix of faster or slower than average growing industries, and the competitive nature of the local industries. This analysis identifies those industries that benefit from local competitive advantages and those that suffer from local growth impediments.

A shift-share analysis comparing the Enterprise Area with Greater Sydney is shown in Figure 11, and shows the extent to which employment growth or contraction can be attributed to unique local factors as opposed to regional trends.

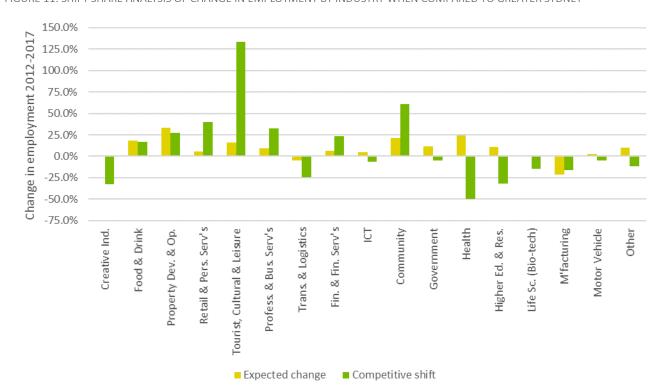


FIGURE 11: SHIFT SHARE ANALYSIS OF CHANGE IN EMPLOYMENT BY INDUSTRY WHEN COMPARED TO GREATER SYDNEY

Source: SGS Economics and Planning 2020, City of Sydney FES data, ABS Census 2011, 2016,

This analysis shows that much of the shift in sectoral employment composition in the Enterprise Area from more traditionally industrial sectors to knowledge intensive and service sectors can also be seen across Greater Sydney, but that a much larger shift occurred in the Enterprise Area.

The Enterprise Area outperformed Greater Sydney in employment growth in several knowledge intensive and service sectors, including professional and business services, retail and personal services, tourist, cultural and leisure and finance and financial services. By contrast, employment in manufacturing and transport and logistics shrank across Greater Sydney, but shrank even more in the Enterprise Area.

Several sectors (including tourist, cultural and leisure and social capital) showed very high employment growth rates in the Enterprise Area between 2012-2017, but these growth rates came off a low baseline and may not be replicated in future years.

Floorspace

Along with employment and economic contribution, the sectoral composition of employment-generating floorspace is another important indicator of the contribution of



different sectors to the economy of the Enterprise Area. Floorspace in the study area is shown by industry (using the City of Sydney's industry classification) in Figure 12 below.

5,000 4,500 4,000 3,500 3,000 2,500 2,000 1,500 1,000 500 Food & Drink Retail & Pers. Serv's Fourist, Cultural & Leisure Profess. & Bus. Serv's Trans. & Logistics Government Health M'facturing Motor Vehicle Social Capital & Fin. Serv's Community Utilities Higher Ed. and Res. Life Sc. (Bio-tech) Property Dev. & Op. \overline{c} Creative Ind. Nat.Res.-Based Ind. 2012 2017

FIGURE 12: FLOORSPACE IN THE ENTERPRISE AREA BY CITY INDUSTRY

Source: City of Sydney FES data, SGS Economics and Planning 2020

While employment shrank between 2012-2017, occupied floorspace increased by 86,421 sqm or 6.3% from 1,372,756 sqm to 1,459,177sqm. The floorspace shifts by industry between 2012-2018 broadly mirrored shifts in employment, with declines in the traditionally industrial sectors of transport and logistics and manufacturing as well as in creative industries, and increases in professional and business services, retail and personal services and several other smaller industries.

The increase in employment generating floorspace between 2012-2017 illustrates an increase in economic activity in the Enterprise Area. As such, the decline in employment is a result of changes in sectoral composition and the kinds of activities taking place in the Enterprise Area rather than an indicator of economic decline.

Floorspace to job ratios

More information regarding how economic activity in the Enterprise Area is changing can be obtained by comparing changes in floorspace to changes in employment for each industry. These variables can be combined to create a floorspace to job ratio, which shows how much space is needed on average per employee. Changes in this ratio for each industry, along with employment and floorspace, are shown in Table 3.



TABLE 3: CHANGE IN THE FLOORSPACE PER JOB BY INDUSTRY IN THE ENTERPRISE AREA, 2012-2017

Industry	% Change in employment	% Change in floorspace	2012 Floorspace/job	2017 Floorspace/job	Change in Floorspace/job
Creative Industries	-32%	-12%	49	64	15
Food and Drink	36%	31%	82	79	-3
Property Development and Operation	60%	68%	50	53	2
Retail and Personal Services	45%	41%	121	118	-3
Social Capital	324%	389%	42	48	6
Tourist, Cultural and Leisure	150%	137%	124	118	-6
Professional and Business Services	42%	48%	40	42	2
Transport and Logistics	-29%	-21%	83	92	10
Finance and Financial Services	30%	-8%	46	33	-13
ICT	-1%	28%	60	77	17
Community	83%	34%	180	132	-48
Government	7%	59%	72	108	35
Health	-26%	-41%	49	39	-10
Higher Education and Research	-21%	-14%	64	69	5
Life Science (Bio-tech)	-15%	4%	46	56	10
Manufacturing	-38%	-42%	70	66	-5
Utilities	500%	10%	974	178	-796
Motor vehicles	-3%	21%			27
Total	-2%	6%	75	81	6

Source: City of Sydney FES Data

As employment has contracted slightly but floorspace has increased across the Enterprise Area, the floorspace per job has increased.

Factors driving increases in floorspace per job ratio include automation, lower labour requirements and increasing prominence of low employment-density storage uses. Industries with notable increases include:

- Creative industries, which contains a large amount of storage floorspace (43% of all creative industries floorspace)
- Transport and logistics, in which automation is likely to be occurring
- Government, in which several low employment density urban services were built between 2012-2017
- Motor vehicles, where employment in small mechanics and similar businesses has decreased, but has been replaced by larger businesses and sales premises with lower employment density
- ICT, in which large data centres which employ few people were built between 2012-2017

Factors driving decreases in floorspace per job include shifts in overall employment composition towards office-based and professional work which requires relatively little space. The community, finance and financial services and health sectors had relatively large decreases in floorspace to job ratios. The presence of each of these sectors in the Enterprise



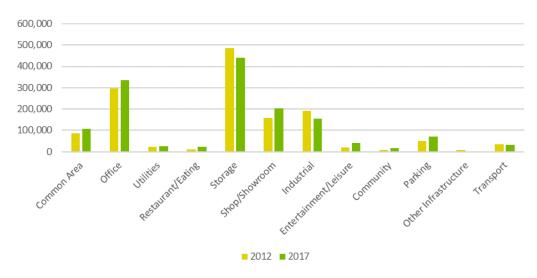
Area is relatively small, and there was a shift in each case in the predominant kind of activity occurring in the Enterprise Area.

Many predominately office-based industries (notable professional and business services) had little change in their floorspace to job ratio. For example, professional and business services had significant growth in both employment and floorspace between 2012-2017 which were relatively evenly matched.

Space use

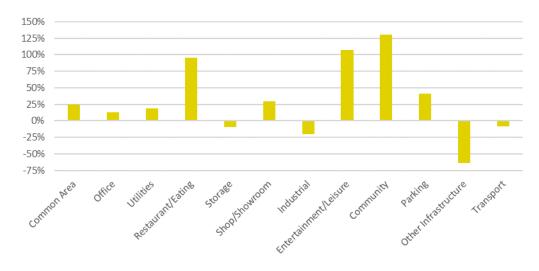
Changes in the amount of floorspace associated with different space uses mirror the overall shift in the sector composition of the economy in the Enterprise Area (see Figure 13 and Figure 14).

FIGURE 13: FLOORSPACE BY SPACE USE (SQM) IN THE ENTERPRISE AREA



Source: SGS 2020 based on City of Sydney FES data

FIGURE 14: CHANGE IN FLOORSPACE BY USE BETWEEN 2012-2017 IN THE ENTERPRISE AREA



Source: SGS 2020 based on City of Sydney FES data

Storage (a predominately industrial use) and office (a predominately non-industrial use) are the most common uses in the Enterprise Area, which also contains large amounts of floorspace used for shops, showrooms and industrial purposes. Between 2012-2017, there was a small decline in floorspace used for storage in industrial purposes (as well as for other



infrastructure which is a relatively uncommon land use), and very significant increases in percentage times in restaurant, entertainment and community space, with smaller but still large increases in the space used for shops, office spaces and common areas.

4.2 Economic links from the Enterprise Area

A key part of the economic importance of the Enterprise Area is its role in the supply chains of other areas with high levels of employment and economic activity throughout the Eastern Economic Corridor, including the Sydney CBD.

One way of illustrating these supply chain linkages is through the movement of freight. The destinations for freight from the Sydney Inner City SA3 (the borders of which are similar to those of the City of Sydney) are shown in Figure 15.

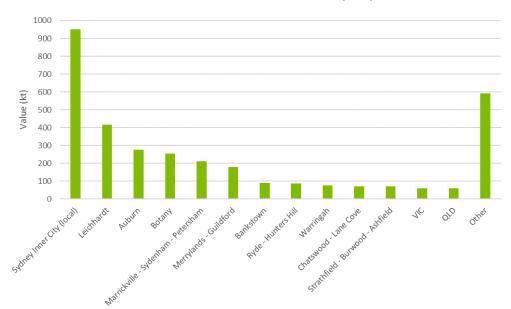


FIGURE 15: TOP SA3 DESTINATIONS FOR SYDNEY INNER CITY FREIGHT (2016)

Source: TfNSW Open Data Hub

A significant volume of goods is freighted out of the inner city, due to its diverse productive role. However, the inner city itself is the most major 'customer' of freighted goods. The breakdown of these locally consumed goods points to a diverse network of supply chains supporting specialised industries, the construction sector and commercial operations. This is explored in Figure 16, which shows the commodity types of freight within the Sydney Inner City SA3, comprising a broad mix of commodities.



Furniture and Other Other Beverage and Tobacco Manufacturing **Product Manufacturing** 2% 2% Basical Chemical and Chemical Product Manufacturing 4% Machinery and Equipment Food Product Manufacturing Manufacturing 40% 10% Non-Metallic Mineral Product Manufacturing 11% Wood Product Manufacturing 11% Concrete

FIGURE 16: COMMODITY TYPES OF SYDNEY INNER CITY (SA3) LOCAL FREIGHT MOVEMENTS (2016)

Source: TfNSW Open Data Hub

4.3 Population growth

Rapid population growth has occurred recently in the City of Sydney, shown in the table below. Much of this growth has occurred near the Enterprise Area, including in Green Square, Alexandria and Waterloo.

TABLE 4: RECENT POPULATION GROWTH IN THE CITY OF SYDNEY

Year	2006	2016	Change
Estimated resident population	164,597	222,717	58,120 (+35%)

Source: ABS 2019, Australian Demographic Statistics

Continued rapid population growth is forecast in the City of Sydney, with Forecast.id projecting population growth of 115,287 or 51% between 2016-2036. Much of the future growth is forecast near the Enterprise Area, including in and around Green Square, Waterloo and Alexandria (as shown in Figure 17).

Population growth near the Enterprise Area will increase demand for population services, including in the retail, hospitality and leisure sectors. This is reflected in recent changes in employment and floorspace (explored in Section 4.1). There is the potential for continued growth in these sectors to displace some industrial uses if it is allowed throughout the Enterprise Precinct.

Housing development is also likely to replace existing employment, industrial and mixed enterprise premises which are outside of the Enterprise Area boundaries, but which still have an industrial character and are now zoned for redevelopment. This will displace large-format and industrial uses and is likely to increase floorspace demand in the Enterprise Area. More information on the amount of employment generating floorspace of an industrial nature that could be displaced is included in Section 8.2.



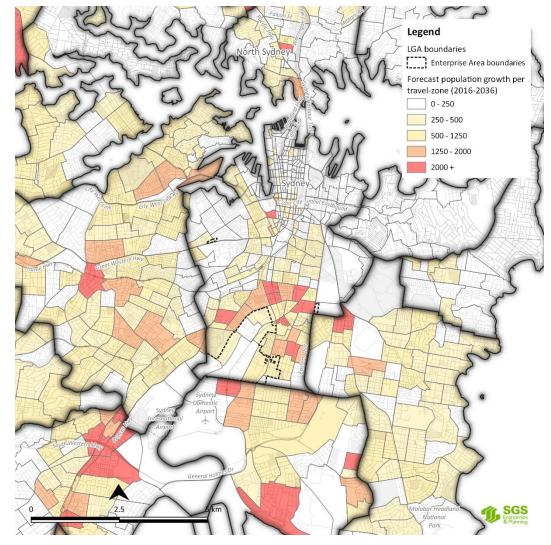


FIGURE 17: FORECAST POPULATION GROWTH IN AND AROUND THE CITY OF SYDNEY

Source: SGS 2020, Forecast.id City of Sydney Population Projections, TfNSW 2020 TZP 19 Projections

4.4 Property market

Enterprise area property sales

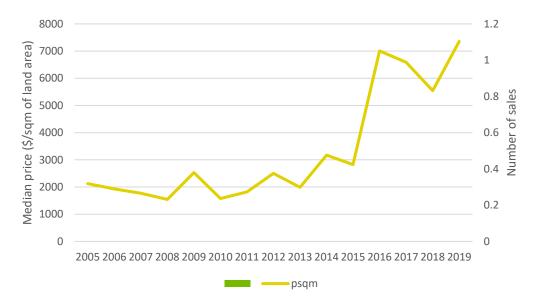
Property sale prices provide an indication of demand for land and premises across the Enterprise Area. Median prices for the Enterprise Area are shown below for properties which have not been strata subdivided (Figure 18) and for units in strata complexes (Figure 19).

Median prices for land which does not contain strata premises have increased in the Enterprise area on a per square metre basis, but sales volumes are not high enough to provide a meaningful median in specific parts of the Enterprise Area. These increases can represent either increases in expected development realisation or increases in realisable rents associated with floorspace demand.

Median prices for strata premises provide a more direct indication of floorspace demand for small premises in the industrial area. These have increased on average in all land use zones since 2005 and have generally at least doubled. The fastest increase in sale prices was between 2013-2017, although they appear to have stabilised somewhat since then. Prices are highest in the B7 zone, which is closest to Green Square and the Sydney CBD.

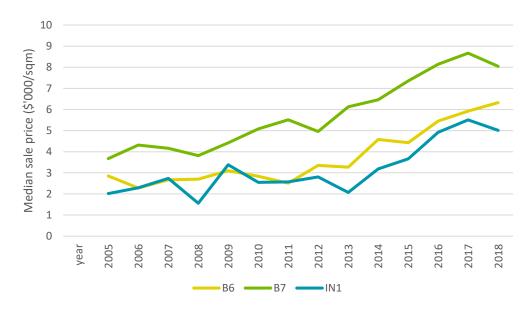


FIGURE 18: MEDIAN PRICE OF NON-STRATA PROPERTY SALES IN THE ENTERPRISE AREA



Source: SGS 2020, Property NSW, Bulk Property Sales Information

FIGURE 19: APPROXIMATE MEDIAN STRATA UNIT SALE PRICES IN THE ENTERPRISE AREA BY LAND ZONE



Source: SGS 2020, Property NSW, Bulk Property Sales Information

South Sydney industrial market

The performance of the South Sydney Industrial market (which includes the City of Sydney Enterprise Area) has been reviewed based on published research by the property sector in more detail than is possible from bulk sales data (the source for city of Sydney specific data in the previous section). While this provides more information than can be gained from publicly available data, but the information is not available on a small area basis.

Despite difficulties in the wider economy, the industrial land market remains strong in Sydney. Across Australia, growth in the e-commerce sector is seen as driving much of the demand for industrial land uses, including in related sectors such as logistics. Sydney continues to have the highest rents among the capital cities for prime stock, though the increases across the city have not been as high as some others recently. However, over the



last five years, industrial land values in Sydney have grown by an average of 12 per cent per annum, and are the highest among the capital cities. ¹⁶

There is substantial price differentiation between precincts within Greater Sydney (see Figure 20). In the South Sydney area, which includes industrial land in the City of Sydney as well as further south, industrial land values are estimated to have grown at a rate of 3.1 per cent year-on-year to 2019, compared to 5.4 per cent and 4.0 per cent for the Outer South West and Central West markets respectively. Over the same time period rents in South Sydney grew at a faster rate of 3.9 per cent year-on-year, compared to 2.1 per cent and 2.0 per cent in the Outer South West and South West respectively. ¹⁷ Growth in rents has been particularly strong for prime stock, growing by 21 per cent year-on-year, with land values in the most sought-after locations increasing by 29 per cent, reaching up to \$2,750 per square metre. ¹⁸

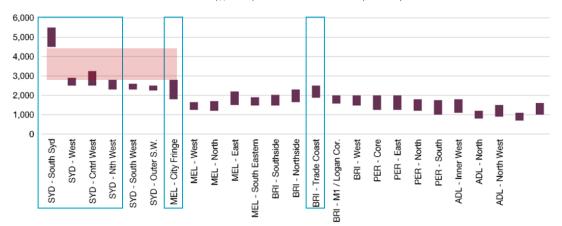


FIGURE 20: TYPICAL CAPITAL VALUE RANGE (\$/SQM) - PRIME INDUSTRIAL (DEC 19)

Source: Savills Research Australia, Quarter Time National Industrial report Q4/2019 (with highlights added by SGS)

The industrial land market in the Eastern City is more valuable, and therefore expensive, than any other industrial land market in Australia. According to research undertaken by Savills (see Figure 20), in December 2019, The South Sydney industrial market (primarily focused on the enterprise zone between the CBD, Port Botany and Kingsford Smith Airport) had approximately twice as high Capital Value ranges for prime industrial than Melbourne's City Fringe. Sydney's Central West was also higher than Melbourne¹⁹.

Overall, net face rents in South Sydney are the highest in Greater Sydney.²⁰ This represents intense competition for floorspace in the South Sydney area, which may displace businesses who are unable to afford the increasing rents. While the Sydney South industrial market has always been the most valuable in Greater Sydney, the past two years has seen significant growth (see Figure 21). This corresponds to the reduction in a reduction in new supply, and is also likely to be driven by changing demand trends explored in Chapter 3.

²⁰ Savills, 2019, 'Quarter Time National Industrial Q3/2019,' Savills Research, https://pdf.savills.asia/asia-pacific-research/australian-research/australia-industrial/savillsresearch-quarter-times-industrial-q3-2019.pdf



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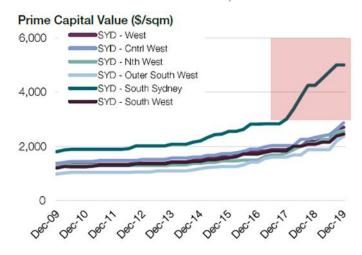
¹⁶ CBRE, 2020, 'Australia Industrial and Logistics, Q4 2019,' Marketview, <a href="http://cbre.vo.llnwd.net/grgservices/secure/Australia_Industrial_MarketView_Q4_2019.pdf?e=1581919507&h=128ff470f4_3005c9a27eb86e623e04a4; Colliers International, 2019, 'Industrial – Second Half, 2019,' Research and Forecast Report, https://www.colliers.com.au/en-AU/Research/Industrial-Research-and-Forecast-Report-Second-Half-2019

 $^{^{\}rm 17}$ CBRE, 2020, 'Australia Industrial and Logistics, Q4 2019.'

¹⁸ Colliers International, 2019, 'Industrial – Second Half, 2019,' Research and Forecast Report.'

¹⁹ Source: Savills Research Australia, Quarter Time National Industrial report Q4/2019

FIGURE 21: CHANGE IN PRIME CAPITAL VALUE, SYDNEY 2009-2019



Source: Savills Research Australia, Quarter Time National Industrial report Q4/2019

Factors and trends affecting the South Sydney sub-market and its industrial floorspace prices that are highlighted by property market research include:

- Declining stock and very few vacancies below historic levels²¹
- Increased competition from non-industrial uses leading to rising rents
- Relocation of traditional occupiers due to higher costs
- Diversification in the tenant base to include higher value sectors such as population serving uses, wholesale retail, and car and furniture showrooms.

Due to the increased demand being seen from logistic and e-commerce related uses, investment in industrial land is increasing generally across industrial markets, including in speculative developments. Demand is also being seen for new types of warehouses and other industrial spaces, such as facilities which are geared towards greater automation.

²¹ Knight Frank, 2019, 'Sydney Industrial Market Overview, July 2019,' https://content.knightfrank.com/research/331/documents/en/sydney-industrial-market-overview-july-2019-6603.pdf



4.5 Discussion

Between 2012-2017, employment declined but floorspace increased and property rents and sale prices increased significantly. In combination, these factors indicate that a decline in employment an indication of a shifting industry and space use profile rather than a decrease in economic performance. Increasing land prices and rents illustrate the economic success of the Enterprise Area and the intense competition for space within it.

As a result of the competition for space, industrial and urban services uses could be displaced without planning controls to preserve spaces suitable for them. The value of industrial and urban services uses in the Enterprise Area extends beyond their employment. They provide services to the surrounding population and businesses and often have critical links to the supply chains of the Sydney CBD and other nearby economic engines.

There is a notable shift in the employment and floorspace profile between 2012-2017 from traditionally industrial sectors towards office and knowledge-based sectors as well as population services. There has been a broad diversification in the industry profile. This is likely to be driven by multiple spatial drivers including Green Square and proximity to the CBD and surrounds, Port Botany and Sydney Airport and the innovation community.

There are signs of a divergence in employment and floorspace growth, with employment contracting but floorspace increasing. Different trends are visible in different industries, with factors like automation increasing floorspace per worker in transport and logistics while predominately office-based industries use much less space per employee.

Pressure for redevelopment of sites with an industrial character for office-based use is likely to continue in the future as employment in high-value add sectors increases. Population growth will also place increasing pressure on traditionally industrial uses by increasing demand for population-serving businesses.



5. STAKEHOLDER ENGAGEMENT

The following stakeholders were engaged with as part of the study to understand their perspectives regarding the Enterprise Area. The conversation focused on the limitations of the precinct, the drivers for location and their views on its future.

The stakeholders were sourced from a list provided by the City of those who had presented submission to Council as part of the Local Strategic Planning Statement process. These stakeholders were:

- Goodman
- Harvey Norman, and Knight Frank Town Planning representing them
- Markham Real Estate Partners, and Mecone representing them
- Addenbrooke Pty Ltd, and Ethos Urban and SJB Planning representing them
- Pemika Pty Ltd and Rex Holdings, with Knight Frank Town Planning representing them
- Local real estate agents (for the purpose of gaining insight into the local market).

Findings from this consultation are summarised below.

Current status of the Enterprise Area

Competitive advantage

The area is uniquely situated in proximity to the Sydney Central Business District (CBD), the international airport, main arterial roads, the rail network, and Port Botany. All respondents suggested that the area was accessible to their work force, suppliers, and customers. Respondents particularly highlighted proximity to the CBD, other office precincts, the eastern suburbs, Port Botany and the Airport.

Creative industries find this area attractive – for example architects, marketing and IT professionals. Businesses in these industries appreciate the fabric of the area with a mix of uses, old and new buildings, coffee shops and other services combined with new amenity at Green Square (among them hotels, conference centres).

The O'Riordan Street Corridor was highlighted as having a unique competitive offering for uses which benefit from exposure like large format retail. Proximity to the wealthy Eastern Suburbs was also highlighted as a key advantage of this corridor for large format and specialised retail premises.

Current land use

The area has become expensive, so *new businesses only locate here now if they have to be here*. There are also some businesses who are in the area for historical reasons, but this is declining.

Land uses in the area included warehousing, commercial office spaces co located with warehousing, distilleries, creative enterprises, and light industrial uses such as printing and industrial laundries, but most respondents agreed that the enterprise area was expensive for warehousing.

Challenges

Land use conflict

One respondent suggested that the interface between residential and light industrial uses creates tensions and restricts industrial activity. For example, residents complain about truck



noise and environmental externalities such as odours and water vapour in the air. This limits the potential of continued industrial use in the Enterprise Area without appropriate management.

Infrastructure

Respondents suggested that infrastructure such as traffic and utility constraints (for example electricity and sewer capacity) are constraints for industrial uses with significant utility requirements.

Traffic and transport constraints were also highlighted as a significant and ongoing challenge throughout the precinct. Ongoing residential development will increase traffic and pressure on other transport infrastructure, exacerbating existing congestion problems.

Walkability is variable throughout the precinct, with only some areas easy to walk around.

Planning

Respondents suggested that FSR controls limit the development potential of the area, in some cases undermining the feasibility of future projects with a commercial focus.

Conditions on development approval were also highlighted as constraining industrial use, slowing development and limiting flexibility (for example conditions on operating hours).

Future of the Enterprise Area

Future industrial uses

While respondents felt that some existing industrial businesses may move away as uses continue transition, there may be demand in the future for small-scale boutique or bespoke industrial uses. Small branches of businesses which are displaced may be retained in Alexandria to cater to clients in the CBD and elsewhere

Future demand for dark stores and warehousing was raised, particularly as the appetite for online shopping continue to increase.

Higher-density and multi-storey warehousing was also highlighted as a key future direction for the Enterprise Area by which demand for warehousing space could be accommodated.

Office uses

Respondents suggested that there would be likely to be demand for commercial office spaces in the future near Green Square. Green Square is proximate to the Sydney CBD and the Airport and has cheaper office space than the CBD. Continued improvement in the perception of South Sydney as a business destination was also highlighted, catalysed by the development of the new Commonwealth Bank headquarters at South Eveleigh (the former Australian Technology Park).

The northern part of the Southern Enterprise Area, which was not precisely defined spatially but is roughly synonymous with North Alexandria, was identified as having a different character to the rest of the Southern Enterprise Area, with more industrial uses to the south and smaller lots in transition in the north. North Alexandria was also identified as having a much stronger potential to develop commercial uses in the future due to its proximity to Green Square Station.

Potential other uses

Some respondents raised the need for a wider range of flexible uses to be introduced into the industrial areas to cater to the dynamic nature of the industrial sector. For example, respondents supported uses such as co working spaces and co locating warehousing and administration.



The need was also raised for more commercial food offerings and night-time activation to ensure that the area does not become an 'urban wasteland' after office hours. These would cater to the growing population.

A range of potential uses apart from office premises were suggested for the B7 zones in North Alexandria Future uses in B7 and Rosebery including day surgeries, gyms, dance studios, IT server hubs, speciality foods.

West Connex

West Connex was highlighted as both an opportunity and challenge for the Enterprise Area. The presence of the Enterprise Area next to the WestConnex interchange at St Peters is likely to make parts of the precinct more competitive for freight and logistics businesses as well as other businesses that need to be accessible from a broad area.

However, WestConnex will also make it quicker to travel from the Sydney CBD to further away industrial precincts like Silverwater, partly duplicating the strategic advantage of the City of Sydney Enterprise Area of temporal proximity to the CBD. This could allow some businesses that currently need to be in the Enterprise Area to move to other cheaper locations.



6. COMPETITIVE POSITIONING

6.1 Competitiveness of the Enterprise Area

To understand the important and diverse roles that the Enterprise Precinct plays in the Greater Sydney economy, it is instructive to compare it to a range of precincts and centres. This highlights the unique nature of the precinct and, in turn, the need to safeguard and proactively plan its future directions.

Proximity to labour market and customers

The Enterprise precinct's location and access to public transport makes it an outlier across Sydney's industrial precincts. This has been quantified by analysis of the effective job density (EJD) and effective population density (EPD).

EJD is a measure of the effective concentration of employment, derived from both the location of all jobs across a region (in this case Greater Sydney), and their accessibility from a given precinct. EJD quantifies how the agglomeration of employment varies between different precincts. It is calculated using two variables:

- Travel time (private vehicle and public transport) from location a to location b calculated using actual transport networks, and
- Number of jobs at location b sourced from 2011 Census.

EPD is a similar measure but is calculated with population density instead of employment density. As a result, EJD quantifies how many other suppliers and customers a business has access to compared to other areas, while EPD quantifies access to the labour market. A location with greater access to the labour market will be more economically competitive, as businesses can hire workers with a better skill fit to roles.

The normalised EJD and EPD of the Enterprise Area (excluding Moore Park and Camperdown) is compared to others in Greater Sydney in Figure 22 below.

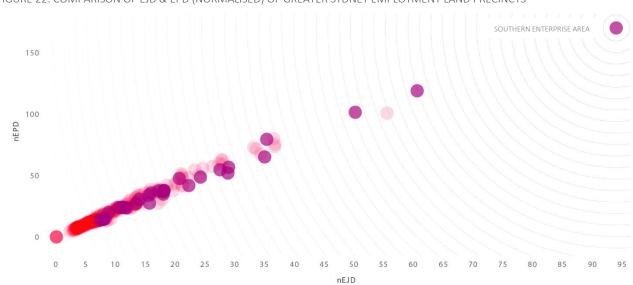


FIGURE 22: COMPARISON OF EJD & EPD (NORMALISED) OF GREATER SYDNEY EMPLOYMENT LAND PRECINCTS

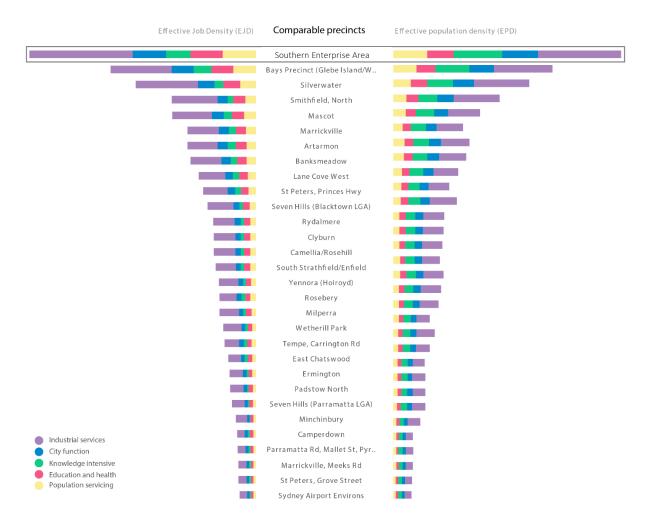
Source: SGS 2020, based on ABS Census data 2016



This figure illustrates the unique position that the Southern Enterprise Area holds among enterprise and industrial areas across Greater Sydney. The Southern Enterprise Area has by far the best access to other businesses and to the labour market, making it a much more competitive business destination that any other precinct.

EJD and EPD are broken down into five broad economic categories in Figure 23 below. This breakdown demonstrates the advantage that the Enterprise precinct has in terms of its accessibility to jobs and skills across *all* sectors of the economy.

FIGURE 23: COMPETITIVE POSITION OF ENTERPRISE AREA WITH OTHER INDUSTRIAL PRECINCTS ACROSS MULTIPLE ECONOMIC SECTORS



Source: SGS 2020, based on ABS Census data 2016

The EJD of many other precincts is dominated by traditionally industrial sectors. By contrast, the Southern Enterprise Area has high EDJ and EPD scores across each of these sectors, including both industrial and knowledge intensive. What this illustrates is that unlike other industrial and enterprise precincts across Greater Sydney, the City of Sydney's Enterprise Area has access to a deeper and therefore more diverse pool of labour. This means that the businesses that locate here, take advantage not just of the proximity to suppliers and customers that surround the area, but can also attract the best talent from the widest possible area.

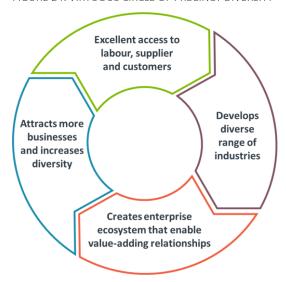
Industry diversity

The Enterprise Precinct's competitive advantage and access to skills, supplier and customers creates a virtuous circle of demand, which is illustrated in Figure 24.

Excellent access makes the Enterprise Area a competitive business location. increasing demand for space and supporting economic growth across a diverse range of industries. Economic diversification in turn creates a diverse enterprise ecosystem which enables value-adding relationships through agglomeration. These value adding relationships reinforce competitiveness and growth, fuelling diversity and improving accessibility of labour, suppliers and customers from the Enterprise Area.

However, this virtuous cycle requires a diversity of floorspace in the first instance and a sustained supply of floorspace to continue to support the high value industries that benefit from

FIGURE 24: VIRTUOUS CIRCLE OF PRECINCT DIVERSITY



Source: SGS Economics and Planning 2020.

location within the Enterprise Area. If diverse and in some cases affordable floorspace is not available, continued economic diversification will not be possible.

Industrial precincts such as the Southern Enterprise Area have a greater diversity of industries present than the Parramatta CBD and specialised centres such as the Randwick H&E precinct. This is illustrated in Figure 25 below, as measured by the standard deviation in proportional industry composition. This diversity reflects the breadth of demand for Alexandria and some other enterprise precincts, compared with commercial centres that cater to a relatively narrow range of business types.

16% Less diverse: one 13.7% 14% or a select few industries 12% dominating 10% Deviance (%) 8% 6.8% 5.3% 5.2% 6% More diverse: 4% multiple industries sharing the spread 2% of jobs 0% Alexandria Brookvale (eastern Parramatta CBD Randwick H&E (industrial land) industrial land) Precincts Greater Sydney average job diversity index

FIGURE 25: EMPLOYMENT DIVERSITY IN ALEXANDRIA COMPARED TO OTHER EMPLOYMENT PRECINCTS

Source: SGS 2020 based on GSC Urban Services Database



6.2 Urban services role

The Enterprise Area supports a diverse range of urban services roles. These are the businesses and sectors that support he ongoing and efficient operation of the city and which need to be located near where people live and work. As economic development and population growth continues in the City of Sydney and nearby, the need for urban services in the Enterprise Area will only grow.

Examples of urban services currently located in the Enterprise Area are listed below.

Concrete and asphalt batching, building supplies, plant hire and other building services

These uses require large amounts of land and as industrial uses often have some offsite amenity impacts. Their location near major construction sites is critical to support timely and cost-effective construction, and so displacement of these sites could hamper ongoing development in the CBD and Inner-city.

Utilities, including facilities for supply of electricity and water

Continued development growth and economic development creates more need for substations and other utilities operations which are best located in industrial areas

Council and waste management depots

The Enterprise Area includes Council facilities for the City of Sydney, Waverley and Woollahra. To ensure efficient operations council depots, including for waste management as well as other council functions, need to be located in affordable premises which are highly accessible to the rest of the local government area and where operations are not constrained. There are few other areas apart from the Enterprise Area which could serve a similar purpose for the City of Sydney.

Data centres

Major under-sea data cables land in Alexandria. As a result, the Enterprise Precinct is the ideal place for large data centres, with several centres currently located in Alexandria or proposed. These data centres are a kind of 'new generation urban service' which is technology based and is linked to the operation of the highly productive financial and IT sectors in the Sydney CBD and other nearby office precincts.

Transport, freight, postal and courier services

Alexandria contains transport depots and hubs for postal and courier services including a major Australia Post facility. Transport depots in well located areas are required for the efficient operation of the transport system, while hubs for postal and courier services are needed to facilitate the delivery of post to inner city areas including the Sydney CBD, which is critical to business.

Warehousing and local distribution facilities to support online shopping

As the market share of online shopping grows, the need for warehouses and distribution facilities facilitating last-mile delivery to consumers is growing.

Event production and technical services

Alexandria contains storage and production facilities for several events and creative institutions. For example, Opera Australia's storage warehouse is in Alexandria. Production facilities need to be near other operations within the production supply chain, while prop storage and similar activities for theatre productions must be near where the performances are staged to allow rapid deliveries to rehearsals and performances.

Self-storage

There are self-storage premises both in the Enterprise Area and in nearby areas zoned for residential redevelopment. As the proportion of the population living in high density housing



increases, the average size of dwellings will decrease and the need for self-storage premises to store additional possessions will increase. Without these premises being accessible to high-density housing areas, liveability will suffer.

Other storage facilities

There are several document and other storage facilities in the Enterprise Area which cater to businesses nearby.

Supermarket local distribution hubs

The increasing localisation of supermarkets and consumer preference for home delivery is leading many supermarkets to establish local distribution hubs in areas like the Enterprise Area which are near the local population.

Vehicle repair premises

There are several vehicle repair and servicing premises in the Enterprise Area catering to the local community

6.3 Position within the Enterprise Ecosystem

Enterprise Ecosystem

The Enterprise Area sits within a broader ecosystem which is part of the Eastern Economic Corridor. This is illustrated in Figure 26, which shows the enterprise ecosystem that extends between Botany Bay and Sydney's Lower North Shore, including employment in particular precincts and innovation anchor institutions.

St Leonards
North Sydney
North Sydney

Bays Precinct

UIS N
Sydney CBD

Alexandria

Sydney CBD

Alexandria

Sydney CBD

Sydney

FIGURE 26: THE ENTERPRISE ECOSYSTEM

Source: SGS Economics and Planning, 2020, based on data from TfNSW TZP 1.51 projections



Many of the discrete yet inter-connected employment precincts around the Enterprise Area have at their centre a dominant land use, infrastructure asset or institution that helps to define them.

The precincts south of Alexandria are anchored by the Port and Airport and have a strong industrial focus. Specialised health and education precincts flank the corridor to the east and west (Randwick and Camperdown), anchored by large hospitals and educational institutions. Precincts closer to the CBD have a higher proportion of knowledge intensive jobs, reflecting their roles as office precincts.

The Southern Enterprise Area (labelled as Alexandria in Figure 26) is located between the office precincts to the north, health and education precincts to the east and west and more-industrial precincts to the south. Compared to these other precincts, it has a notable spread of employment across the four categories shown in Figure 26, illustrating its broad economic roles connecting both to the north and south.

Along with other nearby precincts, the Southern Enterprise Area is proximate to a wide range of health, education and innovation anchors. In contrast to other precincts, the Southern Enterprise Area combines a wide range of floorspace sizes and types (ranging from more to less industrial) with high levels of accessibility to office precincts further north and slightly lower premise rents. This creates a key role for the Southern Enterprise Area in facilitating the commercialisation of research from nearby precincts, providing space for businesses at a range of stages of their evolution.

The 'Central Enterprise District'

In recognising the complex network of precincts and industries in this corridor, and recalling the significant economic contribution that each of these precincts create, the view of inner city industrial precincts as remnant places of declining industries shifts sharply toward considering them collectively as a critical engine of economic activity.

The collection of industries and the scale of employment and economic activity in the Southern Enterprise Area represents the industrial and enterprise version of the CBD – the 'Central Enterprise District' with an agglomeration of inter-dependent, high value businesses who value the central location, high Effective Job Density and accessibility to labour markets to such a degree that they are willing to pay Australia's highest industrial rents to be here. These precinct characteristics parallel those of the CBD itself, and emphasise the economic value of the Southern Enterprise Area. However, unlike a CBD, protection of industrial and urban services functions and provision of floorspace of a variety of sizes and functions (including knowledge intensive functions) is required in a central enterprise district.

The poly-centric industrial network

The inter and intra-precinct (and district) supply chain relationships industrial precincts support parallel a defining economic geography characteristic long-championed in the Greater Sydney strategic planning context – the Poly-centric City model.

The Poly-centric city model eschews the notion that a singular commercial centre defines the economic geography of a city, instead distributing concentrations of employment in a series of distinct, potentially specialised inter-dependent smaller centres. In practice, this model (at least in Greater Sydney) relies on the primacy of a dominant economic cluster which other centres support in a variety of ways. The long-term ambition of the Greater Sydney Region Plan is to anchor each of the three cities with a similar economic cluster, which other centres will interact with in a range of ways both economically and physically. This model relies on the development of an integrated networked transport system.

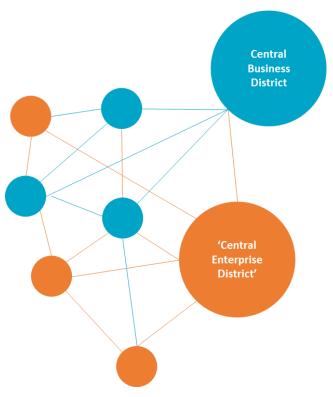
This poly-centric model exists across Greater Sydney's industrial precincts. At the economic centre of this industry poly-centric network is the CBD-Airport corridor — the central enterprise district of Greater Sydney. With the Aerotropolis emerging in the coming decades in the Western City, the industrial precinct surrounding could grow to co-anchor this



industrial network (although it will differ in economic composition as the Aerotropolis will differ from the Sydney CBD).

As with the commercial poly-centric model, the poly-centric industrial model requires a distribution of industrial precincts throughout the city to support specialised regional functions or local businesses. The industrial poly-centric nodes directly support the functioning of nearby commercial centres through the provision of local urban services and centre-support functions. As the following figure illustrates, the twin major nodes for this poly-centric model are both the CBD (for the commercial poly-centric model) and the Central Enterprise District (for the industrial poly-centric model).

FIGURE 27: ILLUSTRATION OF THE INTERACTION BETWEEN THE COMMERCIAL AND INDUSTRIAL POLYCENTRIC NETWORKS



Source: SGS Economics and Planning, 2020

The preservation and active support of the Central Enterprise District in the Eastern City is vital. The Eastern Economic Corridor is anticipated to accommodate 30 percent of Greater Sydney's future jobs, and needs to be sustained and nurtured in the same way that strategic planning recognises the critical role of the Sydney CBD in not just the local economy, but the regional and national economy.

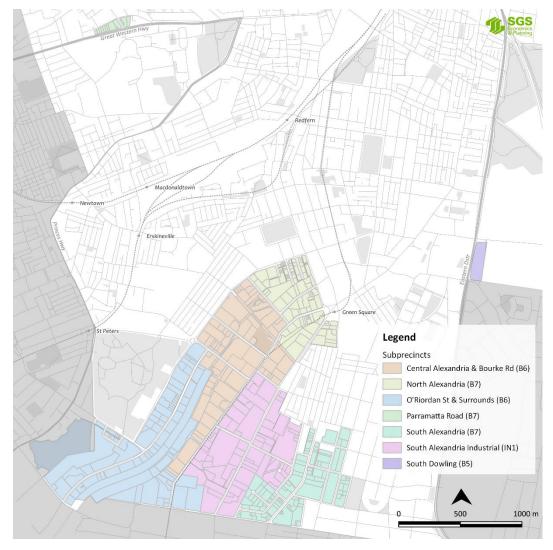


7. SUB-PRECINCT ANALYSIS

7.1 Sub-precincts in the Study Area

Sub-precincts have been identified in the Enterprise Area based on the current land use zone and mix of uses. These sub-precincts are shown in Figure 28. They will form the basis for discussion of the prospects and vision for different parts of the Enterprise Precinct.

FIGURE 28: SUB-PRECINCTS IN THE ENTERPRISE AREA



Source: SGS 2020



Sub-precinct land uses

The floorspace composition of each sub-precinct by industry sector is shown in Figure 33 below, followed by recent changes in this composition in Figure 30. This information, along with more detailed data, is synthesised in Table 5 overleaf to show the predominant uses and recent notable sectoral changes in each sub-precinct. Notable commonalities between precincts are the wide diversity of industry sectors present, and the diversification of sectors within industrial or office-based use profiles.

Sth Alex & Rosebery O'Riordan St Sth Alex Ind Cent. Alex. & Bourke Rd Nth Alex. Moore Park Camperdown 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% ■ Food, Drink, Retail & Personal Services 0 ■ Creative Industries ■ Professional and Business Services ■ Motor Vehicle ■ Transport and Logistics

Other

FIGURE 29: FLOORSPACE COMPOSITION OF EACH SUBPRECINCT (2017)

Source: SGS 2020 based on City of Sydney FES data

■ Manufacturing



FIGURE 30: SUBPRECINCT CHANGE IN FLOORSPACE BETWEEN 2012-2017



Source: SGS 2020 based on City of Sydney FES data



TABLE 5: SECTORAL COMPOSITION AND CHANGES IN EACH SUBPRECINCT

Sub-precinct	Sectoral characteristics	Notable changes between 2012-2017
North Alexandria	 Wide mix including large manufacturing and motor vehicle servicing sectors. Little creative industry, professional services or ICT Relatively large 'other', much of which is the Red Cross on O'Riordan St 	 Small decline in floorspace used No overall shift towards or away from traditional industrial activity
Central Alexandria & Bourke Road	 Relatively large retail and personal services sector, almost all storage and office use rather than shops (for example, maintenance facilities for retail goods, small warehouses for retail distribution) Relatively large ICT sector, mostly storage space with some offices Moderate amount of trade and logistics and manufacturing 	 Very large increase in retail and personal services, predominately due to Bunnings opening Shift towards more knowledge intensive use, with small increases in creative industries, professional services and ICT and decline in trade and logistics and manufacturing
South Alexandria Industrial	 Industrial activity across wide sectoral mix including: Large freight and logistics and manufacturing sectors Warehouse premises with some factory uses for creative industries, professional services and ICT sectors (as well as a data centre in ICT) Several urban services uses captured under other 	 Sectoral diversification while maintaining predominately industrial use Decrease in freight and logistics, and increases in ICT and other (government urban services)
O'Riordan Street & Surrounds	 Large retail and personal services sector composed primarily of large format retailers along O'Riordan Street Large motor vehicle sector composed of car sale premises along O'Riordan Street Moderately sized creative industries, professional services and ICT sectors which are predominately office based 	 Shift away from traditionally industrial manufacturing and transport and logistics and towards currently dominant sectors (retail, motor vehicle retailing) Increase in professional services Increase in other associated with several gyms and similar service facilities
South Alexandria & Rosebery	 Large food and drink sector, including the Cannery and other restaurants and head offices Moderately sized creative industries, professional services, ICT and some other sectors which including a mix of offices, storage and industrial premises Relatively large freight and logistics (including a large Australia Post facility) sector and moderately sized manufacturing sector 	- Shift from transport and logistics to food and drink, with other small changes
Camperdown	 Small precinct with relatively few premises makes sectoral analysis less relevant Several sectors represented, predominately office and shop/showroom based 	- Relatively minor changes in composition
Moore Park	- Exclusively retail in the Moore Park Supa Cena	- No change

Source: SGS 2020



7.2 Broad land use categories (BLCs)

Buildings have been categorised into the following BLCs:

- Office: Buildings that resemble commercial office buildings, although in some cases they may contain some floorspace with an industrial character.
- Retail: Buildings used predominately for retailing, typically large format retailing or motor vehicle retailing within the Enterprise Area
- Fine grain industrial: Fine-grain industrial premises on small properties. These are typically older premises which are often found in inner-city Industrial areas like Alexandria and Marrickville.
- Strata industrial/commercial: Industrial or commercial complexes divided into a large number of smaller tenancies, often containing both office and industrial floorspace. They are often strata subdivided.
- Urban services: Low employment or floorspace density uses that are important for the functioning of the City, like substations, concrete batching facilities and transport depots. Note that this is a more restrictive measure of urban services than is discussed in Section 6.2.
- Large lot industrial: Warehouses or industrial facilities with large floorplans. These are often used by transport and logistics businesses but may have a variety of other uses.

Allocated BLCs are shown in Figure 31, illustrating the spatial distribution of building types across the Enterprise Area.

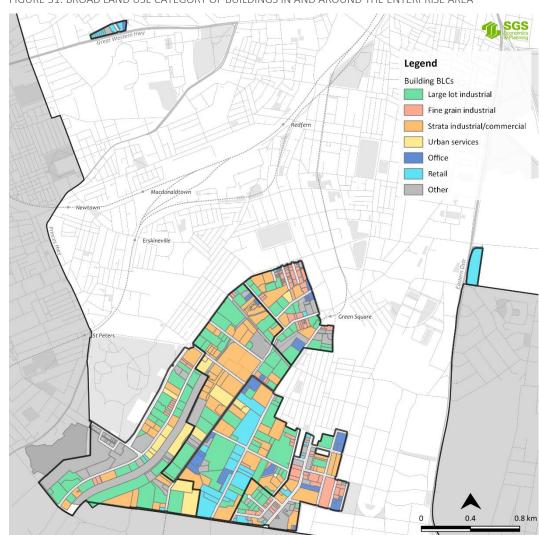


FIGURE 31: BROAD LAND USE CATEGORY OF BUILDINGS IN AND AROUND THE ENTERPRISE AREA



Source: SGS 2020

There is a broad mix of BLCs in multiple parts of the Enterprise Area. Observable patterns in BLC include that:

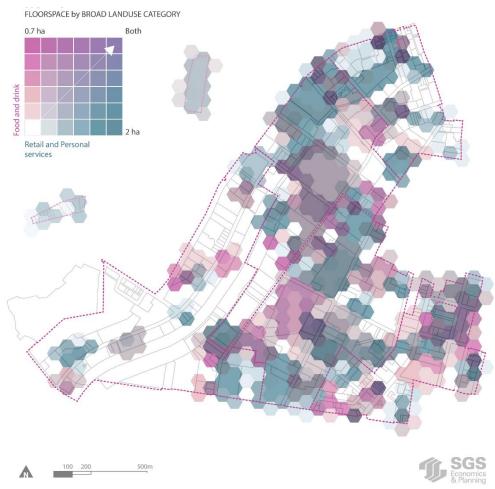
- Retail buildings are concentrated along O'Riordan St, in line with the City's planning controls that permit this.
- There are clusters of fine grain industrial buildings in the northern part of Alexandria and in Rosebery, creating a different character to other areas. There are few small lots outside of these areas.
- There is a mix of large lot industrial and strata style premises on larger lots throughout Alexandria, interspersed with some urban services.
- The south-west part of the Precinct contains a large number of large lot industrial premises and almost all of the urban services premises.

Additional mapping has been conducted to show how floorspace of each type is distributed across the Enterprise area, as opposed to the categorisation of each property.

Population services

Population services are spread throughout multiple parts of the precinct, with the exception of the south-west part of Alexandria which is predominately zoned IN1 (see Figure 32). There is a mix of food and drink and retail premises, with a particular cluster of food and drink in Rosebery and retail along O'Riordan Street and in the north-western part of the Enterprise Area.

FIGURE 32: POPULATION SERVING ACTIVITY IN THE ENTERPRISE AREA



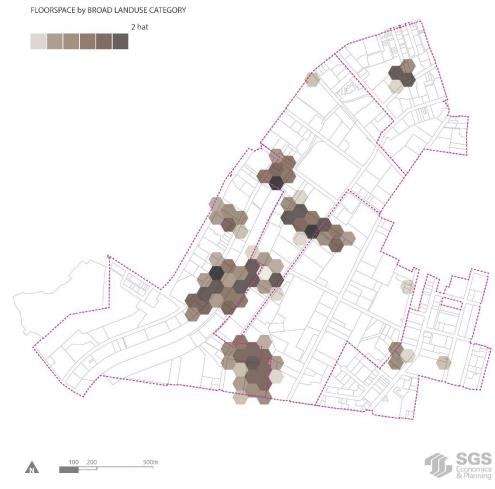


Urban services

Urban services floorspace is concentrated in the Southern Alexandria Industrial sub-precinct and in the adjoining part of the Central Alexandria & Bourke Road Sub-precinct.

As noted above, the definition of urban services used when defining the 'Urban Services' BLC is much more limited than the full scope of industrial urban services critical for the surrounding economy and liveability, which is discussed in Section 6.2. Rather this figure is intended to convey where buildings with an explicit urban services *typology* are clustered in the Southern Enterprise Area.

FIGURE 33: DISTRIBUTION OF URBAN SERVICES FLOORSPACE IN THE SOUTHERN ENTERPRISE AREA



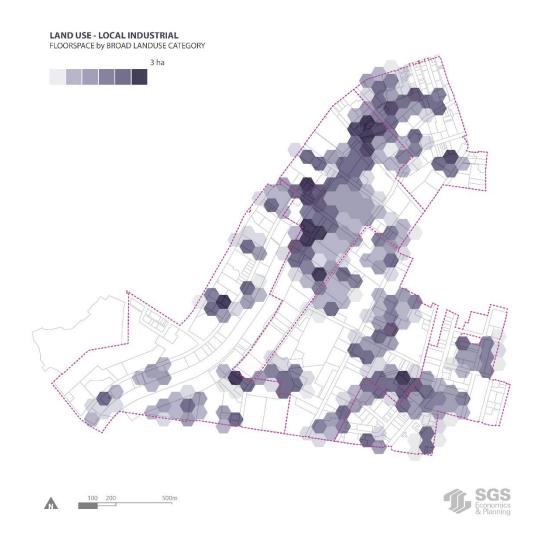
Source: SGS 2020 using City of Sydney 2017 FES data



Large lot industrial

Large lot industrial floorspace is spread throughout the Southern Enterprise Area in multiple sub-precincts.

FIGURE 34: DISTRIBUTION OF LARGE LOT INDUSTRIAL FLOORSPACE IN THE SOUTHERN ENTERPRISE AREA



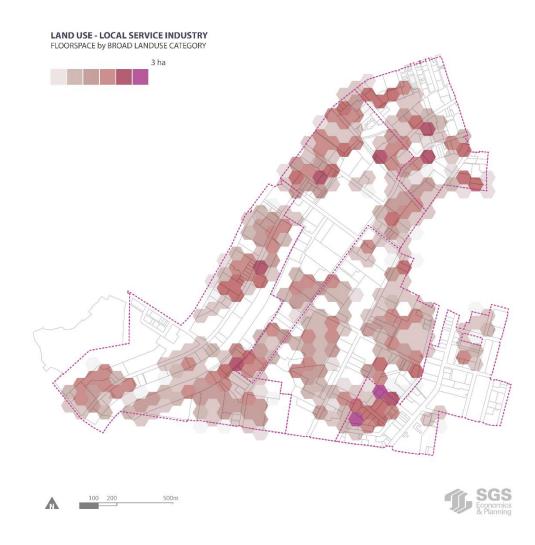
Source: SGS 2020 using City of Sydney 2017 FES data



Fine grain industrial

Fine grain industrial floorspace is also spread across the Southern Enterprise Area and in most sub-precincts.

FIGURE 35: DISTRIBUTION OF FINE GRAIN INDUSTRIAL FLOORSPACE IN THE SOUTHERN ENTERPRISE AREA



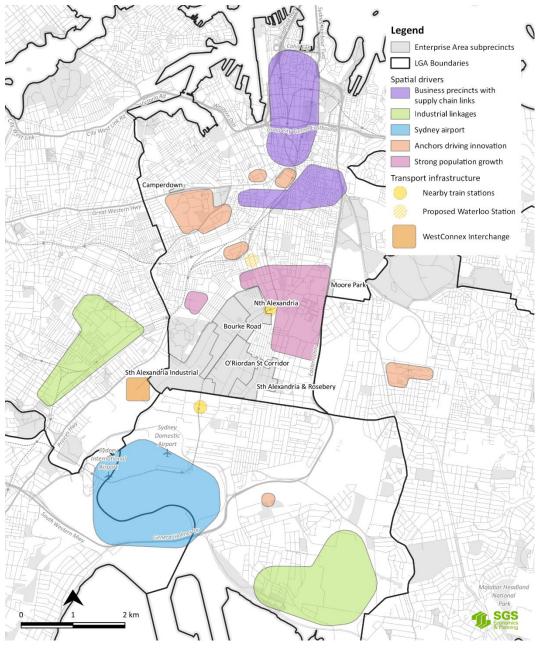
Source: SGS 2020 using City of Sydney 2017 FES data



7.3 Spatial opportunities and constraints

The position of the Enterprise Area creates a wide range of competitive advantages and opportunities. Some of the other uses driving these opportunities are shown in Figure 36 below.

FIGURE 36: SPATIAL DRIVERS OF OPPORTUNITIES AND COMPETITIVE ADVANTAGES NEAR THE ENTERPRISE AREA



Source: SGS 2020

The Enterprise Area is uniquely positioned near the **Sydney CBD and City Fringe** business area centred around Surry Hills and Camperdown which contains a wide range of creative businesses. Over time, businesses priced out of the CBD and City Fringe are moving south, which will increase demand for business premises in the Enterprise Area. North Alexandria is best placed to capitalise on potential business demand as a result of its proximity to Green Square Station.



Population growth in and around Green Square will continue drive demand for population-serving functions in the Enterprise Area such as restaurants, cafes, gyms and services. North Alexandria is adjacent to the rapidly growing Green Square development area, which also extends towards the South Alexandria and Rosebery Precinct. Population growth will also increase road congestion in these areas.

The proximity of the **trade gateways** of Sydney Airport and Port Botany create strong competitive prospects for the Enterprise Area in particular sectors. **WestConnex** will increase accessibility to and from other Metropolitan centres and precincts. In combination these factors trade and logistics uses most strongly in the South Alexandria Industrial Precinct which is located next to the WestConnex interchange, combined with less constrained access to the arterial road network than several of the other precincts.

Education institutions surround the precinct and create opportunities for innovative businesses to locate in the Enterprise Area. Camperdown is located next to the University of Sydney, but the effect of this spatial driver otherwise is likely to depend on the kind of floorspace needed to commercialise new products and the availability of this space in different precincts rather than on spatial accessibility.



Access to public transport

On-road accessibility to current train stations and the proposed Waterloo Station is illustrated in Figure 37. North Alexandria Area is the only area a significant part of which is within 400m of a train station. This accessibility only extends to the part of the precinct closest to Green Square, making it the most appropriate place for any intensification which could occur. Waterloo Station will only marginally improve accessibility to the northern part of North Alexandria, and will still be between 600m-1,000m walk from a train station.

Large parts of the Enterprise Area are more than 1,200m from a railway station, including Moore Park and almost all of South Alexandria & Rosebery, South Alexandria Industrial and Moore Park. Much of the remainder of the Southern Enterprise Area is between 400-800m from a train station. There are also relatively frequent bus routes along Botany Road, but bus routes elsewhere do not provide a high frequency service that would be needed to support significant intensification of use.

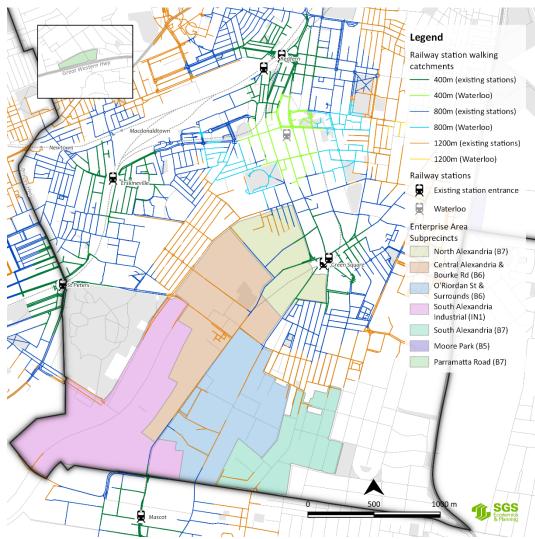


FIGURE 37: ACCESS TO CURRENT AND PROPOSED TRAIN STATIONS

Source: SGS 2020



Development applications for commercial offices

The office, retail and commercial development pipeline has been assessed using the Cordell Connect project database, which has a high level of coverage of substantial proposed developments. Development applications in the Enterprise Area (and in sites immediately adjacent) are shown in Figure 38.

There are multiple large commercial applications in the North Alexandria area and across the road along Bourke Road and Bowden Street. Most of these proposed buildings have three or four storeys, but buildings of up to nine storeys are proposed. Along with these developments, a large development precinct with multiple large office buildings is proposed between Bourke Road and O'Riordan Street near the corner with Green Square, although development applications have not been submitted.

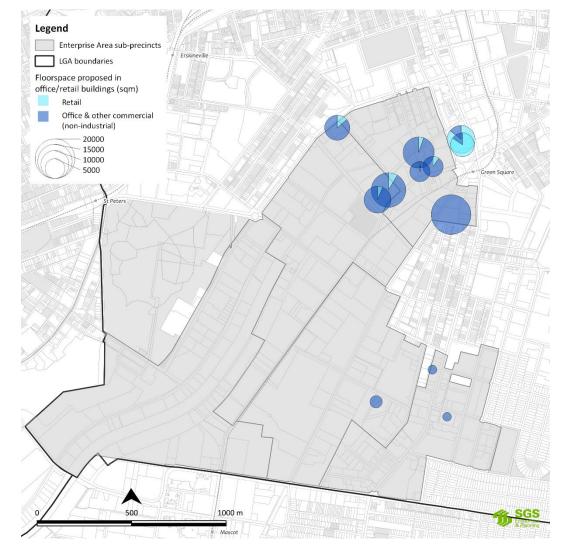


FIGURE 38: OFFICE AND RETAIL DEVELOPMENT APPLICATIONS IN THE ENTERPRISE AREA

Source: SGS 2020 based on Cordell Connect database

In combination, these development applications and proposals indicate that there is likely to be demand in the future for additional commercial office development in North Alexandria. This demand may be reduced by COVID-19 and an associated economic downturn, but in the context of longer-term economic growth transition of use in this area near Green Square is likely to occur if planning controls permit it.



8. FLOORSPACE CAPACITY AND DEMAND

8.1 Floorspace capacity

The City of Sydney conducted a *Development Capacity Study* in 2019 to inform local strategic planning. SGS has created scenarios which modify the capacity results by the City of Sydney based on potential supply constraints resulting from potential industrial built form and current development.

Realisable floorspace

Floor space ratio (FSR) controls apply to properties in the Enterprise Area. As they provide a maximum amount of floorspace upon development, they are generally used when modelling floorspace capacity. However, industrial built form can only reach a certain density without moving to a multi-storey format. This *realisable* floorspace may be less than the *permissible* floorspace possible under the FSR control.

The current realised FSRs of all buildings in the City of Sydney Enterprise Area are shown in the figure below, categorised by BLC. The boxes and whiskers show the median, quartiles and range within which the buildings lie, while every building is illustrated with a dot.

3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0

Retail Industrial Type of the service State of the service S

FIGURE 39: CURRENT REALISED FLOORSPACE RATIO OF ALL BUILDINGS IN THE ENTERPRISE AREA

Source: SGS 2020 based on City of Sydney Floorspace and Employment Data 2017



This analysis shows that across the spectrum of business types in the Enterprise Area, very few lots get close to the current FSR controls in the LEP, which are illustrated with horizontal black lines in the figure above. However, many industrial premises also use space that is not included in the gross floor area as assessed by floor space ratio. For example, outside hard-stand area is important for many industrial operations but is not included.

The mismatch between permitted and realised FSR has two implications which are discussed below: capacity analysis must consider realisable floorspace, and factors other than floorspace ratios limit the potential to achieve higher industrial land use densities.

Implications for capacity analysis

If future industrial development resembles current industrial development, realised floor space ratios will fall within the range shown in figure above, with a maximum realised FSR of around 1:1 apart from office and fine grain industrial development. The realisation of theoretical capacity to maximum permissible FSR is highly unlikely without future development having a very different built form to existing industrial development, which would only be likely to occur with widespread adoption of multi-storey industrial development. As a result, realisable floorspace in capacity analysis should be lower than the permissible floorspace in most cases.

Implications for achieving higher industrial density

New industrial development in the Enterprise Area generally have either strata industrial/commercial or large lot industrial formats. This indicates that there are limitations on realising the full permissible floorspace. These limitations are likely to include industrial built form requirements (including the need for hard-stand), other built form controls, market value for sites, site size and lack of development feasibility. These limitations would need to be considered if higher industrial densities were to be facilitated.

Site coverages are already relatively high in the Enterprise Area particularly if hard-stand area is included. As such, it is not likely that site coverage could increase as a way to change the built form and increase realised floor space ratio.

The only way to achieve much higher realised floorspace ratios would be for multi-storey industrial development to occur. Current height controls may limit the potential for multi-level industrial development, but the fact that FSR controls are already much higher than realised FSRs suggests that FSR controls are not the primary constraint on multi-storey development occurring. It is noted also that not all industrial functions can operate within a multi-storey format and so there is likely to be a sustained degree of unrealised capacity in parts of the industrial zones that continue to support large format, but single-storey industrial typologies. This should not be considered a failure of planning controls but rather an acknowledgment of the operational characteristics of certain industries.

Feasibility analysis presented in Appendix C concludes that multi-storey industrial redevelopment is likely to be unfeasible at median industrial rents and sale prices, but that some developments may be feasible with small changes in market conditions (for example lower site costs or higher returns). As a result, multi-storey industrial development is a reasonable proposition for long-term strategic planning.

Potential role of multi-storey industrial development

Current multi-storey industrial proposals are targeted at freight and logistics uses and would not be appropriate for all sectors. As such, multi-storey industrial development could have a role in increasing industrial floorspace in the Enterprise Area but could not meet all future demand.

Capacity scenarios

The following capacity scenarios have been considered:



- City of Sydney's Development Capacity Study 2019 (the DCS) results
- High scenario: An upper limit for capacity with all sites included, reflecting the potential for exclusion criteria to remove sites that may be able to redevelop
- Medium scenario: The capacity if current FSR controls can be reached but sites unlikely to be feasible to develop are excluded from the DCS results
- Low scenario: The capacity if a lower realisable instead of permissible FSR is used and sites unlikely to be feasible to redevelop are excluded from the DCS results

These scenarios are discussed in more detail below. The low scenario is considered the be the most likely to reflect capacity under current development conditions and built forms, while the medium scenario is considered the most likely if multi-storey industrial development could occur on a widespread basis.

City of Sydney results

This baseline scenario uses the results in the DCS. Sites in the Enterprise Area were identified as potentially developable and included in the DCS if they:

- Were zoned for employment purposes, and not designated or zoned for open space or infrastructure,
- Did not contain heritage items,
- Were not strata titled,
- Were 100sqm or larger in area
- Were not redeveloped within the last 25 years
- Did not have site-specific factors preventing likely development

Capacity on developable sites was calculated in the DCS using FSR controls, with net capacity given by subtracting existing gross floor area (GFA) from maximum permissible GFA.

As detailed in the DCS, these results were intended to illustrate the maximum development attainable under current FSR controls once sites reasonable unlikely to be developed have been excluded.

The total capacity identified under the DCS falls between the high and medium scenarios detailed below.

High scenario

Under the high scenario, all sites are identified as being available for development, including those excluded in the City's analysis.

Some of the sites excluded from the DCS's capacity results may be able to be developed. For example, strata titled properties or those containing heritage items may be able to host some development even if it is relatively unlikely or more difficult. As such, the DCS results may understate capacity on some sites.

The high scenario responds to this potential undercount by removing the exclusions used in the DCS. This scenario provides an upper bound for capacity but is likely to be significantly higher than the level development that could reasonably be realised. Comparing the high scenario and DCS results also shows how much impact the DCS exclusions have on overall development.

Medium scenario

The medium scenario adds to additional exclusions to the DCS's exclusions:

- Sites are only included if the current floorspace is not more than 40% of the total permissible floorspace (calculated using the floor space ratio control). On more intensively developed sites redevelopment would achieve only small increases in total floor area, and so redevelopment may not be feasible.
- Current utilities, substations and depots are excluded from redevelopment. These uses are urban services which are critical to the operation of the Enterprise Area and



surrounds. While some may be able to be redeveloped, the inability of these uses to be relocated elsewhere means that they are unlikely to be sold or redeveloped.

This scenario shows the likely floorspace capacity if the maximum permissible floorspace under current FSRs can be reached. As noted above, step changes in building typologies would be needed for this to occur, most likely through multi-storey industrial development.

Low scenario

Under the low scenario, a *realisable* FSR has been used to calculate the development yield instead of the maximum permissible FSR:

- On most sites a FSR of 1:1 has been used, following from the analysis in the previous section which shows that few strata industrial, urban service or large lot industrial premises realise more floorspace than this.
- The floorspace ratio under the LEP has been used in the B7 zone and on sites identified as currently containing find grain industrial, as SGS's analysis shows that more floorspace may be realised in office, retail and fine-grain retail typologies.

In addition to the DCS's exclusions, under this scenario:

- Sites are only included if the current floorspace is not more than 40% of the *realisable* floorspace (calculated using the realisable FSR). The rationale is similar to the first additional exclusion under the medium scenario.
- Utilities, substations and depots are also excluded, similarly to the second additional exclusion under the medium scenario.

This scenario shows the likely maximum floorspace capacity if step changes in building typologies are not realised.

Capacity results

Capacity results are shown in the following tables, broken down by land zone and subprecinct within the Enterprise Area.

TABLE 6: FLOORSPACE CAPACITY (SQM) IN THE ENTERPRISE AREA

Zone	Low	Medium	City of Sydney results	High
B5	-	-	53,615	53,615
B6	40,696	230,113	382,400	960,426
B7	187,247	311,654	406,288	590,084
IN1	38,977	102,045	256,483	538,202
Total	266,921	643,812	1,098,786	2,142,326

Source: SGS 2020 based on City of Sydney Floorspace Capacity Data

TABLE 7: FLOORSPACE CAPACITY IN SUB-PRECINCTS WITHIN THE ENTERPRISE AREA

Sub-precinct	Low	Medium	City of Sydney results	High
Camperdown	719	719	4,253	4,598
Moore Park	-	-	53,615	53,615
Alexandria North	133,979	255,235	303,420	394,858
Central Alexandria (B6)	11,855	131,855	176,717	536,828
South Alexandria (IN1)	38,977	102,045	254,163	549,429
O'Riordan St Corridor	28,841	98,258	205,683	418,075



South Alexandria (B7)	52,548	55,699	98,615	194,513
Total	266,921	643,812	1,096,465	2,151,915

Source: SGS 2020 based on City of Sydney Floorspace Capacity Data

The high scenario provides substantially more capacity than the City of Sydney's results, while the medium and low scenarios are substantially lower than City's results. This reflects the limited capacity for additional floorspace without a step change in the built form profile.

Floorspace capacity under the medium and low scenarios is not evenly distributed across the Enterprise Area. Alexandria North has by far the most capacity, as does the B7 zone. In the low scenario there is very little capacity in B6 and IN1 zones, which are the zones in which traditionally industrial uses could be accommodated (as opposed to the B7 zone in which a wider mix of uses including offices would be expected).

8.2 Floorspace demand

Demand modelling method

Floorspace demand within the enterprise area was modelled using the following method:

- 1. Categorise existing buildings in the Enterprise Area by broad land use category (BLC)
- 2. Determine forecast employment growth rates by industry for the Enterprise Area
- 3. Multiply industry growth rates by current floorspace (aggregated by industry and BLC) to estimate how much additional floorspace would be needed to allow this level of growth. As a conservative baseline it is assumed that floorspace to job ratios will remain constant in the future.
- 4. Aggregate floorspace required by BLC to provide total future floorspace demand across the Enterprise Area.

Buildings of an industrial character outside of the Enterprise Area in areas where residential redevelopment is expected to occur (for example Green Square) were also identified through a desktop audit. Residential development would displace existing uses in these buildings. While some of the displaced use may be able to be accommodated within other kinds of premises (for example new retail premises), much of it would likely need to be accommodated in the Enterprise Area or other industrial and enterprise precincts outside of the City of Sydney.

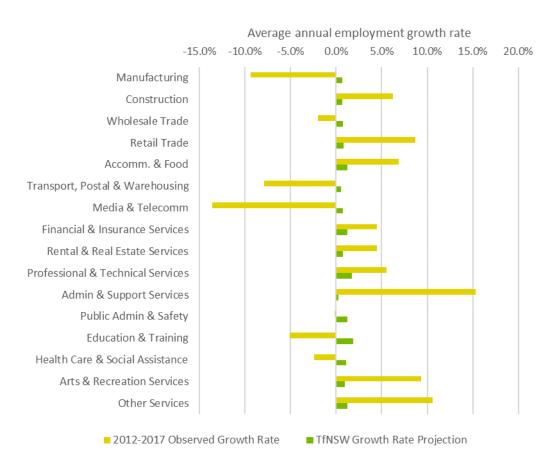
Employment growth rates

Small area land use projections were used to provide a baseline employment forecast for the Enterprise Area. The TZP v1.51 projections by Transport for NSW were used for this purpose. These projections are used for strategic planning across the NSW Government.

The forecast employment growth rate for the Study area is compared to the growth rate between 2012-2017 in Figure 40 below.



FIGURE 40: COMPARISON BETWEEN FORECAST AND RECENT EMPLOYMENT GROWTH RATES FOR THE ENTERPRISE AREA



Source: TfNSW 2020, TZP v1.51 Projections, City of Sydney FES Data

The observed employment growth rates between 2012 and 2017 differ dramatically from the projections across a wide range of industries. This illustrates the significant diversification of employment in the Enterprise Area and shift in the industry profile occurring in the Study Area discussed in Chapter 4 towards services and knowledge intensive industries. While some industrial displacement is occurring, there is still a large amount of traditional industrial and light industrial activity occurring in the Enterprise Area and there is a growing need for urban services.

As the TfNSW projections are top-down and based on recent industry growth rates across the Sydney Greater Metropolitan Area (Greater Sydney, Wollongong and Newcastle), they may not reflect the specific economic context of the Enterprise Area. Nonetheless they provide the best available base line based on how different industries are growing and changing across Sydney. As such, they have been used to produce a *baseline* demand projection showing the floorspace implications of natural industry growth without significant levels of industry movement to or displacement from the Enterprise Area.

It would not be possible for floorspace demand to be accommodated if the rapid growth rates seen between 2012-2017 in multiple industries continued. In combination with the very high premise prices and rents seen in the study area, this illustrates the level of underlying demand for space in the Enterprise Area. It is likely that there would be demand for much higher amounts of floorspace could be accommodated that suggested by the baseline analysis.



Floorspace demand results

Floorspace demand results are shown in Table 8 below. These results show that more floorspace is required for *all* BLCs over the next 20 years if demand is to be accommodated under this baseline scenario.

The most demand is expected to be for broadly industrial uses, in line with the current distribution of floorspace in the Enterprise Area. If this baseline demand cannot be accommodated in the Enterprise Area, industrial and semi-industrial activity is likely to be displaced.

Given the recent rates of growth of employment in knowledge intensive industries, potential office and retail floorspace demand is likely to be constrained by floorspace availability and could exceed this modelled baseline.

TABLE 8: FLOORSPACE DEMAND RESULTS FOR THE ENTERPRISE AREA (SQM)

	BLC	2017 Floorspace	20-year growth requirement	% Change
Broadly industrial BLCs	Strata industrial/ commercial	982,797	110,628	11%
	Large lot industrial	1,167,528	147,549	13%
	Fine grain industrial	245,948	38,715	16%
	Urban services	174,127	17,574	10%
	Subtotal	2,570,400	314,467	12%
Office and retail BLCs	Office	253,507	27,345	11%
	Retail	466,863	53,315	11%
	Subtotal	720,370	80,659	11%
Other		673,233	69,488	10%
Total		3,964,003	464,614	12%

Source: SGS 2020



8.3 Capacity-demand alignment

The balance between capacity and demand is shown in Table 9 below, assuming that:

- 75% of capacity in the B6 zone is developed as broadly industrial BLCs (this is roughly consistent with current use patterns).
- All capacity in the IN1 zone is developed as broadly industrial BLCs.
- All capacity in the B7 zone is developed as office, retail and other BLCs. It was assumed in
 the capacity analysis that the permissible FSR could be achieved in this zone on the basis
 that these BLCs would be developed, and capacity in the low scenario in these zones
 would be much lower if industrial BLCs were delivered.

As the low capacity scenario is considered the most likely capacity scenario without step changes in building types, there is a shortfall of around -115,000 sqm of industrial floorspace, (and in land on which floorspace can be developed). As some of the currently vacant floorspace may be not fit for purpose (leading to its vacancy), the actual figure may be higher.

There is enough capacity in the office, retail and other BLCs under this modelling. However, there are likely to be opportunities to capture more demand for office use around Alexandria North where there is a developing commercial submarket and developer interest.

TABLE 9: COMPARISON OF SUMMARISED FLOORSPACE DEMAND AND CAPACITY

Floorspace demand			
	Broadly industrial BLCs	Office, retail and other BLCs	Total
Demand	314,467	150,147	464,614
Vacant floorspace	130,131	31,355	161,486
Remaining demand (Demand – Vacant floorspace)	184,336	118,792	303,128

Floorspace capacity

	Broadly industrial BLCs	Office, retail and other BLCs	Total
Capacity - low	69,499	197,422	266,921
Capacity - medium	274,630	369,182	643,812
Capacity - City of Sydney results	543,283	555,503	1,098,786
Capacity - high	1,258,522	883,805	2,142,326
666,2020			

Source: SGS 2020



9. SYNTHESIS AND RECOMMENDATIONS

9.1 The role of the Enterprise Area

Vision of the Enterprise Land Strategy 2014-2019

The vision for the Enterprise Area in the Enterprise Land Strategy 2014-2019 was to facilitate new business and industry opportunity, provide employment across a range of sectors and provide land for strategic industrial activity and essential urban services. Flexibility in land use planning was intended to facilitate new economic activities and a transition in uses towards higher density.

Findings of this review

The findings of this review strongly support the previous vision for the Enterprise Area. In its 2013 *City of Sydney Employment Lands Study*, SGS recommended facilitating a range of businesses and sectors, with 'mixed business areas' that were translated into the current B6 zone.

Economic and floorspace profiling shows that the diversity of activity and sectors in the Enterprise Area has increased between 2012-2017, and that it is one of the most diverse employment areas in Greater Sydney. This diversity is a key economic strength feeding a virtuous cycle of economic development and links to other parts of the Global Economic Corridor. In this sense, **previous strategic directions are working as intended**. However, as part of the diversity of floorspace in the Enterprise Area it is important to ensure that truly industrial uses continue to be accommodated, as well as premises combining flexible industrial floorspace with office space.

Central Enterprise District

SGS's research highlights the Enterprise Area's role as Sydney's 'Central Enterprise District' (CED), the industrial/enterprise equivalent of a Central Business District. This includes features such as:

- Excellent access to the labour market (the best of any Enterprise Area)
- Agglomeration of inter-dependent high-value businesses who value the central location, increasing productivity
- Very high property rents, leading to diversification in use and relocation of those without a strong rationale for locating in the District
- Proximity and supply chain relationships to a wide range of economic anchors

The role and presence of the CED is critical in supporting the CBD, as well as a network of smaller centres and industrial and enterprise areas, through a range of supply chain and urban services relationships. As economic development continues, increased density of employment through multi-storey industrial and commercial development may occur, and smaller boutique parts of larger industrial businesses may appear.

Future roles for the Enterprise Area

In this report, SGS has identified a range of roles that the Enterprise Area fills and could fill in the future:



- Accommodating critical urban services that underpin broader productivity and liveability
- Accommodating strategic industrial uses with a compelling economic argument for their location, for example highly productive freight and logistics uses that need to be near Sydney Airport and Port Botany and that support a high-density residential catchment
- Accommodating businesses that need diverse or semi-industrial floorspace but have important supply chain or business to business links to the CBD and other nearby employment areas
- Providing space for businesses that wouldn't fit in office precincts either through their price sensitivity or use profile (particularly creative businesses), but that make a significant economic contribution and benefit from agglomeration economics, excellent access to labour markets and the cultural milieu of the inner-city
- Providing relatively affordable and diverse floorspace (compared to office districts) to accommodate smaller businesses as they evolve
- Providing services to the local population in high density residential areas although this use must be balanced against the need for other employment functions
- Providing space for commercialisation of innovation and for emerging high-value industries like boutique advanced manufacturing.

In the past there has been a perception that industrial areas in the inner city are an obsolete product of the old Fordist economy, and that they should be redeveloped for other uses (particularly residential) in a post-Fordist world. This view does not appreciate the wide range of important economic functions filled by the Enterprise Precinct and other inner-city industrial areas. This wide-ranging set of economic functions supports the continued retention and diversification of the Enterprise Area, which far from being a post-industrial relic is a thriving, diverse, dynamic and creative modern employment precinct.

Recommendations

Recommendation	Justification
Reinforce current planning approaches and visions which encourage a wide diversity of businesses and employment in the Enterprise Area	Recent economic trends are in line with the previous vision and reinforce the economic strength and competitive offer of the Enterprise Precinct as a location accommodating a wide range of businesses, including industrial uses.
Continue to review planning controls to provide flexibility in land uses to accommodate emerging enterprise, innovative and light industrial uses that reinforce the economic value of the Enterprise Area to the District and Region	Flexibility to accommodate emerging land uses is critical to support the continued evolution of the Enterprise Area, but should be balanced against the need to retain and not displace industrial uses in parts of the Enterprise Area.



9.2 B7 Business Park Zone

Approach of the Enterprise Land Strategy 2014-2019

Under the Enterprise Land Strategy 2014-2019, North Alexandria and the South Alexandria & Rosebery precincts were intended to accommodate a wide range of economic activities. Over the long term they were intended to house a relatively higher density mixed business precinct including creative and knowledge-based uses, although limited development was expected in the short term. They were intended to become a buffer between industrial uses and residential areas.

Affordable housing was permitted in the B7 zone reflecting the need for additional affordable housing in the area, the location of the B7 zone near services and the potential for broader housing development to displace employment uses.

Parts of the B7 zone were identified as investigation areas in which site-specific planning proposals facilitating redevelopment could be considered if a series of standards were met, including:

- No net loss of jobs,
- Fifty percent of residential uses being affordable rental housing managed by a community housing provider,
- New developments to provide public benefits and to meet other standards.

North Alexandria

Findings of this review

North Alexandria has very high levels of accessibility to public transport and a variety of services. Analysis of commercial development proposals and stakeholder consultation show that there is current interest in predominately commercial development in North Alexandria, and demand is likely to grow as Green Square continues to develop. Some transition in uses would be consistent with current planning controls and the City's broader policy framework.

Recommendations

SGS recommend three broad land use approaches for North Alexandria: creation of a business core, creation of a creative precinct north of the business core and retention of current uses with a more gradual evolution elsewhere.

Business core

Recommendation: Create a **business core** with higher-rise office buildings in a limited extent concentrated around Green Square Station. The current B7 land zone is appropriate for this role.

Recent employment trends and development interest show that demand for commercial development will likely exist in the future and exceed modelled base-case demand.

Accommodating a higher density business core would capture some of the office demand of businesses displaced from areas closer to Sydney CBD, reducing the pressure for redevelopment and likely industrial displacement elsewhere in the Enterprise Area. It is appropriate to concentrate the business core rather than spread it out across the North Alexandria precinct, minimising the displacement of other uses and the concentration of activity near Green Square Station.

Parts of North Alexandria are highly proximate to services and public transport, building a strong rationale for some intensification of use. The immediate surrounds of Green Square Station are the only parts of the Enterprise Area with the level of accessibility to a train station that would be expected of a business core.



The business core should be focused on commercial and innovative uses. It should not seek to replicate the broader range of retail and service functions that would be expected in a traditional town centre, as this would detract from the focus of those activities in Green Square's mixed-use core. The current B7 land zone is appropriate for supporting a business core which does not provide a broader set of uses that would be found in a traditional town centre.

It is noted however that the impact of COVID and the resultant move to home-based working has had on the commercial property market is still unfolding and will likely supress demand in the short term. This recommendation is made with a long-term view, with the expectation that over the long term, the demand for CBD-fringe office floorspace will continue. The current uncertainty makes it impossible to accurately forecast this. This should therefore be closely monitored by the City of Sydney, both in terms of total demand and also what type of commercial building is sought after post-COVID, as it is likely that the take up of remote working will re-shape how people use office space in the future.

Creative precinct

Recommendation: Create a **creative precinct** providing small offices and other diverse employment spaces north of the business core

A creative precinct between the business core and the northern boundary of the Enterprise Area on McEvoy Street would provide flexible floorspace for high value creative industries. This part of the Enterprise precinct retains an industrial feel, yet benefits from good proximity to Green Square Station and is therefore attractive to businesses that place a premium on employee accessibility. Part of this area (along Wyndham Street, Hiles Street, McCauley Street and Stokes Avenue) has been previously announced as a night-time entertainment district, which has natural synergies with other nearby creative uses.

While a more detailed urban design study would examine built form typologies in more detail, it is likely that there will be demand for flexible creative space – particularly at ground level, that can support a range of creative or high-tech production functions that can operate within a business zone. This may take the form of double-height ground floor units, with creative commercial suites above. This part of the sub-precinct is therefore considered to be akin to Surry Hills or Chippendale in its form and identity. An example for reference in Surry Hills is the Holt and Hart building, that provides an example of the type of building that may be suitable in the Creative Precinct.

FIGURE 41: HOLT AND HART, SURRY HILLS SYDNEY



Holt and Hart is a commercial development in Surry Hills that caters to a range of small to medium sized creative businesses. Covering approximately 14,000sqm over seven levels, it is home to around 50 tenants with communal meeting facilities and services. Suites range from around 50sqm to whole and half floors.

 $Source: http://dbproperty.com.au/sold-properties/Holt-Hart-50-Holt-Street-SURRY-HILLS/443.aspx, \\ http://www.cstone.com.au/projects/6/holt-and-hart$



Gradual transition

Recommendation: Retain the existing use profile and facilitate a more **gradual transition** in uses in the remainder of the Precinct, including boutique industrial uses and smaller scale offices

It is unlikely that the whole of the North Alexandria Precinct will be needed to provide capacity for redevelopment in the short term. It would be appropriate instead to allow current uses to continue in the part of the Precinct outside of the business core and future creative precinct, with a gradual transition of uses, without being highly prescriptive as to the future use (which could constrain business and precinct evolution). Changes to principal planning controls are unlikely to be needed.

Built form of business core and creative precinct

The exact size and height of the business core should be subject to more detailed urban design work to ensure a high amenity built form. However, the following principles should guide appropriate heights:

- The fine-grain industrial heritage and character along Mccauley Street and Hiles Street provides a point of difference from other areas. This distinctive local character creates opportunities for attracting creative uses in line with recommendations. The heritage and character should be protected, although some adaptive re-use should be possible.
- The height of buildings in the broader commercial precinct (likely to be located south of Mccauley Street and Hiles Street and north of Bourke Road) should facilitate medium height office and flexible employment development of a scale similar to that present in creative precincts like Chippendale and Surry Hills. Higher rise development is likely to require a higher price point for floorspace rental and to communicate a more premium and corporate business offering.
- The business core should be constrained in size and bounded by roads or other natural barriers, providing a clear rationale for its boundaries and minimising the risk that small-scale expansions could erode the surrounding enterprise land
- Higher buildings are appropriate in the business core than in the creative precinct, although it should not seek to duplicate the scale of major office centres like North Sydney and Chatswood to position it as a part of the Enterprise Area's diverse economy rather than as a competitor to existing CBDs. Building heights should not exceed those in the mixed-use portion of the Green Square Town Centre.

Floorspace requirements

Under the base case forecasts, 1.6% of the City of Sydney's employment growth over twenty years in the knowledge-intensive industries of financial services, professional services, administrative services, education and training and arts and recreation is expected to take place in the Enterprise Area. Varying this percentage gives an indication of how much additional growth North Alexandria could accommodate²². If the Enterprise area is to accommodate:

- 3% of total growth in these industries (approximately double what is forecast), around 50,000sqm of additional employment floorspace would be required in North Alexandria
- 6% of total growth in these industries (approximately 4.4 times what is forecast), around 156,000sqm of additional employment floorspace would be required in North Alexandria

²² A floorspace to job ratio of 30 sqm/job has been used to produce these estimates, which is a lower ratio than currently observed in the Enterprise Area but is consistent with a combination of office and other employment uses.



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 10% of total growth in these industries (approximately 7.6 times what is forecast), around 302,000sqm of additional employment floorspace would be required in North Alexandria

Other recommendations

Recommendation	Justification
Undertake further urban design work to inform changes to planning controls which facilitate development of a business core around Green Square. The extent should be limited to concentrate traditional commercial activity and retain a mix of uses elsewhere in North Alexandria	Urban design is needed to ensure that a cohesive and permeable business core is developed with a pleasant public domain supported by appropriate scaled buildings.
Create a night-time entertainment district along Wyndham Street, Hiles Street, McCauley Street and Stokes Avenue, as previously announced by the City of Sydney	This block is separated from surrounding residential uses and other uses sensitive to noise but is also easily accessible from residential areas. It has a high level of amenity given the fine-grain industrial architecture and street trees. These features would lend themselves well to nigh-time entertainment uses which utilise formerly industrial spaces such as micro-breweries. Provision of night-time entertainment uses in this precinct would also increase the amenity of the adjacent proposed creative district for businesses.
Protect the fine grain industrial heritage along Wyndham Street, Hiles Street, McCauley Street and Stokes Avenue using design controls	The fine-grain industrial architecture provides a high level of amenity and is relatively unique in this area.
Improve road/pedestrian permeability to train stations from across the precinct, subject to further urban design study	It is difficult to walk from the northern to the southern parts of the North Alexandria precinct. Adding road or pedestrian connections as part of any redevelopment would improve access, particularly to the fine grain industrial premises to the north, particularly along McCauley Street and Hiles Street.
Retain the current B7 zone in North Alexandria as well as the currently permissible uses	The objectives and implementation of the B7 zone corresponds well with the recommended vision for this precinct. The B7 zone currently permits a wide range of uses, including office premises. Expanding this list to include retail premises (for example) would risk reducing the retail focus on the Green Square Town Centre.

South Alexandria & Rosebery

Findings of this review

This Precinct currently contains a mix of strata industrial, fine grain industrial population services and residential development. Residential and employment uses are interspersed, making it inappropriate for heavier industrial functions.

The land uses in this area are evolving, with an identity as a food destination emerging. The high level of amenity created by the industrial heritage of this area lends itself to creative office uses similar to those in places like Camperdown, however the lack of mass transit availability limits suitability for more intensive redevelopment.

Creative offices are also being established in this precinct, although more industrial uses also remain. The emerging mix of sectors and uses is consistent with a vision for this area as a creative mixed enterprise precinct including a range of population services. Given that evolution is already occurring, and the area is performing well (there appear to be relatively few vacancies), prescriptive intervention is unlikely to be needed at this time.



Recommendations

Recommendation

Justification

provide an evolving range of employment uses including creative businesses, some higher density employment and some industrial uses.

Retain the vision for this precinct to This vision reflects the current evolution of the precinct, its amenity, its potential land use conflict between residential and employment uses.

Consider this precinct as a future creative employment precinct.

Retain the current B7 zoning and planning approach in the South Alexandria & Rosebery Precinct

The B7 zone provides a high degree of flexibility regarding use and accurately encodes the City's vision for the future evolution of these precincts.

The emerging mix of sectors and uses is consistent with a vision for this area as a creative mixed enterprise precinct including a range of population services. Given that evolution is already occurring, and the area is performing well (there appear to be relatively few vacancies), prescriptive intervention is unlikely to be needed at this time.

South Alexandria & Rosebery Precinct as part of any proposed redevelopment

Retain the industrial heritage of the Existing large warehouse and former industrial buildings in Rosebery provide a distinctive local character and a high degree of amenity conducive to the evolution of the precinct as a mixed creative enterprise area

Establish principles for redevelopment of key sites which are currently vacant (notably the block bounded by Hayes Road, Dunning Avenue, Harcourt Parade and Mentmore Avenue) including: There are some remaining large industrial and enterprise uses in this precinct that may redevelop in the future (including the highlighted

- Provision of diverse employment space
- Accommodating creative uses and small businesses
- Provision of affordable housing

It is recommended that the City consider North Alexandria as a higher priority area for enterprise development and evolution through master planning than this precinct. However, redevelopment has the potential to catalyse the evolution of this precinct as a home for creative industries. Creating principles that could underpin a constructive relationship with development proponents would respond to this opportunity.

Botany Road Corridor

Recommendations

Recommendation

Justification

Retain existing permissibility of apartment development above the ground floor, but require provision of flexible employment floorspace rather than retail floorspace at the ground floor level

Many of the properties along Botany Road have already been developed for the purpose of shop top housing so removing permissibility for this development would likely create limited employment capacity. The ability to develop has likely already been factored into land prices.

There is unlikely to be demand for retail premises all the way along Botany Road, and they would not form a cohesive centre. Retail energy in this area should rather be directed to the existing centre (around Queen Street and Morley Avenue).

Further apartment development could instead provide extra-high flexible employment spaces accommodating enterprise area demand. This would be preferable to rezoning to B4, which would remove the ability for some kinds of low-impact enterprise area businesses to locate along this corridor.



Camperdown

The Camperdown Precinct is part of the Camperdown Heath and Education Precinct and collaboration area, which sets a strategic vision for the Precinct and surrounds. The colocation of the Camperdown precinct with multiple health and education economic anchors creates significant opportunities for economic development. These have been explored and planning approaches identified in the Camperdown Innovation Precinct Plan and Biotechnology Hub project being led by Inner West Council with support from the City of Sydney, which sets a strong specific evidence base for this Precinct.

Recommendations

Recommendation	Justification
Plan for use of the Camperdown Precinct in line with the Camperdown Innovation Precinct Plan and Bio-technology Hub being led by Inner West Council with support from the City of Sydney	Given the limited amount of enterprise land in the City of Sydney in the Camperdown Precinct and its strategic relationship with land the adjoining Inner West Council, a coordinated and joint vision and approach to planning for this area is needed.

Additional B7 recommendations

Recommendation	Justification
Retain the existing flexible list of permissible uses in the B7 zone, facilitating land use transition	Flexibility in land zones is essential to facilitating continued evolution of enterprise uses in the B7 zone given the vision for its development. SGS has not identified any particular uses whose permissibility should be changed but continued monitoring by the City is necessary as new uses emerge that are not yet reflected in land use instruments.
Retain permissibility of affordable housing in the B7 zone, but do not permit any other housing development	Supply and demand modelling showed higher levels of demand for non-office uses than are likely to be able to be accommodated in the Enterprise Area, making it essential to retain land zoned for employment purposes. The Enterprise Area has a highly strategic location, making it one of the most competitive locations in Greater Sydney for a variety of employment functions, both industrial and non-industrial. Residential development would likely fragment land ownership, inhibiting future conversion back to employment use, and raise land values above the level at which large-scale employment use of the land use viable. It is also important to consider potential land needs beyond the 20-year timeframe for the modelling in this study. As laid out in the Greater Sydney Region Plan and Eastern City District Plan, a precautionary approach is needed which recognises that there is likely to be an increased need for inner-city land for a variety of employment generating uses and other critical economic uses in the future, which would be compromised by conversion for residential use.



9.3 IN1 General Industrial Zone

Approach of the Enterprise Land Strategy 2014-2019

Under the Enterprise Land Strategy 2014-2019, the IN1 zone was intended to accommodate pure industrial use, with only minimal ancillary uses, both to provide for local light industrial and urban services required by local population, and to accommodate strategic industrial use.

South Alexandria Industrial Sub-precinct

Findings of this review

This review found continued industrial use in the IN1 zone and the Southern Enterprise Area more broadly to be critically important in order to:

- Continue to accommodate critical urban services, demand for which will likely grow in the future as the population and economy grows,
- Provide for strategic industrial uses which will be attracted by the trade gateways of Sydney Airport and Port Botany and the excellent road accessibility facilitated by West Connex
- Accommodate some industrial uses which may be displaced from elsewhere as redevelopment continues outside of the Enterprise Area
- Accommodate the forecast increase in demand for uses with predominately industrial BLCs shown in the base-case demand modelling

Land use vision

South Alexandria should continue to have a predominately industrial function, providing space for industrial and urban services businesses critical to the broader economy and liveability of the City of Sydney.

Recommendations

Recommendation	Justification
Review principal planning controls to facilitate multistorey industrial development (an increase in the allowable building height is likely to be needed in line with existing proposals)	Base-case demand modelling showed increasing demand for industrial floorspace in the Enterprise Area. This is likely to include demand for urban services uses, freight and logistics uses driven by accessibility to WestConnex and trade gateways and demand form other sectors.
	However, SGS's modelling showed that there's unlikely to be much additional floorspace capacity in this zone unless a step change in development typology occurs. Multi-storey industrial development presents one such change. There are examples of this development elsewhere, and the land values in the Southern Enterprise Area means that development is likely to be close to feasibility.
	The design of most multi-storey industrial developments would cater predominately to freight and logistics users. They are unlikely to cater to all users of the IN1 zone.
Retain current IN1 zone and a similar set of permitted uses	Current uses in this zone reflect the industrial land zoning, and any change to a more permissive zone could create a risk of facilitating development with a larger and non-ancillary office component (which is likely to command a higher rent), displacing industrial uses.



9.4 B6 Enterprise Corridor Zone

Approach of the Enterprise Land Strategy 2014-2019

Under the Enterprise Land Strategy 2014-2019, this zone was intended to provide a flexible approach to land use. facilitating a wide variety of economic activities. The long-term aspiration was to facilitate a mixed business precinct, with gradual change occurring and an industrial character likely to remain in the short-medium term.

Retail uses were intended to be limited in scale to complement to Green Square Town Centre and other defined centres, with bulky goods retail and motor showrooms prohibited from most of the zone so as not to distract from the primary function of the zone.

B6 Sub-precincts

Findings of this review

The B6 zone was found to contain a diversity of employment uses and businesses. This diversity is increasing over time in line with the vision set out in the Enterprise Land Strategy 2014-2019. There are a range of strata industrial/commercial, large lot industrial, office and retail uses in the B6 zone, however it is not accessible enough by public transport to make it suitable for significant intensification of use, which would also risk displacing existing employment functions.

Recommendations

Recommendation	Justification
Retain the vision for evolution of B6 zones into mixed business areas, facilitated by flexible land use controls	The B6 zone currently reflects the broad range of land uses that existing in this zone, and the future vision for this zone. The flexibility of the zone is important to allow continued evolution in employment uses.
	Recent development in the B6 zone has included mixed industrial and commercial premises which accommodate a diversity of uses. If this changes in the future and there are signs that more predominately office-based uses are proposed, a shift in land use or design controls to facilitate a diverse range of uses (similar to those investigated in case studies in this report) may be necessary. In the meantime, there is a risk that introducing prescriptive controls could restrict economic evolution, and so this action is not recommended at this time.
Do not make broad changes to principal planning controls to facilitate multi-storey industrial development in the B6 zone	Large increases in allowable floorspace or height across the B6 zone could create a risk of encouraging pure office development given the permissibility of the B6 zone. This would displace industrial and semi-industrial uses and decrease the economic diversity of this area.

O'Riordan Street Corridor

Findings of this review

While detailed retail modelling has not been conducted as part of this review, continued population growth nearby is likely to mean that there will be continued demand for large format retail space even if the market share of online retail increases. Similarly, there is likely to be continuing demand for car retailing in the foreseeable future.

The O'Riordan Street Corridor is one of the premium furniture, homewares and other bulky goods retailing areas in Sydney (and Australia), a role that is assisted by its accessibility to the wealthy eastern and inner-northern suburbs as well as to other parts of Sydney. While it has relatively low employment density and economic returns, this bulky goods retailing function is an important retailing service to the local population



Recommendations

Recommendation	Justification
Retain the bulky goods and vehicle retailing corridor along O'Riordan Street, but do not expand retailing permissibility to other areas	As discussed above, there is likely to be continued demand for these uses. However, expanding the area that could be developed for bulky goods or car retailing would risk displacing other valuable employment generating uses.

9.5 B5 Business Development Zone

Approach of the Enterprise Land Strategy 2014-2019

Under the Enterprise Land Strategy 2014-2019, this zone continued to apply to the Moore Park precinct. This reflected the use of the Precinct for bulky goods retailing, which is the focus of the B5 Zone.

Findings of this review

The Moore Park Precinct continues to be used for the purpose of bulky goods retailing, which is aligned with the intention and implementation of the B5 zone. The Precinct is not proximate to a train station and is isolated on the eastern side of South Dowling Street.

As the population grows, there is likely to be continuing demand for bulky goods retailing even if the online mode share increases. If a transition of uses away from bulky goods were permitted on this site, the demand for large format retailing would likely need to be accommodated elsewhere. As there are few sites which could accommodate this volume of activity, this demand may need to be accommodated in the B6 zone in the Enterprise Area, displacing other employment generating uses.

Recommendation

For the reasons outlined above, it is recommended that the current land use planning approach be retained in the B5 zone.



APPENDIX A: STRATEGY AND POLICY REVIEW

This section provides an overview of the state and local strategies policies and strategies with relevance to the study area and the City of Sydney LGA.

Greater Sydney Planning Strategies

Greater Sydney Region Plan (2018)

The Greater Sydney Region Plan (GSRP) is the NSW Government's metropolitan strategy for the Greater Sydney region. It aims to grow Greater Sydney's economy and to make Greater Sydney more liveable, sustainable and productive.

Over the next 40 years, the GSRP aims to transform Greater Sydney into a metropolis of three cities: The Western Parkland City, Central River City and the Eastern Harbour City over the next 40-years. The Harbour CBD, the name by which the Sydney CBD is known in the GSRP, is the metropolitan centre at the heart of the Eastern Harbour City and is the largest economic centre in Australia. The GSRP aims to make the Harbour CBD stronger and more competitive and acknowledges the importance of innovation and diverse activities in and near the Harbour CBD.

The Eastern Harbour City also contains the Eastern Economic Corridor, which stretches from Macquarie Park to Sydney Airport and is an economic corridor of national significance. It contains a range of economic assets including Sydney CBD, other major centres, Sydney Airport and multiple industrial areas. The Enterprise Area lies within the Eastern Economic Corridor.

The City of Sydney Enterprise Area accommodates a diverse range of businesses and economic activities which are likely to have supply chain connections to the Harbour CBD and other parts of the Eastern Economic Corridor. For this reason, planning for the continued strength of the Enterprise Area is important to achieve the broader productivity directions of the aims of the GSRP.

Green Square is identified in the GSRP as part of the Green Square-Mascot Strategic Centre. Under this designation, the combined centre is expected to provide a range of jobs and services and accommodate high levels of private sector investment.

Objective 23 of the GSRP recognises the importance of industrial lands to the functioning of the city beyond the number of jobs that they accommodate, and their ability to support a range of land uses. The City of Sydney, along with the rest of the Eastern City District, is requited to retain and manage its industrial land, safeguarding it from competing pressures.

Eastern City District Plan (2018)

The Eastern City District Plan (ECDP) is a 20-year strategy which gives effect to the GSRP in the City of Sydney and the remainder of the Eastern City District. It is intended to inform local level strategic planning and the assessment of planning proposals.

The ECDP includes several Planning Priorities related to the economic growth and productivity which are relevant to the Enterprise Area:



- E7 Growing a stronger and more competitive Harbour CBD

 This priority recognises the importance of connections between the Harbour CBD and other parts of the Eastern Economic Corridor, including the Enterprise Area.
- E8 Growing and investing in health and education precincts and the Innovation Corridor

 This Priority aims to grow the innovation corridor which stretches from Walsh Bay to Redfern, including Camperdown Ultimo (within which part of the Study Area sits).

 The accommodation of diverse businesses including start-ups in nearby enterprise areas is likely to be important for this priority. The establishment of the Camperdown-Ultimo Collaboration Area in the ECDP seeks to facilitate efforts to address existing issues including the loss of employment floorspace and limited opportunities to create new commercial floorspace.
- E9 Growing international trade gateways
 This priority highlights the importance of the international trade gateways of Sydney
 Airport and Port Botany, and contains actions to identify and retain strategically
 important nearby employment and urban services land which is necessary to the
 continued growth of the trade gateways.
- E11 Growing investment, business opportunities and jobs in strategic centres. Green Square-Mascot is identified as an important strategic centre supporting the Harbour CBD. This strategic centre covers parts of the Enterprise Area in Alexandria. The ECDP sets a target for between 75,000 and 80,000 jobs in this precinct by 2036, up from a baseline of 59,500 in 2016.
- E12 Retaining and managing industrial and urban services land
 This priority specifies that all industrial land should be retailed and safeguarded from competing pressures, especially residential and mixed-use zones. The value of industrial land is discussed, extending beyond simply the number of jobs the land provides.

Future Transport 2056 (2018)

Future Transport 2056 is the NSW Government's long-term transport strategy. The accompanying Greater Sydney Services and Infrastructure Plan provides transport infrastructure priorities and aims to achieve the aspiration of a 30-minute city, as set out in the GSRP.

The Plan proposes a number of new connections and initiatives across the metropolitan area to deliver both city-shaping and city-serving networks. The result of these investments is likely to be felt over the longer term across the city, creating the potential for more employment to be accommodated in major centres outside of the Harbour CBD as well as increasing the potential labour catchment for the City of Sydney and Enterprise Area. Improved road access for industrial uses could also have both positive and negative impacts, with improved accessibility to motorways improving suitability for freight and logistics uses, but increased congestion harming amenity and the viability of a wide range of industrial businesses.

Transport projects nominated in Future Transport 2056 which relate directly to the Enterprise Area include:

- WestConnex (under construction)
 This road project will have offramps leading directly into the enterprise area and is likely to both increase accessibility to the motorway network and congestion along major roads in the Enterprise Area like Euston Road and McEvoy Street.
- Sydney Metro City and South-West (under construction)
 The Waterloo Station on the South-West Metro will be within walking distance of the northern part of the B7 zone in Alexandria, which could increase pressure for



redevelopment or demand for higher-order uses (note that this does not imply that these are the most appropriate uses)

- Sydney Gateway (committed)
 Sydney Gateway is proposed to connect WestConnex to Sydney Airport and Port Botany, which could reduce truck movements on existing roads.
- Rapid bus links between Green Square and La Perouse (potential project)
 This connection would improve labour market accessibility to Green Square and to other any other parts of the Enterprise Area precinct along the route, which is currently unconfirmed
- Eastern Suburbs to Inner West Rapid Bus Links East-west connectivity from the eastern suburbs to the inner west through the South Sydney area and the southern Enterprise Area is a key transport constraint. Rapid bus links would improve public transport connectivity to parts of the Enterprise Area, including to the University of New South Wales and Randwick Health and Education Precinct. This could increase the ability of the precinct to accommodate diverse startups and innovative businesses associated with research from the Randwick Area.
- Harbour CBD to Green Square Mass Transit Link (potential project)
 Green Square is growing rapidly and will require improved public transport connections. An additional mass transit link could increase commercial demand depending upon its location. However, there is already a direct transport link from Green Square Station to Central Station and the Sydney CBD.

City of Sydney strategies

Sustainable Sydney 2030

Sustainable Sydney 2030 is the City of Sydney's Community Strategic Plan. The strategy has a focus on promoting a globally competitive and innovative city. It aims to attract growth across national and international business, professional services, specialised health and education precincts, and specialised shops and tourism. The strategy also identifies a focus on strengthening globally competitive clusters and networks to drive innovation.

Among the 10 targets included in Sustainable Sydney is that the LGA will have an additional 97,000 jobs compared to the 2006 baseline, with an increased share in finance, advanced business services, education, creative industries and tourism. Continued growth in these industries is likely to translate to continued pressure for redevelopment in the Enterprise Area to accommodate offices, as well as to increase the need for accommodation of other businesses within the supply chains of these higher order businesses.

Draft Local Strategic Planning Statement (2019)

The City's Draft Local Strategic Planning Statement (LSPS) — City Plan 2036 — establishes a land use planning vision for the LGA for the next 20 years. The Draft LSPS explains expected future changes in the City of Sydney and how the planning system will accommodate this, provides a local response to the ECDP priorities and actions, identifies planning priorities and actions to implement the Sustainable Sydney 2030 vision, and will guide planning decisions and provide a basis for collaboration with other councils and the NSW Government.

The Draft LSPS notes the importance of the Southern Enterprise Area for its strategic location between central Sydney and the Airport and the range of businesses that it accommodates, as well as the need to retain industrial and urban services uses to support the functioning of the city.

Like the GRSP and ECDP, the Draft LSPS includes a number of Planning Priorities which relate to productivity, with Priority P3 of particular relevance:



- Priority P1 Growing a stronger, more competitive Central Sydney. To implement the
 draft Central Sydney Planning Strategy and prioritise space for business and
 enterprise activities while managing housing growth, providing infrastructure and
 guiding appropriate built form to create a world class city centre.
- Priority P2 Developing innovative and diverse business clusters in City Fringe. To
 grow knowledge-intensive business clusters with health, education, innovation,
 technology and creative industries in the Harbour CBD and prioritise those strategic
 land uses and improve connections between business and institutions.
- Priority P3 Protecting industrial and urban services in the Southern Enterprise Area and evolving businesses in the Green Square-Mascot Strategic Centre.

The Draft LSPS notes that the Southern Enterprise Area accounts for 68 per cent of all businesses within the Green Square-Mascot Strategic Centre, and 43 per cent of the City's manufacturing businesses.

North Alexandria (Sub-Area 3) is identified as a strong area for potential business transformation from industrial to higher density, knowledge intensive and creative industries, driven to some extent by the high rents within the Harbour CBD, good public transport accessibility, and the amenity of the Green Square Town Centre. The Draft LSPS also noted the importance of retaining existing B7 Business Park zones in North Alexandria against encroachment from residential uses. South Alexandria is seen as a location for industrial businesses which need proximity to central Sydney as well as major trade gateways, including wholesale, transport and logistics providers.

The Draft LSPS's stated actions for productivity and to contribute to the jobs target for the Strategic Centre include:

- Retaining and managing the Southern Enterprise Area for industrial and urban services uses while enabling new business opportunities which reinforce the economic role of the Strategic Centre
- Undertaking the five-year review of the City's Employment Lands Strategy
- Identifying and supporting opportunities to support growth of cultural activities and enterprise uses in appropriate locations
- Undertaking precinct-based planning to investigate appropriate land use and built form controls to facilitate desirable non-residential uses within B7 zoned land in North Alexandria, including reviewing the permissibility of 'shop-top housing'
- Undertake a review of the permissibility of 'shop-top housing' in the B7 zoned land on the Botany Road corridor
- Continuing collaboration with Bayside Council in giving effect to the District Plan's actions for the Green Square-Mascot Strategic Centre.

Precinct specific strategies

Camperdown-Ultimo Collaboration Area Place Strategy (2018)

The Place Strategy for Camperdown-Ultimo sets out a vision, priorities and actions for the Camperdown-Ultimo Collaboration Area to 2036. The intent is to make the Collaboration Area Australia's innovation and technology capital, fostering collaboration between a range of sectors and creating liveable places for people. The key strengths of the area are identified as heath, education and research built around existing institutional clusters and nodes within the Collaboration Area.

The Place Strategy notes a number of complex issues, including an unequal distribution of public and active transport links, poor pedestrian amenity, a lack of community and other



infrastructure to support population growth, and a lack of a cohesive overall identity or objectives for the future development of this part of the city.

The Place Strategy highlights the conversion of industrial and commercial stock to residential and mixed-use buildings in recent times. This has had the effect of limiting the overall availability of employment land and affordable spaces which can support innovation, research, and creative industries.

The Place Strategy includes a series of Priorities and Actions related to broader themes including those from the Eastern City District Plan. Of particular relevance to productivity and the enterprise area is Priority 8 – Support the role and function of employment lands, which includes:

- Action 26 Retain and manage commercial and business activities, particularly small businesses and tech start-ups, by safeguarding business zoned land from conversion that allows residential development.
- Action 27 Establish a biotechnology hub in Camperdown activity node (Parramatta Road, Mallet Street and Pyrmont Bridge Road area), and safeguard innovative, incubator and research activities from unrelated commercial land uses through planning controls.
- Action 28 Advocate for and deliver a minimum percentage requirement for affordable space in developments for tech start-ups, innovation, creative industries, cultural uses, community uses and artists within and beyond the Collaboration Area.

The Place Strategy identifies the City of Sydney as a primary stakeholder for Actions 26 and 28.

City of Sydney studies

Employment Lands Study 2013²³

An Employment Lands Study was developed by SGS to inform the preparation of the Employment Lands Strategy 2014-2019 (described above). It identified the Southern Employment lands as having national economic significance due to being within the Global Economic Corridor of Sydney's former Metropolitan Plan.

The Study recommended ensuring that sufficient land be retained for heavy industrial uses, while allowing flexible uses and development controls to support new economic activities. The recommended land use strategy was based on a mixed economy scenario, intended to balance the range of competing uses in the area and align with strategic policy.

Identified constraints

The Study explored the potential constraints on the future development of the area, and noted:

- The area is relatively unconstrained in terms of site development barriers, with few strata
 or heritage properties, and ANEF contours limited to the south west edge of the study
 area.
- Some isolated flooding impact areas, most extensive near Alexandra Canal and central part of the main study area.
- Potential for site contamination issues.
- Traffic and transport constraints, including:
 - Road and public transport capacities between the CBD and Sydney Airport
 - Movement of heavy vehicles, particularly O'Riordan Street and Botany Road

²³ SGS Economics and Planning, 2013, 'Employment Lands Study,' prepared for City of Sydney, March 2013, https://www.cityofsydney.nsw.gov.au/ data/assets/pdf file/0020/232463/2B.-PP-Attach-B Employment-Lands-tudy FINAL.pdf



- Capacity on neighbouring major roads leading to congestion (e.g. Southern Cross Drive and Eastern Distributor)
- Capacity on the Airport rail line between Green Square and Central
- Importance of Botany Road as a key transit corridor, particularly with development of the Urban Renewal area.

The transport and traffic issues were identified as the most significant impediment to more intensive development in the area.

Floor Space and Employment Survey 2017

The City of Sydney's Floor Space and Employment Survey (FES) is conducted every five years, and collects detailed data on all businesses, floor space, and employment uses in every property in the LGA. The most recent survey was undertaken in 2017.

The 2017 results showed an overall increase in internal floorspace across the LGA of 2.68 million square metres compared to 2012 (7.6 per cent growth), an 8.7 per cent increase in the number of businesses, and a 15.1 per cent increase in the number of workers. Transport and logistics was found to have the largest decrease in number of workers over the period, of 17.6 per cent since 2012, followed by creative industries (5.7 per cent decrease) and manufacturing (35.5 per cent decrease). Conversely, the largest increases in the volume of workers were seen in knowledge intensive and office-based sectors, including professional and business services (27.2 per cent increase), finance and financial services (16.1 per cent increase), and property development and operation (122.7 per cent).²⁴

The results of the survey are also broken down by the City's 10 Villages. The Southern Enterprise Area is part of the Green Square and City South Village. Sub-area 1 (Parramatta Road) is part of the Glebe Point Road Village, and Sub-area 2 (South Dowling) is within the Crown and Baptist Streets Village.

Green Square and City South Village

The Green Square and City Village is characterised as being predominantly industrial in the west with residential in the east, with an increase of 226 businesses overall between 2012 and 2017 (10.8 per cent increase). Transport and logistics accounts for the largest number of workers in the Village, at over 4,000, however this sector also saw the largest decrease in workers over the five-year period (a 33.6 per cent decrease). Transport and logistics is also the largest sector by floor area, accounting for 42.1 per cent of floor space in the Village, though this also decreased compared to 2012. The floor space per worker across Green Square and City South has increased from 80.0 square metres to 85.2 square metres, though space per worker has been declining in some industries, particularly knowledge intensive sectors.²⁵

Glebe Point Road Village

The Glebe Point Road Village extends from Parramatta Road up to Blackwattle Bay, made up of predominantly historic terraces and apartments, and is influenced by its proximity to the universities and other educational institutions nearby.

Between 2012 and 2017 there was a very small decrease in the number of businesses in this Village (1.3 per cent), with the dominant sectors being food and drink and retail and personal services. The total workforce also declined slightly over this time (by 4.6 per cent), with the largest decline in food and drink, and the largest increase in ICT. Tourist, cultural and leisure uses take up the largest amount of floorspace in the Village, though the largest growth was seen in higher education and research (32 per cent increase in floor space). At the same time floor space in the transport and logistics sector declined by over 10,000 square metres (a 62.2

²⁵ City of Sydney, 2019, https://www.cityofsydney.nsw.gov.au/learn/research-and-statistics/surveying-our-community/floor-space-and-employment-survey/village-overview-summary/green-square



²⁴ See City of Sydney, 2019, https://www.cityofsydney.nsw.gov.au/learn/research-and-statistics/surveying-our-community/floor-space-and-employment-survey/local-area-overview-summary

per cent decrease). The floor space per worker across the Village has also declined slightly, from 49.9 square metres to 48.0 square metres per worker.

Crown and Baptist Streets Village

Sub-area 2 for this study is at the edge of the Green Square and City South Village, but within the Crown and Baptists Streets Village. The wider Village is characterised by its mix of low-rise terraces and high rise housing and includes much of Surry Hills.

The number of businesses in the Village increased between 2012 and 2017 by 8.7 per cent. The largest sector by number of businesses is creative industries, which also has the largest workforce. Transport and logistics had the largest decline in workers over the period (19.8 per cent decrease. While the number of businesses has increased, the overall business floor area has declined, with the largest decrease also seen in transport and logistics. Like other Villages, the floor space per worker has declined over this period, from 38.2 square metres to 29.6 square metres per worker.

Development Capacity Study 2019

The City's Development Capacity Study was undertaken in 2019 and was based on the results of the 2017 FES as well as existing planning controls, consideration of the capacity of government-controlled sites, and projects in the development pipeline. The identified development capacity was also considered in terms of the potential split between residential and non-residential uses, based on recent development trends.

The Study found a baseline capacity across the LGA of over 4.5 million square metres under existing controls, with just over 685,000 square metres of this already committed. Accounting for NSW Government sites, the capacity increases to 10 million square metres, estimated to be able to accommodate over 50,000 private dwellings, over 5,500 non-private dwellings and over 158,000 jobs.

Capacity by Village

The distribution of the baseline capacity is shown in Figure 42. This shows a significant amount of capacity in the south of the LGA, particularly in the Enterprise Lands Area, with the Green Square and City South Village having one of the highest amounts of capacity.



100 - 499 sqm 500 - 1.000 sqm 1.001 - 5.000 sqm Over 10.000 sqm 0 250 500 1.000

FIGURE 42: SPATIAL DISTRIBUTION OF BASELINE CAPACITY FROM DEVELOPMENT CAPACITY STUDY

Source: City of Sydney, 2019.

The Green Square and Village South is identified as having the highest concentration of potential for growth in dwellings, accounting for 41 per cent of the City's total dwelling capacity. If all development capacity for dwellings was realised in this Village, this would see 61 per cent growth in the number of dwellings. For the other Villages which include Enterprise Lands, the proportions are identified as 16 per cent for Glebe Point Road and 19 per cent respectively for Crown and Baptist Streets.

In terms of employment, the Green Square and City South Village is also identified as having a decent amount of capacity, which if realised would see the number of jobs increase by 32 per cent. There is less capacity for jobs growth in the Glebe Point Road (13 per cent) and Crown and Baptist Streets (11 per cent) Villages respectively.

Many of the sites with capacity in the Green Square and City South Village are part of the Green Square Urban Renewal Area or the remainder of the Enterprise Area, with the majority of these being larger sites of over 1,000 square metres. The Study also estimates that there is capacity for over 17,000 jobs in the Green Square and City South Village, with 1,950 already in the development pipeline.



APPENDIX B: CASE STUDIES OF ENTERPRISE AREA PLANNING

Melbourne, Australia

Commercial 3 Zone

Melbourne faces many of the same growth pressures as Sydney. The Victorian Government's metropolitan plan *Plan Melbourne* aims to protect some industrial areas and facilitate the evolution of others towards a wider range of employment generating uses including creative industries, small manufacturers and start-ups. In order to facilitate this evolution, the Victorian Government has created a new zone, the commercial 3 zone. This zone was released with a policy paper: *Unlocking Enterprise in a Changing Economy*.

The Commercial 3 zone is intended to provide more flexibility in permitted land uses to meet the needs of businesses which do not fall within existing 'commercial' or 'industrial' zones. The Commercial 3 Zone's purpose is to promote innovative and enterprising mixed-use precincts that enable business creation and experimentation.

This new zone allows for a wide range of employment generating uses without the need for a planning permit, which is similar to a development approval in NSW, including arts and craft centres, education centres, home based businesses, industries, manufacturing sales, markets, offices, and research centres. Note that this exemption only applies to the use of existing premises, not their further development or redevelopment.

The Commercial 3 Zone allows for a diversity of uses with planning permission. This includes a range of industrial, commercial, office and other employment generating uses, as well as complementary uses such as retail. A limited amount of residential use is permitted, defined as a percentage of total gross floor area. This is intended to serve the primary economic role of the zone by facilitating activation, increased amenity and live/work development models. By default up to 35% of GFA is permitted to be residential, but the amount is intended to be set on a precinct specific basis as a result of detailed land use planning studies. In some cases it is anticipated that no residential use would be allowed.

Pilot enterprise areas

The Victorian Government has identified two pilot enterprise precincts to facilitate collaboration between stakeholders and to demonstrate how the formation of partnerships can further innovation and economic development in precincts. The two pilot precincts are:

- Brunswick Design Precinct, and
- Cremorne Enterprise Precinct

Cremorne

Cremorne used to be a key manufacturing centre in Melbourne with large industrial complexes. Towards the 21st century, Cremorne experienced a decline in manufacturing businesses, many of the key players relocated offshore. Cremorne was identified as an area for urban renewal by the Victorian Government in the 2000s. Industrial buildings have been retrofitted to commercial office spaces. It now hosts many creative industries in the tech and digital space, contributing \$2.7 billion a year to the Victorian economy.



Planning for continued growth in Cremorne is being led by the Victorian Planning Authority along with the City of Yarra and Victorian Government in consultation with local businesses. The following challenges have been identified:

- Demand for bigger commercial buildings increases as larger headquarters offices moving in
- Conflicts between low-rise residential and mid-rise development
- Demand for affordable spaces for small and medium enterprises, start-ups and scaleups
- Limited community facilities and open spaces
- Unsafe environment for pedestrians and cyclists

While the Commercial 3 Zone may be applied to Cremorne to facilitate a continued economic transition, most of the potential actions in the Cremorne *Issues and Opportunities Paper* released by the Victorian Government relate to transport, movement, open space and the public domain.

Fishermans Bend Employment Precinct, Melbourne

Context

Fishermans Bend is a 480-hectare urban renewal area, located south-west of the Melbourne CBD. It consists predominately of single storey industrial premises, with some large former and current manufacturers. In 2018, Fishermans Bend Framework and planning controls were finalised. The Framework set a long-term vision for the development of Fishermans Bend to 2050. This was a revision of an earlier framework for the comprehensive redevelopment of the area.

Fishermans Bend contains five precincts: Montague, Lorimer, Sandridge, Wirraway, and the Employment Precinct. The Employment Precinct occupies more than 230 hectares of land and sits at the north-western end of the urban renewal area (see Figure 43 for the location of the Employment Precinct which was referred to as the National Employment and Innovation Cluster in Plan Melbourne). The Employment Precinct was not rezoned for mixed use and has retained its industrial and commercial zoning.



Docklands Lorimer St Portside Business Park Southbank Futuris Automotive Defence Ausnet Terminal Science and Foods Station **GM Holden** Technology Group Toyota Australia Sandrida Industrial node, precinct Road network 1 Map is not to scale and is indicative only. Research facility State-significant road 2 Designation of this area as a national employment and innovation cluster does not change the status of parkland, open Port of Melbourne Key bus route space or residentially zoned land.

FIGURE 43: FISHERMANS BEND NATIONAL EMPLOYMENT AND INNOVATION CLUSTER

Source: Plan Melbourne 2017-2050

Urban renewal area

Fishermans Bend's changing role

..... Principal bicycle network

The vision is for Fishermans Bend to transform from low scale industrial and warehouse uses to a series of vibrant and mixed- use neighbourhoods with medium and high-density developments.

Source: Department of Environment, Land, Water and Planning

The Employment Precinct is intended to retain an employment role rather than housing mixed-use redevelopment. Its economic role is intended to be transformed to facilitate employment growth to 40,000 jobs and to become a centre for advance manufacturing and design excellence. The precinct's focus on physical production and small and large scale manufacturing is intended to be retained.

Catalyst moves/enablers

There is no plan to change the current zoning of the Employment Precinct, the intention is to maintain its employment uses.

In 2016, the Victorian Government purchased the former General Motors Holden (GMH) production site. The former GMH site occupies 32 hectares of land and is located at the centre of the Employment Precinct, see Figure 44. The Government envisioned the site to be a catalyst project for Fishermans Bend to transition into a leading place for technology and innovation. The site has attracted a major institution, the University of Melbourne. The



University has committed to building a new engineering campus on the former GMH site, covering seven hectares of land.

FIGURE 44: THE FORMER GENERAL MOTORS SITE HIGHLIGHTED IN RED



Source: Victoria State Government, Department of Jobs, Precincts and Regions, 2019

To address limited connectivity to Fisherman's Bend, the Victorian Government proposed a new tram route that would connect the Employment Precinct with Melbourne CBD. In the long term, there could be an underground rail.

International examples

San Francisco's Production, Distribution, and Repair (PDR) Zone

Context

San Francisco is a global city which is an international heart of the internet and technology industry. There are formerly industrial parts of San Francisco which are in close proximity to the Financial District, and some of which have been undergoing redevelopment to accommodate higher-density employment and residential use

In response to industrial displacement, the San Francisco Planning Department studied the production, distribution and repair sectors defined in the following way:

- Production, including jobs in manufacturing, construction, printing and publishing, audio, film and video, media and arts.
- Distribution, covering wholesaling, transportation, utilities and distribution.
- Repair, covering repair contractors and automobile related jobs.

PDR businesses face many challenges. It has been identified that the production, distribution and repair sectors in San Francisco: 26

- Can't compete on rent
- Can't afford to build new space
- Low employment per square foot
- May conflict with other uses due to noise and smell

²⁶ See: https://commissions.sfplanning.org/presentations/cpc_Production_Distribution_Repair_SF_06-12-14.pdf



- Don't provide a daily convenience for residents
- Can't be "off-shored"

However, PDR businesses have been found to be critical for the local population. They provide locally produced products that support the economy and provide job diversity.

Catalyst moves/ enablers

A five-point plan was released by San Francisco's Mayor to grow and protect PDR businesses in 2012. The measures that were put in place to support PDR businesses are:

- Establishment of the PDR zone which prohibits residential developments and office, retail, and hotel are only allowed when ancillary to PDR use
- To address the issue of large vacant industrial floorspace, a new model was introduced in 2014 to allow vacant or near large vacant industrial sites to be redeveloped to include commercial uses, but 33 per cent of the new development need to be maintained for PDR uses
- Redevelopment of public sites for PDR uses
- Allowing PDR as-of-right in mixed-use districts
- Supporting new PDR businesses through reduced process, reduced fees, incentives
 for new construction, and business development support from SFMade (a non-profit
 corporation that focused on building the economy by developing the local
 manufacturing sector)

The PDR zone is intended to protect these industries from the intrusion of non-industrial uses, such as residential uses. Production, warehousing, distribution, and industrial uses often have specific land use requirement, such as areas for loading and unloading stocks. The PDR zone ensures that industrial uses can be accommodated in inner-city locations with high land values and competition for land, whole allowing for compatible office and retail uses.

Oregon Central East Side Industrial Precinct, Portland

Context

Portland Oregon has historically maintained multiple industrial precincts which are protected from redevelopment. The Central East Side Industrial Precinct is one of Portland's oldest industrial areas, located on the east side of the Williamette River close to the Portland CBD, and historically contained many large manufacturing premises. By 1094, the Precinct had become the second largest industrial district in Portland, it was named as an "Industrial Sanctuary" by the City of Portland.

As traditional manufacturing industries declined, the City of Portland modified the zoning of this area in 2003 to accommodate the 'new urban economy' which includes creative industries. The restriction of non-industrial businesses was relaxed and businesses in digital production, retail, and office uses were allowed to move in. Today, contemporary manufacturing uses co-exist with residential, ICT and creative industries.

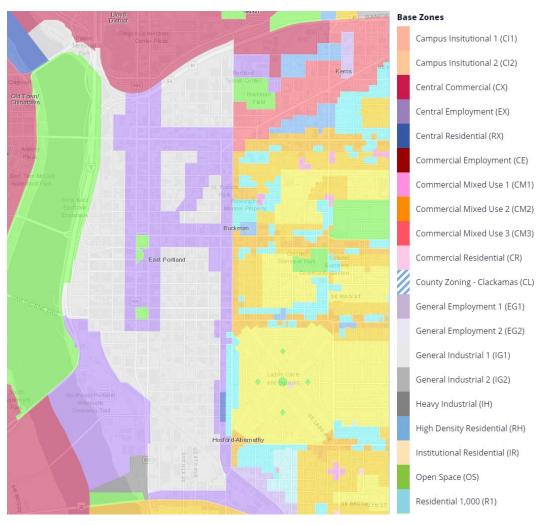
The Portland Plan aims to facilitate business growth, including fostering creative, innovative and technology industry sectors. The Plan aims to continue to grow Portland's role as a national leader in sustainable business and new technologies that foster innovation and adaption to change, spur invention and attract and develop talent.

Catalyst moves/ enablers

The land use zoning in the Central East Side Industrial Precinct mainly consists of the Central Employment (EX) zone and General Industrial 1 (IG1) zone (see Figure 45).



FIGURE 45: PORTLAND ZONING MAP



Source: City of Portland

The EX zone allows for a range of high density commercial, light industrial, institutional and residential uses. The allowable uses include:

- Manufacturing
- Warehouse
- Wholesale sales
- Industrial services
- Vehicle repair
- Residential
- Educational and health institutions
- Retail and office premises

While residential development is permitted in this zone, it is not intended to comprise the majority of floorspace. Development in intended to be similar in character to existing development (which is generally industrial in character).

The IG1 zone is mostly used to accommodate industrial developments. It does not permit educational institutions The specific allowable uses include:

- Manufacturing
- Warehouse and freight movement,
- Wholesale sales
- Industrial services

Residential development is not permitted, and only one retail or office premise is permitted on each site up to a maximum size of 3,000 square feet.



As illustrated in Figure 45, most of the East side Industrial Precinct is zoned General Industrial, and so is retained for uses with an industrial character, which could benefit from proximity to the Portland CBD and population. The Central Employment zone is interspersed through the industrial zone to facilitate a diversity of employment uses and increased amenity and activity.

The Central East Side uses a mechanism called the Enhanced Services District (EDS or BID in other cities) which allows businesses and property owners to fund improvements that go beyond normal City services. The ESD is created, funded and controlled by local businesses and property owners. Each property in the ESD boundary pats a rate (a Property Management License Fee) based on the size, improved value and usage of their building. The rate collected will be used to provide additional services.



APPENDIX C: FEASIBILITY MODELLING

Development feasibility in the Enterprise Area was tested for the following development types:

- Replacement of older industrial stock with newer strata industrial space,
- Development of multi-storey industrial, and
- Development of offices at Green Square.

These feasibility tests are conducted at a high level and are intended to show whether development concepts are broadly possible rather than to determine whether an individual development will be feasible.

Feasibility methodology

Development feasibility has been tested with a residual land value (RLV) model. The RLV is the maximum amount that a rational developer could pay for a site for redevelopment while still making a profit. This testing assumes that a developer immediately sells a development after it is built. Other development models are also likely to occur in the Enterprise Area (for example an institutional industrial landlord developing a building and then retaining ownership while leasing parts of it on a long-term basis). More detailed discount cash flow modelling would be needed to accurately quantify feasibility in this case. SGS's RLV modelling is intended to provide strategic-level testing of outcomes only.

The RLV is calculated by deducting all the costs of a development from the sales revenues in the current market. The development costs include construction costs and contingencies, external works and other site works, professional fees, a developer's profit margin, infrastructure levies or contributions and other council fees. This calculation is illustrated in Figure 46.

If the RLV is much greater than a site's current value including existing improvements such as dwellings, a developer could afford to pay more than the current market value for a site. In this case development is likely to be feasible. If the RLV is much less than a site's value, a developer would not be able to make a sufficient profit from a development to cover the cost of site acquisition, and development would be unfeasible.

FIGURE 46: RESIDUAL LAND VALUE CALCULATION



Source: SGS Economics and Planning, 2019



Feasibility under an RLV model is usually reported with a ratio of RLV to current land value. If this ratio is 1.25 or greater, a developer could afford to pay a 25% premium on the existing land value to acquire a site for development. This premium could entice a landowner to sell a site for development and would facilitate the amalgamation of sites for development. In this case, development is reported to be feasible.

A feasibility ratio of between 1 - 1.25 indicates that development may be feasible. In this range a developer would be able to make enough profit from a development to cover the cost of acquisition of the land if a landowner is willing to sell their land for a smaller price margin than 25%. However, as there is less room for a price premium in the event of an increase in land value, development may become unfeasible in the future. Developers may also be unable to acquire multiple sites for amalgamation. In this case, development is reported to be marginally feasible.

A feasibility ratio of less than 1 indicates that a developer would not make enough profit to make development viable.

Test one – Strata industrial

Overview

This analysis aims to test the renewal of older stock (large floorplate warehousing) with newer, industrial strata stock. The scenario assumes an existing FSR of 0.65:1 and a replacement FSR of 0.8:1.

Index	Scenario	Existing FSR	Ind GRV	Ind Rent per sqm	RLV	Ratio
1	Base Case	0.65	\$4,543	\$199	\$17,510,000	0.57
2	Increase in GRV to ensure feasibility	0.65	\$6,724	\$295	\$31,040,000	1.01
3	Increased Acquisition + Increase in GRV to feasible	0.8	\$7,905	\$346	\$38,370,000	1.25

Development is not considered feasible under the base case (ratio 0.66:1; RLV \$16.3m). An increase in GRV of +54% above the median is required to make the project feasible (ratio 1.25:1; RLV \$31.1m). This represents an increase in GRV from \$4,543/sqm to \$6997/sqm. This sort of increase can be considered possible given the observed sales values for strata units discussed in this report.

This scenario is sensitive to acquisition values. If the assumed site has an FSR of 0.8:1 (i.e. this is a like for like replacement), an 74% increase to GRV (up to \$8,178) is needed to make the project feasible (Ratio 1.25:1; RLV \$38.2m). This is considered an unlikely outcome.

On sites which are underutilised, it may be possible for floorspace renewal and potentially small increases in intensity of use through development of new strata industrial premises. However, underutilised sites are not particularly common (sites under 0.8:1 FSR exist, but consideration needs to be given to the fact that a number of sites have hardstand/yard requirements which may mean that they have a low FSR but are still highly utilised).

Base assumptions:

Built form

- Site area 10000sqm
- Built GFA 8000sqm
- Part-low and part-high bay warehousing with offices
- At grade parking provided to maximum under SLEP (1space/100sqm GFA; PTAL area F)



Acquisition and Revenue

- Base GRV/sqm \$4,543
- Taken from Colliers median rents (\$199/sqm) and yields (4.38%) for prime assets in Sydney South Submarket (from Colliers Industrial RFR H1 2020).
- Base acquisition/sqm \$3580
- Taken from Colliers median rents (\$199/sqm) and yields (4.38%) for **secondary** assets in Sydney South Submarket (from Colliers Industrial RFR H1 2020).

Costs

\$936/sqm base rate, standard assumptions for loadings otherwise

Test two – Multi-storey industrial

Overview

This scenario aims to test the addition of floorspace through the replacement of existing sites with a moderate to high utilisation with multi-storey industrial developments. The scenario assumes an existing FSR of 0.8:1 and a replacement FSR of 1.5:1.

Two sets of tests are conducted. Firstly, using the estimated construction cost for multi-storey warehousing supplied in *Rawlinsons* (\$1,696/sqm), and secondly using a cost identified through consultation with an institutional investor operating in the area (\$2,250/sqm).

Rawlinsons cost estimate

The base case is not considered feasible (RLV ratio 0.58), however this is conducted using the median GRVs for prime assets within the submarket. It can be argued that higher GRVs could be realised by producing brand new, premium tenancies in key locations (e.g. Goodman site adjacent to the WestConnex interchange).

The first sensitivity test (index 2) examines increases GRV to the point where development is feasible. A 39% increase is required for this project to be feasible, which represents an increase of GRV to \$6,315/sqm (at the median market yield of 4.38% that translates to rents of \$277/sqm/annum).

The subsequent sensitivity tests examine the uncertainty surrounding the floorplate efficiency of a multi-storey building. The base set of assumptions SGS consider a 90% efficiency for industrial buildings, however given the lack of available multi-storey industrial buildings within the Australian context, a prevailing efficiency is not able to be identified. The same sensitivity as in index 2 (increasing GRV to the point where the development is feasible) is conducted for buildings with floorplate efficiencies of 80%, 70% and 60% (index numbers 3, 4, and 5 respectively). These show a required increase in GRV of 47%, 57% and 70% respectively to guarantee project feasibility.

Index	Scenario	Effic. %	Ind GRV	Ind Rent per sqm	RLV	Ratio
1	Base Case	90%	\$4,543	\$199	\$17,860,000	0.58
2	Base Case - Increase in GRV to feasible (39%)	90%	\$6,315	\$277	\$38,470,000	1.26
3	Base Case - 80% efficiency (GRV +47%)	80%	\$6,679	\$293	\$38,520,000	1.26
4	Base Case - 70% efficiency (GRV +57%)	70%	\$7,133	\$312	\$38,440,000	1.26
5	Base Case - 60% efficiency (GRV +70%)	60%	\$7,724	\$338	\$38,150,000	1.25

Consultation-based cost estimate

The same tests are repeated using the higher construction cost estimate. Under the standard set of assumptions (index 6), the project is again not feasible, unsurprisingly since the only thing which has changed herein is an increase construction cost. A 59% increase in GRV is required to make the development feasible (index 7).



The same sensitivities on floor plate efficiency are repeated in index numbers 8-10. These show a required increase in GRV of 70%, 83% and 101% respectively.

Index	Scenario	Effic. %	Ind GRV	Ind Rent per sqm	RLV	Ratio
6	Alt Case (higher construction cost)	90%	\$4,543	\$199	\$6,940,000	0.23
7	Alt Case - Increase in GRV to feasible (59%)	90%	\$7,224	\$316	\$38,120,000	1.25
8	Alt Case - 80% efficiency (GRV +70%)	80%	\$7,724	\$338	\$38,390,000	1.26
9	Alt Case - 70% efficiency (GRV +83%)	70%	\$8,314	\$364	\$38,140,000	1.25
10	Alt Case - 60% efficiency (GRV +101%)	60%	\$9,132	\$400	\$38,150,000	1.25

Discussion

Multi-storey industrial development appears to be currently unfeasible if median industrial rents and returns per square meter are achieved, however only moderate increases in GRV above this median are required to reach feasibility. This indicates that some developments may be feasible in the current market if a relatively premium or attractive product can be delivered, and that a multi-storey industrial product is a reasonable proposition for longer-term strategic planning.

It is important to note that this feasibility analysis does not consider build-to-rent scenarios, which would substantially alter the way a number of factors are considered in this analysis. The SGS modelling approach considers a developer purchasing a site on-market, completing construction, and selling all developed floorspace at market values whilst collecting a margin for profit and risk. Institutional investors completing a build to rent scenario do not need to obtain this 18% profit margin upfront, often have higher ability to draw on equity, and are instead concerned with the marginal rental return on their total costs (as compared to other investment opportunities). Consequently, it is considered that a number of these scenarios are more likely to be feasible for a large, institutional investor in the industrial market than these results suggest.

Base assumptions:

Built form

- Site area 10,000sqm
- Built GFA 15,000sqm
- Multi-storey warehousing with either goods lift access (Rawlinsons costs) or truck access direct to the upper floors (consultation-based costs)
- At grade parking provided to maximum under SLEP (1space/100sqm GFA; PTAL area F)

Acquisition and Revenue

- Base GRV/sqm \$4,543
- Taken from Colliers median rents (\$199/sqm) and yields (4.38%) for prime assets in Sydney South Submarket (from Colliers Industrial RFR H1 2020).
- Base acquisition/sqm \$3580
- Taken from Colliers median rents (\$199/sqm) and yields (4.38%) for **secondary** assets in Sydney South Submarket (from Colliers Industrial RFR H1 2020).

Costs

- \$1696/sqm base case,
- \$2500/sqm alt case,
- Standard assumptions for loadings otherwise



Test three - Green Square Offices

Overview

This test examines the feasibility of commercial office development. While the findings can largely be translated to other parts of the precinct, conceptually the test is looking at the development of offices in the areas around the Green Square station. The site is assumed to have a current built FSR of 0.68:1, with the replacement FSR being variable based on the sensitivity test.

A number of tests have been conducted to examine the feasibility of office development at various FSRs. Each test is accompanied by a sensitivity which identifies the GRV required to make the development feasible. The GRV has been obtained from the Colliers Metro Office RFR H2 2019, taking the median rent and yield values for Mascot as a proxy measure for potential values in Green Square. It is possible that a higher GRV could be realised in Green Square, however this has not undergone detailed examination to determine to what extent this would occur.

The first test (index 1) uses an FSR of 2:1, which is not identified as being feasible at the median GRV (RLV ratio: 0.28). A 40% increase in GRV (index 2) is required to make the development feasible (GRV of \$8974/sqm). This may be possible with a high end product in a good location, however the market depth for that type of floor space in Green Square has not been established.

The subsequent tests each increase the FSR by 1:1. At 3:1 (index 3) the development is not feasible at the median GRV (ratio 0.48; RLV \$7.8m). A 22% increase in GRV makes the development feasible (GRV of \$7821). At 4:1, the development is again not feasible (ratio 0.72, RLV \$11.8m), however only an 11% increase in GRV is required, which is considered to be attainable under the current circumstances for new floor space in this location.

Index	Scenario	FSR	Com GRV	Com Rent per sqm	RLV	Ratio
1	2:1 FSR	2.00	\$6,410	\$350.00	\$4,620,000	0.28
2	2:1 FSR (GRV +40%)	2.00	\$8,974	\$490	\$20,530,000	1.26
3	3:1 FSR	3.00	\$6,410	\$350	\$7,790,000	0.48
4	3:1 FSR (GRV +22%)	3.00	\$7,821	\$427	\$20,920,000	1.28
5	4:1 FSR	4.00	\$6,410	\$350	\$11,830,000	0.72
6	4:1 FSR (GRV +11%)	4.00	\$7,115	\$389	\$20,580,000	1.26

The results here show that commercial office floor space is likely to be feasible at several tested FSRs within the area. The GRVs which could be attained in the area are difficult to discern at this time due to limited information available as part of this testing. However, with moderate increases in GRVs or changes in assumptions that could occur for some developments or over the timeframe of the study, commercial development at Green Square is likely to be feasible. Proximity to Green Square Station would contribute to attain the required increases above the median values used.

The successful transition of the area into providing more commercial office floor space would provide a commercial identity to the area, which is considered important in attracting tenants, however the extent to which this would eventuate cannot be discerned at this time and would depend on a range of factors.

The testing also indicates that commercial office development has a higher marginal RLV/sqm when compared to industrial floor space. Consequently, increases in height and FSR controls in areas which are intended to be retained for primarily for industrial uses may result in the erosion of industrial floor space supply.



More detailed feasibility modelling would be required to determine if an individual development is likely to be feasible given the uncertainty in likely rents and GRVs.

Base assumptions:

Built form

- Site area 4,000sqm
- Built GFA 8,000sqm 16,000sqm
- Part-low and part-high bay warehousing with offices
- Basement parking provided to maximum under SLEP (various provision rates as per cl7.6(d); PTAL area E)

Acquisition and Revenue

- Base GRV/sqm \$6,410
- Taken from Colliers median rents (\$350/sqm) and yields (5.46%) for office assets in Mascot (from Colliers Metro Office RFR H2 2019).
- Base acquisition/sqm \$5,652
- Taken from Colliers identified rent (\$325/sqm) and yields (5.75%) for retail asset sales in the surrounding area.

Costs

- \$2,683/sqm base case (Rawlinsons costings for 4-7storey offices with finished floor, no fit out)
- Standard assumptions for loadings otherwise







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