20 Berry Street, North Sydney

Economic Impact Assessment

Holdmark

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Document Control

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Executive Summary

BACKGROUND

North Sydney CBD is a major office market and plays a complementary role to the Sydney CBD. The North Sydney CBD is identified as part of the Eastern Economic Corridor in strategic planning documents, specifically Greater Sydney Region Plan - A Metropolis of Three Cities and the North District Plan.

Accommodating more than 20% of Greater Sydney's jobs, the significance of the Harbour CBD to Greater Sydney's prosperity is clear. The Region Plan identifies an emerging Innovation Corridor on the western edge of the Harbour CBD comprising universities, a major teaching hospital, international innovation companies and fast-growing start-ups.

The North District Plan identifies the importance of growing a stronger and more competitive Harbour CBD and highlights the role of North Sydney in, *inter alia*, facilitating jobs growth in a commercial centre, growing the education sector and importantly, maximising land use opportunities presented by the imminent completion of the Victoria Cross metro station.

Holdmark are preparing a Planning Proposal for the site at 20 Berry Street, North Sydney ('the Site') which is within the North Sydney CBD ('the CBD'). The Proposal is to allow a future prime grade commercial development in a location just outside the B3 Commercial Core and within 200m of the Victoria Cross metro station.

Atlas Urban Economics (Atlas) is engaged to prepare an Economic Impact Assessment (the Study) to consider the need for the Proposal and thereafter to assess the economic impacts likely to result from the proposed planning controls amendments and subsequent redevelopment of the Site.

The Study investigates whether current planning controls are economically sustainable. Demand for commercial floorspace in North Sydney CBD and the competitiveness of the Site will be key to understanding if the current planning framework is economically sustainable. The Study also examines if alternate planning controls are required to ensure the Site contributes to the economic prosperity of North Sydney as a commercial centre.

MARKET CONTEXT

Commercial office markets in Greater Sydney commenced 2021 in a period of significant flux. The economic ramifications of the COVID-19-induced recession on the Australian economy are still playing out. Businesses remain cautious with many deferring major capital expenditure until there is further certainty in the global economy. Large occupiers, particularly the private sector, are also hesitant to commit to any large and long-term office tenancy commitments as forced working from home practices over the course of 2020 have seen most businesses reconsider their workspace requirements.

Greater Sydney's largest commercial office market – the Sydney CBD – recorded an upswing in vacancy levels over 2020, rising from 3.9% to 8.6% over the 12 months to January 2021 (PCA, 2021). Office landlords responded by offering greater incentives, with average incentive rates up to 25%-35% compared to circa 17%-20% in early 2020. Some forecasters suggest CBD office vacancy could peak at 20% over the coming four years (JP Morgan in The Australian, 2021).

In North Sydney CBD, vacancy levels rose from 7.2% to 18.8% over the 12 months to January 2021. Incentives have also risen to currently range between 30% and 35%. The vacancy profile is particularly distinct in North Sydney - secondary grade stock (B, C and D-grade) is the most affected with vacancy rates up to 25%.

Structural Change Accelerated by COVID-19

The expectations of tenants and workers has changed significantly over the past decade. Services or amenity that were once 'nice-to-haves' have over time become 'standard', thereby shifting employee expectations to require even greater levels of quality and amenity from their workspace accommodation. Building amenity such as end-of-trip facilities are now expected in a contemporary building; many older buildings having to retrofit such facilities or risk being uncompetitive.

Any economic downturn is invariably accompanied by a rise in vacancy levels as occupiers reduce their occupied footprint or businesses exit their premises.

When tenant demand falls on a large scale, pricing is affected - incentives rise and effective rents fall as landlords compete for a smaller pool of tenants. This results in a 'flight to quality' where tenants of secondary space leave for better quality space.



NEED FOR THE PROPOSAL

Challenges to Delivering Growth

The LSPS acknowledges the challenges of achieving commercial office growth given limited opportunity to expand laterally.

North Sydney CBD has a disproportionate amount of secondary office space (60%) compared to its peer markets (e.g. 30% in Macquarie Park and 40% in Sydney CBD), making it less competitive. Council's LSPS identified the large amounts of B-grade and C-grade space as a weakness of the North Sydney CBD, recognising the importance of renewal and redevelopment to offer new and modern floorspace. This is a major challenge for the North Sydney CBD to grow employment.

The notion of capacity is two-fold - *theoretical capacity* (planning capacity) and market capacity. *Market capacity* refers to whether capacity in the planning framework is deliverable from a commercial viability perspective - firstly whether there is market demand, and secondly whether the planning controls enable viable development. In order for existing office buildings to be redeveloped, that redevelopment must be a commercially viable proposition.

Taking the Site as an example, there is planning capacity in the current controls for 3,358sqm (13,260sqm in a compliant commercial development less 9,902sqm of existing GFA). However, development of a compliant commercial building of 13,260sqm (which includes demolition of the existing building) is shown to not be a commercially viable proposition. This is a clear example there might be *theoretical capacity* (planning capacity) but not *market capacity* for growth.

The ability of North Sydney CBD to be competitive will depend on the capacity of its secondary grade stock to renew, improving its commercial office offer and transforming parts of the centre that are aged and in need or reinvestment.

Role for the Proposal

The Site being located on the edge of the B3 Commercial Core has the potential to help spur greater employment activity in the B4 zone, maximising the land use opportunities provided by the new metro station. Employment growth in the B4 zone has generally been softer than in the commercial core given the permissibility of non-employment uses such as residential.

Structural changes in office market trends have been accelerated by the COVID-19 pandemic, shifting business and employee expectations and entrenching a 'permanent flight to quality' mindset.

In any economic downturn (including the present), occupancy rates for secondary grade buildings are not only challenged by falling tenant demand but also by a 'flight to quality' by existing tenants upgrading to prime grade buildings.

In a post-COVID world, office assets will be required to 'work harder' in order to be competitive. Secondary grade assets like the Site (which is nearly 50 years old) will be particularly vulnerable to tenant selectiveness and amenity expectations.

Contribution to Employment Diversity

The District Plan employment targets (15,600 to 21,100 additional jobs) require circa 340,000sqm to 460,000sqm GFA^1 of additional floorspace (net of demolished floorspace).

Since 2016, the North Sydney CBD has had office net floorspace additions of 130,000sqm (approx. 5,900 workers²). There is approximately 160,000sqm in the supply pipeline. Assuming 100% delivery of the supply pipeline and deducting 20% of pipeline supply for existing floorspace to be demolished, the pipeline supply could potentially accommodate 5,800 workers². This would bring the North Sydney CBD about halfway to meeting its 2036 employment targets.

The Proposal envisages smaller floorplates compared to other new A-grade buildings (recently completed or in the pipeline). Majority of the new prime grade commercial buildings comprise floorplates in excess of 1,900sqm and up to 4,000sqm. With typical floorplates of 800sqm to 900sqm, the Proposal adds a diversity of stock to the North Sydney CBD office market. This caters to smaller occupiers who may want A-grade space in a boutique offer building.

The Proposal offers a boutique commercial building with smaller floorplates that could accommodate just over 1,000 workers. It would enable the Site's existing B-grade building to redevelop, contributing to Council's objective of renewing the large proportion of B and C-grade office space in the North Sydney CBD.

Atlas

 $^{^1}$ Based on a generic workspace ratio of 22sqm GFA per worker (equivalent to 18sqm to 20sqm lettable area)

 $^{^2}$ ibid

ECONOMIC IMPACTS

To estimate economic activity and impacts that could result from the Proposal, a Base Case and Proposal Case are defined:

• Base Case: There are no changes to the existing planning controls.

The Study investigated the likely development and built form outcomes were there to be no change to the planning controls. The following would be permissible under the existing planning controls:

- Retention (and refurbishment) of existing commercial building (9,902sqm) which could accommodate 330 workers directly;
- Development of new commercial building (13,260sqm) which could accommodate 600 workers directly;
- Development of new mixed use development (estimated at 9,300sqm) which could accommodate 190 workers directly in the non-residential GFA component of the mixed use development.

From a financial feasibility perspective, retention (and refurbishment) of the existing commercial building would be the most likely outcome. In comparison, redevelopment into commercial or mixed use residential (as permitted by existing density controls) are not commercially viable options.

Accordingly, the economic modelling adopts the first option (i.e. retention of the existing commercial building) as the Base Case.

Proposal Case: Planning controls are amended allow development of 22,750 sqm GFA of commercial floorspace.

Construction Phase

The Proposal is estimated to result in a **net increase in economic activity** during construction through direct and indirect (flow-on) at:

- \$110.5 million in output (\$68.1 million directly).
- \$46.5 million contribution to Gross Regional Product (GRP) (\$23.3 million direct contribution).
- \$26.9 million in wages and salaries paid to local workers (\$15.7 million directly).
- 289 Full Time Equivalent (FTE) jobs (167 direct FTE).

Table ES.1: Construction Impacts (Proposal Case), North Sydney LGA

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
Direct	\$68.1	\$23.3	\$15.7	167
Flow-on Type I (Production-induced)	\$20.6	\$10.5	\$6.2	59
Flow-on Type II (Consumption-induced)	\$21.8	\$12.8	\$4.9	63
Total	\$110.5	\$46.5	\$26.9	289

Note: Totals may not sum due to rounding.

Operational Phase

In the Base Case, the existing commercial building is assumed to be retained and refurbished (as a defensive strategy to preserve value). Given its age and base building layout configuration, refurbishment works would address code compliance and obsolescence issues, however will not necessarily result in the level of use intensity (number of workers per sqm) that a new building would accommodate.

When operational, the Proposal is estimated to result in a net increase in economic activity above the Base Case through direct and indirect (flow-on) annually at:

- \$566.8 million additional in output (including \$332.6 million in direct activity).
- \$297.6 million additional in contribution to GRP (including \$168.2 million in direct activity).
- \$135.0 million additional in incomes and salaries paid to households (including \$76.4 million directly).
- 1,335 additional FTE jobs (including 704 additional FTE jobs directly related to activity on the Site).



Table ES.2: Net Operational Impacts, North Sydney LGA

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
Direct	\$332.6	\$168.2	\$76.4	704
Flow-on Type I (Production-induced)	\$122.8	\$63.7	\$33.4	310
Flow-on Type II (Consumption-induced)	\$111.5	\$65.7	\$25.3	322
Total	\$566.8	\$297.6	\$135.0	1,335

Note: Totals may nor sum due to rounding.

Source: Atlas

The Study demonstrates a clear need for the Proposal to assist with the strategic planning objectives of growing North Sydney CBD and making it more competitive. North Sydney CBD has a disproportionately high volume of secondary grade office stock (60%) compared to other markets, with B-grade commercial stock notably high (43%).

The Proposal will result in the redevelopment of a B-grade commercial asset and contribute to accommodating employment opportunities in the B4 Mixed Use, which has historically comprised much less intense employment activity.

The economic modelling demonstrates the Proposal can make a significant contribution to the North Sydney economy by addressing clear and growing demand for modern and contemporary office floorspace.



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1. Introduction

1.1 Background and Overview

North Sydney CBD is a major office market and plays a complementary role to the Sydney CBD. It is also recognised as the northern component of the Harbour CBD. The North Sydney CBD is identified as part of the Eastern Economic Corridor in strategic planning documents, specifically Greater Sydney Region Plan - A Metropolis of Three Cities and the North District Plan (GSC, 2018a, 2018b).

The Greater Sydney Region Plan (the Region Plan) identifies the Eastern Economic Corridor (which stretches from Macquarie Park to Sydney Airport) as NSW's greatest economic corridor, contributing two-thirds of the state's economic growth in 2015-16. Included in this economic corridor are Harbour CBD (comprised of Sydney and North Sydney CBDs), Macquarie Park, Chatswood, St Leonards, Green Square-Mascot, Randwick and Sydney Airport.

Accommodating more than 20% of Greater Sydney's jobs, the significance of the Harbour CBD to Greater Sydney's prosperity is clear. The Region Plan identifies an emerging Innovation Corridor on the western edge of the Harbour CBD comprising universities, a major teaching hospital, international innovation companies and fast-growing start-ups.

The North District Plan (District Plan) identifies the importance of growing a stronger and more competitive Harbour CBD and particularly highlights the role of North Sydney in, *inter alia*, facilitating jobs growth in a commercial centre, growing the education sector and importantly, maximising land use opportunities presented by the imminent completion of the Victoria Cross metro station.

Holdmark are preparing a Planning Proposal for the site at 20 Berry Street, North Sydney ('the Site') which is within the North Sydney CBD ('the CBD'). The Proposal is to allow a future prime grade commercial development in a location just outside the B3 Commercial Core and within 200m of the Victoria Cross metro station.

Atlas Urban Economics (Atlas) is engaged to prepare an Economic Impact Assessment (the Study) to consider the need for the Proposal and thereafter to assess the economic impacts likely to result from the proposed planning controls amendments and subsequent redevelopment of the Site.

1.2 Purpose and Approach

The Study investigates whether current planning controls are economically sustainable. Demand for commercial floorspace in North Sydney CBD and the competitiveness of the Site will be key to understanding if the current planning framework is economically sustainable. The Study also examines if alternate planning controls are required to ensure the Site contributes to the economic prosperity of North Sydney as a commercial centre.

To meet the requirements of the brief, the following issues are investigated:

- Trends and drivers of demand for commercial floorspace in the CBD office market.
- The economic fallout and implications of the COVID-19 pandemic on the CBD office market.
- Supply pipeline, vacancy rates and implications for the Site and the broader CBD office market.
- The viability of the Site for renewal and redevelopment.
- Economic impacts (direct and indirect/flow-on) that could result from the future redevelopment of the Site during construction and post-construction in the operational phase.

The Study investigates to provide the economic justification for the Proposal.



1.3 Structure of the Study

The Study is structured as follows:

- Chapter 2 provides an overview of the Site including its location and surrounds, its employment profile and composition and its strategic planning context.
- Chapter 3 examines the commercial office market as a sector, the influencing trends and drivers and the collective implications for the Site. The chapter additionally reviews the requirements of various market participants and examines how the Site is positioned to be economically sustainable.
- Chapter 4 undertakes an economic impact assessment to ascertain the economic impacts of the future development on the Site.

The EIA concludes if the Proposal has economic merit and summarises the economic impacts in the short and longer term.

1.4 Assumptions and Limitations

Atlas acknowledges a number of limitations associated with the Study.

- Data extracted (ABS, Transport, Performance and Analytics) is assumed to be true and correct and is not verified.
- Market research is carried out on a 'desktop' basis without the benefit of site surveys and inspections.
- Floorspace supply data is sourced from various third party databases and subscriptions. No responsibility is accepted for any inaccuracies inherent in this data.

Notwithstanding the above, all due care, skill and diligence has been applied to this Study as is reasonably expected.



2. Site Context

2.1 Location and Description

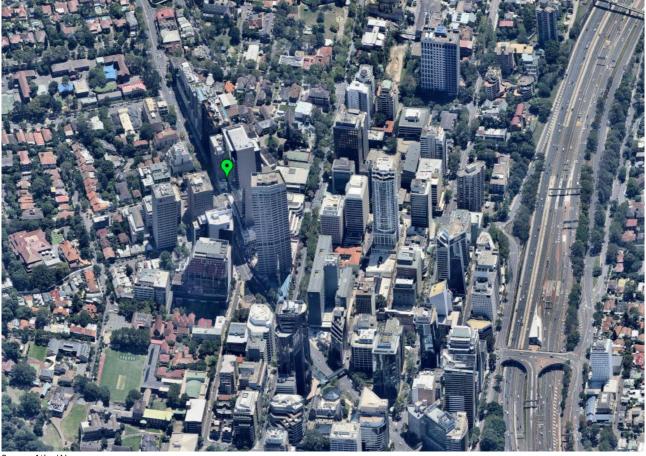
The Site is within the North Sydney CBD, a 5km drive north of the Sydney Central Business District (CBD). Located on Berry Street at the corner of Pacific Highway, the Site is located 600m northwest of the North Sydney train station and approximately 200m southwest of the future Victoria Cross metro station.

The Site is accessible through the existing road network. Pacific Highway is an arterial roadway providing access through Sydney North Shore, extending to the Hunter region. Bus services are also accessible on Pacific Highway providing linkages to the Sydney CBD and North Shore.

The Site is surrounded by a range of land uses, including commercial office buildings along Pacific Highway, mixed use residential buildings, strip retail and low-rise commercial buildings.

The Site's location at the edge of the commercial core is indicated in Figure 2-1.

Figure 2-1: Location Map



Source: Atlas/ Nearmap

The Site is a 1970's B-grade commercial office building with approximately 9,730sqm lettable area. Building floorplates are approximately 700sqm with the commercial accommodation arranged over 15 storeys.



2.2 Planning Context

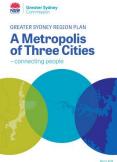
2.2.1 State Planning Policy

The state planning policies of most relevance to the Site include the Greater Sydney Region Plan (GSC, 2018a and, the North District (GSC, 2018b).

Greater Sydney Region Plan (2018)

The Greater Sydney Region Plan (the Region Plan) seeks to accommodate the needs of Sydney's growing population into a metropolis of three cities: Western Parkland City, Central River City and Eastern Harbour City, building on a vision where most residents live within 30 minutes of their jobs, education and health facilities. The Region Plan delineates Greater Sydney into five districts; Western City District, Central City District and Eastern City District, North District and the South District.

The Region Plan outlines a series of planning priorities, objectives and actions for each District. Those of direct relevance to the Site are detailed in the North District Plan (GSC, 2018b).



North District Plan (2018)

Building upon the strategic aims and objectives outlined in the Region Plan, the North District Plan (referred to as the 'District Plan') sets out a 20-year vision, priorities and actions for Greater Sydney's North District, which includes the North Sydney, Mosman, Willoughby, Ryde, Lane Cove, Hunters Hill, Northern Beaches, Ku-ring-gai and Hornsby LGAs.

Under 'Planning Priority (N7): Growing a stronger and more competitive Harbour CBD', the District Plan identifies North Sydney CBD's role in growing the competitiveness of the Harbour CBD.

North Sydney CBD is recognised to be a thriving office market, an alternative to Macquarie Park and an attractive complementary office market to Sydney CBD. It is therefore recognised as the northern component of the Harbour CBD.

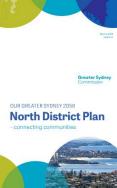
Key actions for the North Sydney CBD include:

- Maximise the land use opportunities provided by the new station;
- Grow jobs in the centre and maintain a commercial core;
- Strengthen North Sydney's reputation as an education centre, to grow jobs and add diversity;
- Expand after hours' activities;
- Encourage growth in business tourism as a conference location that takes advantage of North Sydney's identity as a business hub, its location, access and views;
- Provide a variety of high quality civic and public spaces befitting a globally-oriented CBD, which can be utilised for a range of cultural and entertainment activities;
- Improve amenity by reducing the impact of vehicle movements on pedestrians;
- Create capacity to achieve job targets by reviewing the current planning controls.

The District Plan outlines an employment target of between 76,000 and 81,500 by 2036, compared to an estimated 60,400 jobs in 2016. This reflects additional jobs of 15.600 to 21,100 and a required rate growth of between 750 and 1,150 jobs per annum (on average).

2.2.2 Local Planning Policy

Local planning policies and instruments of direct relevance to the Site include the draft North Sydney Local Strategic Planning Statement (LSPS) and North Sydney Local Environmental Plan 2013 (NSLEP 2013). These are briefly detailed below.



North Sydney Local Strategic Planning Statement (2019)

The North Sydney LSPS is the local planning policy linking the objectives and actions outlined in the District Plan with the North Sydney LGA. The North Sydney LSPS outlines the a 20-year vision for the North Sydney LGA, detailed with a set of planning priorities and actions organised into the themes of the District Plan.

The LSPS identifies the value and significance of the North Sydney CBD to the Eastern Economic Corridor and to North Sydney's ability to provide for employment. It also identifies the challenges that the CBD has faced, including:

- Decline in competitiveness against Macquarie Park which replaced it as the second largest office market in Sydney (2016).
- Encroachment of residential development on commercial uses.
- High proportion of B and C grade commercial office buildings.
- Low pedestrian amenity due in part to high levels of traffic in the CBD.
- Limited activity outside business hours.

The LSPS acknowledges the challenges of achieving commercial office growth given the limited opportunities to expand laterally. Retention of the B3 Commercial Core zone is an action to ensure there is sufficient employment capacity in the CBD and that residential development is restricted to the periphery.

In growing a stronger, more globally competitive North Sydney CBD, the LSPS through Action P1.1 will continue to implement the North Sydney CBD Capacity and Land Use Strategy (2017). In collaboration with DPIE, industry stakeholders and the community, Council will:

- Increase commercial floorspace capacity and employment growth for the North Sydney CBD.
- Deliver high quality commercial floorspace that caters to the needs of existing and emerging industries.
- Restrict residential development to the mixed-use periphery to preserve a critical mass of employment in the North Sydney CBD.
- Encourage a diverse mix of entertainment, recreation, retail and commercial uses that contribute to the North Sydney CBD's diversity, amenity and commercial sustainability.
- Ensure high-quality design that responds to context and enhances the amenity of the North Sydney CBD.

North Sydney Local Environmental Plan (2013)

The NSLEP 2013 is the principal planning instrument governing land use and development in the North Sydney LGA. The applicable planning controls of relevance to the Site include:

Land Use Zone: B4 Mixed Use

Floor Space Ratio: Not specified

Minimum Non-residential FSR: FSR 3:1

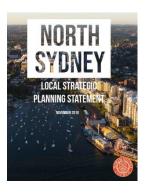
Maximum Building Height: 145m (RL)

Clause 6.3 of the NSLEP requires there is no net increase in overshadowing of the Berry Street (West) Special Area between 12pm and 2pm from the March equinox to the September equinox (inclusive).

The absence of an FSR control requires built form testing to estimate the maximum GFA that would be achievable in the compliant development scheme.

Holdmark engaged Turner Studio who have advised the following GFAs could be achieved on the Site in a compliant scheme.

- Commercial-only development 13,260sqm GFA (equivalent to FSR 9.53:1)
- Mixed use residential development 9,282sqm GFA, which is approx. 30% lower than a commercial-only development. Applying the minimum non-residential FSR 3:1 to arrive at 4,173sqm GFA (commercial) and 5,109sqm GFA (residential).





2.3 Employment Profile

Understanding the economic profile of the North Sydney CBD is useful in understanding its role in the context of the broader North Sydney LGA and Greater Sydney region. The Site is located within the B4 Mixed Use zone and at the edge of the B3 Commercial Core zone. The employment profile of these two zones is examined by defining B3 and B4 catchment areas.

The employment profiles of the catchment areas are examined using Australia Bureau of Statistics (ABS) Census data. Analysis is based on Destination Zone (DZ) geographies as defined by the ABS, being the smallest geographical areas available for fine grain employment analysis.

It is noted that the DZ geographies selected for analysis are larger than the boundaries of catchment areas. Nevertheless, the selected DZs are considered appropriate for the purposes of this analysis.

Figure 2.2 illustrates the boundaries of the Catchment Area used as the basis for the employment profile analysis.

Figure 2.2: Catchment Areas (Select B3 and B4 Catchment Areas)



Source: ABS/Atlas/Nearmap

B3 Catchment Area

The B3 Catchment Area comprised 29,861 workers as at 2016. The precinct is heavily dominated by three industries which represent over 60% of total employment, including Professional, Scientific & Technical Services (30%), Financial & Insurance Services (20%) and Information Media & Telecommunications (10%).

Over 2011-2016, the Catchment Area grew by approx. 5,300 workers reflecting average annual growth of 4%. A large proportion of this growth was attributed to three main industries (Professional, Scientific & Technical Services, Information Media & Telecommunications and Construction) which grew in size and proportionality.

Figure 2.3 illustrates employment growth in the B3 Catchment Area by ANZSIC industry over 2011-2016. A more detailed breakdown of employment growth is provided in Schedule 1.



Agriculture, Forestry and Fishing Mining Manufacturing Electricity, Gas, Water and Waste Services Construction Wholesale Trade Retail Trade Accommodation and Food Services Transport, Postal and Warehousing Information Media and Telecommunications Financial and Insurance Services Rental, Hiring and Real Estate Services Professional, Scientific and Technical Services **Administrative and Support Services Public Administration and Safety Education and Training** Health Care and Social Assistance **Arts and Recreation Services** Other Services Inadequately Described/Not Stated 1,000 2,000 3,000 4,000 5,000 6,000 7,000 000,8 9,000 10,000 **2011 2016**

Figure 2.3: Employment by Industry (2011-2016), B3 Catchment Area

Source: ABS (2017a, 2012)

B4 Catchment Area

Figure 2.4 illustrates employment growth in the B4 Catchment Area by ANZSIC industry over 2011-2016. A more detailed breakdown of employment growth is provided in Schedule 1.

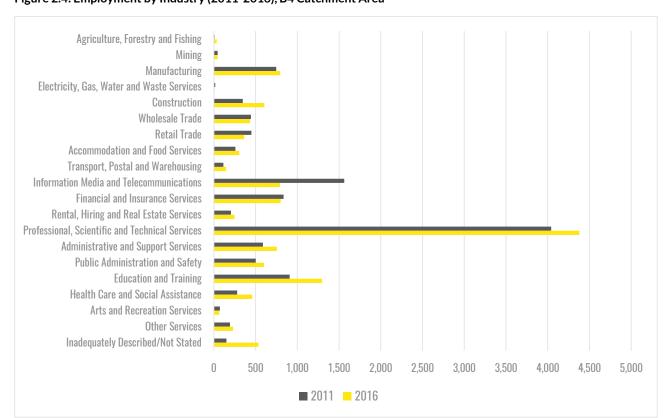


Figure 2.4: Employment by Industry (2011-2016), B4 Catchment Area

Source: ABS (2017a, 2012)



The B3 Catchment Area comprised 12,903 workers as at 2016. The precinct is heavily dominated by two industries which represent nearly 50% of total employment, including Professional, Scientific & Technical Services (35%) and Education & Training (10%).

Over 2011-2016, the Catchment Area grew by 1,100 workers reflecting average annual growth of 1.9%. This growth was driven by growth in the industries of Professional, Scientific & Technical Services and Education & Training.

In contrast to the B3 Catchment Area where there was strong growth in Information Media & Telecommunications and Construction, in the B4 Catchment Area there was a net loss of employment in this industry.

Employment growth in the B4 Catchment Area has been much more modest compared to the B3 Commercial Core. This is expected given the nature of permissible uses in the zone; with residential and other non-employment uses permitted.

Combined B3 and B4 Catchment Areas

Combined, the B3 and B4 Catchment Areas accommodated 42,764 workers in 2016, up from 36,331 workers in 2011.

Table 2-1 contains the employment profile on the defined (combined B3 and B4) catchment that surrounds the Site.

Table 2-1: Combined B3 and B4 Catchment Employment by Industry

Industry	2	2011	20	2016		Change (2011-16)	
	No.	%	No.	%	No.	%	
Agriculture, Forestry and Fishing	29	0.1%	84	0.2%	55	190%	
Mining	196	0.5%	208	0.5%	12	6%	
Manufacturing	1,149	3.2%	1,057	2.6%	-92	-8%	
Electricity, Gas, Water and Waste Services	327	0.9%	657	1.6%	330	101%	
Construction	1,582	4.4%	2,437	6.0%	855	54%	
Wholesale Trade	1,407	3.9%	1,239	3.0%	-168	-12%	
Retail Trade	990	2.7%	1,097	2.7%	107	11%	
Accommodation and Food Services	832	2.3%	1,007	2.5%	175	21%	
Transport, Postal and Warehousing	796	2.2%	1,186	2.9%	390	49%	
Information Media and Telecommunications	2,757	7.6%	3,559	8.7%	802	29%	
Financial and Insurance Services	6,040	16.6%	6,560	16.0%	520	9%	
Rental, Hiring and Real Estate Services	629	1.7%	672	1.6%	43	7%	
Professional, Scientific and Technical Services	11,490	31.6%	13,081	31.9%	1,591	14%	
Administrative and Support Services	2,250	6.2%	2,296	5.6%	46	2%	
Public Administration and Safety	1,627	4.5%	1,563	3.8%	-64	-4%	
Education and Training	1,516	4.2%	1,694	4.1%	178	12%	
Health Care and Social Assistance	1,172	3.2%	1,267	3.1%	95	8%	
Arts and Recreation Services	146	0.4%	306	0.7%	160	110%	
Other Services	882	2.4%	973	2.4%	91	10%	
Inadequately Described/Not Stated	514	1.4%	1,821	4.3%	772	150%	
Total	36,331	100.0%	42,764	100.0%	535	177%	

Source: ABS (2012, 2017)

The employment composition of the B3 and B4 Catchment Areas is anchored by three major industries, accounting for over 55% of total employment. These knowledge-intensive industries (Professional, Scientific & Technical Services, Information Media & Telecommunications and Financial & Insurance Services) grew strongly over the 2011-2016 period.

Employment growth in the defined catchment was robust over the 2011-2016 period, representing average annual growth of 3.3% per annum. The analysis in section 2.3 indicates that this employment growth was primarily driven by growth in the B3 Catchment Area (rather than the B4 Catchment Area).



2.4 Implications for the Site

A strategic review of the Site in its North Sydney CBD location has provided important insight into its locational qualities, future role under State and local strategic plans and the nature and evolution of local employment activity.

Location

- The Site falls within 600m of the North Sydney train station and 200m from the future Victoria Cross metro station.
- North Sydney CBD is recognised to be a thriving office market, an alternative to Macquarie Park and an attractive complementary office market to Sydney CBD. It is therefore seen as the northern component of the Harbour CBD.
- North Sydney CBD is one of four North Shore office markets, the others being Macquarie Park, Chatswood and Crows Nest/St Leonards. Its proximity to the Sydney CBD has helped spur growth and renewal in recent years.

Strategic Planning

- North Sydney CBD is identified as a Strategic Centre in the *North District Plan* (GSC, 2018b), being the north component of the Harbour CBD. It is designated an employment target of between 76,000 and 81,500 by 2036, requiring between 750 and 1,150 new jobs per annum in the 20 years to 2036.
- The District Plan notes an action a number of actions on the North Sydney CBD, including to maximise land use opportunities provided by the new station and to ensure capacity in the planning framework to achieve job targets.
- The North Sydney LSPS echoes the value and significance of the North Sydney CBD as an economic centre. It also
 identifies the challenges the CBD has faced, including the high proportion of B and C-grade commercial office buildings.
- The LSPS acknowledges the limited opportunities to expand laterally and the importance of retaining the B3 Commercial Core to ensure sufficient employment capacity.

Employment Profile

- The Site's Catchment Area (B3 and B4 combined) recorded ~42,800 workers in 2016 circa 60% of the North Sydney LGA's overall workforce.
- The Site's Catchment Area is anchored by three major industries (over 55% of employment). These knowledge-intensive industries (Professional, Scientific & Technical Services, Information Media & Telecommunications and Financial & Insurance Services) grew strongly over the 2011-2016 period.
- The Catchment Area grew by 6,500 workers over 2011-2016, reflecting average annual growth of 3.3%. Analysis indicates that this employment growth was primarily driven by growth in the B3 Catchment Area (4% average annual growth). Employment growth in the B4 Catchment Area has been much more modest. This is expected given the nature of permissible uses in the zone; with residential and other non-employment uses permitted.

Role for the Site

One of the key challenges for the North Sydney CBD will be the ability of its high proportion of secondary grade office space (B and C-grade) to renew and redevelop. The District Plan and LSPS identify the importance of capacity to grow employment.

The notion of capacity is two-fold - theoretical capacity and market capacity. Market capacity refers to whether capacity in the planning framework is deliverable from a commercial viability perspective - firstly whether there is market demand, and secondly whether the planning controls enable viable development. Theoretical capacity alone is insufficient to achieve the desired employment growth.

The ability of North Sydney CBD to 'turn the tide' will importantly depend on the capacity of its secondary grade stock to renew, improving its commercial office offer and transforming parts of the centre that are aged and in need or reinvestment.

The Site being located on the edge of the B3 Commercial Core has the potential to help spur greater employment activity in the B4 zone, maximising the land use opportunities provided by the new metro station.



3. Commercial Office Market

Commercial office markets in Greater Sydney commenced 2021 in a period of significant flux. The economic ramifications of the COVID-19-induced recession on the Australian economy are still playing out. This follows Australia's largest contraction in domestic economic activity since the Great Depression, with GDP falling 7% in Q2 2020. With the continued easing of restrictions and initial vaccine rollout scheduled in February 2021, normal economic activity is expected to slowly return. Growing retail spending and a declining unemployment rate demonstrate this recovery is already underway.

That said, businesses remain cautious with many deferring major capital expenditure until there is further certainty in the global economy. Large occupiers, particularly the private sector, are also hesitant to commit to any large and long-term office tenancy commitments as forced working from home practices over the course of 2020 have seen most businesses reconsider their workspace requirements.

Greater Sydney's largest commercial office market – the Sydney CBD – recorded an upswing in vacancy levels over 2020, rising from 3.9% to 8.6% over the 12 months to January 2021 (PCA, 2021). Office landlords responded by offering greater incentives, with average incentive rates up to 25%-35% compared to circa 17%-20% in early 2020. Some forecasters suggest CBD office vacancy could peak at 20% over the coming four years (JP Morgan in The Australian, 2021).

In North Sydney CBD, vacancy levels rose from 7.2% to 18.8% over the 12 months to January 2021. Incentives have also risen to currently range between 30% and 35%. The vacancy profile is particularly distinct in North Sydney - secondary grade stock (B, C and D-grade) is the most affected with vacancy rates up to 25%. This is discussed in greater detail in section 3.2.

3.1 Trends and Drivers

Commercial office market trends in Greater Sydney have experienced rapid evolution over the last decade, driven by a series of structural changes.

These structural change drivers have ranged from broad, global influences (e.g. growth and adoption of technology) to more local, micro influences (e.g. State Government shift to Western Sydney). These key trends and drivers which have and will continue to influence demand for office accommodation in North Sydney are discussed below.

Occupational Change



Technological change over the last decade has revolutionised office markets. In 2009, only one of the top 10 largest companies was a technology company (i.e. Microsoft), with the largest firms within the energy and financial sectors. By 2019, seven of the top 10 were 'tech' companies (Visual Capitalist, 2019). In August 2020, Apple became the first company in the world to surpass US\$2 trillion in value.

Tech occupiers have been increasingly taking larger amounts of office space as compared to traditionally dominant corporate players like banks, consultancies and energy companies. Large tech companies have been extremely active in Sydney over the last few years. For example, Salesforce more than doubled its existing footprint last year when it committed to new space in Barangaroo.

The expansion of tech occupiers has changed the office market in two ways. Firstly, it has changed perspectives of office design and layout. Secondly, it has eroded the dominant market position of large corporate occupiers in favour of small and medium sized enterprises (SMEs), creating more demand for smaller tenancies compared to large tenancies.

The need for tech occupiers to attract the 'best and brightest' talent in order to grow and outcompete rivals has meant that the office has evolved to focus on providing a best-in-class experience for workers. Offices are designed around satisfying employees with highly specified and amendable space.

Occupiers in all sectors have followed suit in providing this type of office space as they compete for the same talent. The net effect of this has been to change the purpose of the office from primarily functional workspaces towards an experiential environment to act as a recruitment tool and maximise worker choice.



Employment Change

Technology is also changing the type of work office employees perform. The capabilities of machine-learning, algorithms and artificial intelligence (AI) are increasing fast and impacting more tasks currently performed by human workers. Any office task which is repetitive and predictable is highly exposed to automation.

Companies switching from human to Al-powered employees can save significant costs, increase productivity (as Al does not require any breaks), minimise the scope for errors and ensure skills are constantly kept up to date in real time (it is easier to upgrade an algorithm to account for new requirements than it is to retrain a human worker). For these reasons it is likely that lower skilled office functions will become less important to total office demand in the future.

Conversely though, skilled employees in knowledge-based or creative roles which cannot be automated will become more valuable to companies and will account for a larger share of total office employment. Companies will be more dependent in the future on attracting the best and brightest skilled labour. Location decisions offer the best chance to attract and retain talent. This means quality offices in city centres that are easily accessible and provide a high level of amenity.

Skilled employees favour offices which are designed around them, meaning that it provides a high level of user experience. This usually means offering a high quality and engaging physical environment with multiple types of space.

Rise of Flexible/Remote Working

Remote working has been gathering momentum for some years, but the impact of COVID-19 restrictions has made it 'front of mind' for many businesses. Forced home working has made even laggard companies realise that technology and digital connectivity allows work to be done from anywhere.

Figure 3-1 shows the since 2011, the proportion of employees working from home has been on the increase in all capital cities except Darwin. In Greater Sydney, the proportion of employees working from home in 2016 was 4.9%.

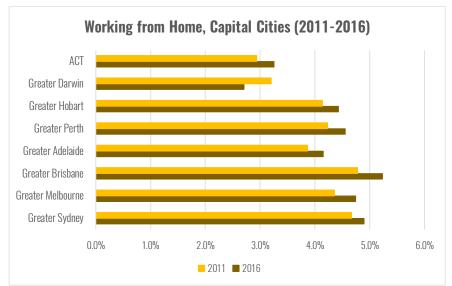


Figure 3-1: Working from Home, Capital Cities (2011-2016)

Source: ABS (2017)

 $An international \ survey \ (Buffer, 2020) \ found \ that \ key \ struggles \ employees \ working \ from \ home \ faced \ included:$

- Collaboration and communication (20%);
- Loneliness (20%);
- Not being able to 'unplug' (18%);
- Distractions at home (12%).

There are positives and negatives associated with remote working. The middle ground between in-office and remote working is flexible working, under which employees are free to work where they wish and their working week is likely to comprise a mix of home and office-based work. Indeed, most Australian office workers want to work in the office 2 to 3 days per week in the future (ABC News, 2020).

As a result, offices will evolve towards providing space which facilitates human interaction, creativity, innovation and social engagement. It will also become showroom space for a company to promote its brand and ethos to staff and clients. This could mean companies may take less office space for desks, but they will take better quality, more expensive space that appeals to workers who can choose where they want to be based.

The best offices must have a more diversified offer. This includes a range of environments – hot desks, quiet space, cafes, standing desks, break-out spaces, kitchens, meeting booths – each serving different purposes and which can be adapted easily to meet fluctuating demand throughout the day/week.

'Flight to Quality'

The expectations of tenants and workers has changed significantly over the past decade. This has meant that services or amenity that were once 'nice-to-haves' have over time become 'standard', thereby shifting employee expectations to require even greater levels of quality and amenity from their workspace accommodation.

Building amenity such as end-of-trip facilities are now expected in a contemporary building; many older buildings having to retrofit such facilities or risk being uncompetitive.

Any economic downturn is invariably accompanied by a rise in vacancy levels as occupiers reduce their occupied footprint or businesses exit their premises.

When tenant demand falls on a large scale, pricing is inevitably affected - incentives rise and effective rents fall as landlords compete for a smaller pool of tenants. This often leads to a situation where tenants of secondary space leave for better quality space, obtaining better 'bang for buck'.

Figure 3-2 and **Table 3-1** illustrates the vulnerability of secondary grade stock in Australian CBD markets to vacancy; this vulnerability is heightened in any economic downturn.

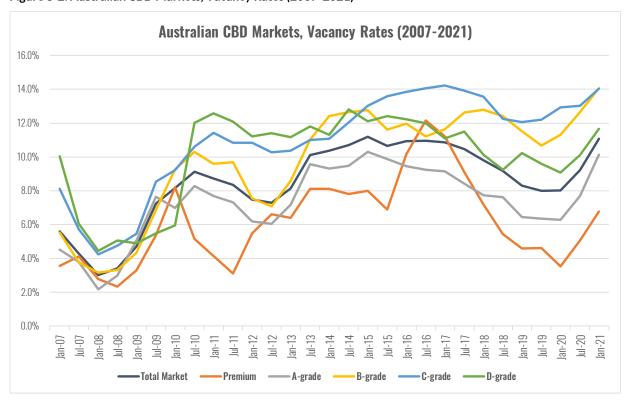


Figure 3-2: Australian CBD Markets, Vacancy Rates (2007-2021)

Source: PCA (2021)

The graph shows that vacancy rates for secondary grade office (B, C and D-grade) have *consistently* been higher than prime secondary grade office (premium and A-grade).

Vacancy rates for all office grades of space have increased in the 12 months to January 2021. Vacancy rates for B-grade space in particular have risen to the highest of all office grades (14.1%).



Table 3-1: Australian CBD Markets, Vacancy Rates (2007-2021)

Period	Total Market	Premium	A-grade	B-grade	C-grade	D-grade
Jan 2007	5.6%	3.6%	4.5%	5.5%	8.1%	10.0%
Jan 2008	3.0%	2.8%	2.2%	3.2%	4.2%	4.4%
Jan 2009	4.7%	3.3%	5.1%	43%	5.5%	4.9%
Jan 2010	8.1%	8.2%	7.0%	9.3%	9.2%	5.9%
Jan 2011	8.7%	4.1%	7.7%	9.6%	11.4%	12.6%
Jan 2012	7.5%	5.5%	6.2%	7.5%	10.8%	11.2%
Jan 2013	8.1%	6.4%	7.2%	8.6%	10.4%	11.2%
Jan 2014	10.4%	8.1%	9.3%	12.4%	11.1%	11.3%
Jan 2015	11.2%	8.0%	10.3%	128%	13.6%	12.4%
Jan 2016	10.9%	10.1%	9.4%	12.0%	13.8%	12.2%
Jan 2017	10.9%	11.2%	9.2%	11.6%	14.2%	11.1%
Jan 2018	9.8%	7.2%	7.7%	12.8%	13.6%	10.1%
Jan 2019	8.3%	4.6%	6.4%	11.5%	12.1%	10.2%
Jan 2020	8.0%	3.5%	6.3%	11.3%	12.9%	9.1%
Jan 2021	11.1%	6.8%	10.1%	14.1%	14.0%	11.7%

Source: PCA (2021)

A 'flight to quality' is observed in all markets where secondary grade buildings (B, C and D-grade) have much higher vacancy rates compared to prime grade buildings (premium and A-grade).

While a number of structural trends were already at play prior to the COVID-19 pandemic, forced shutdowns over the last 12 months have accelerated the implications of these structural trends on office demand.

Looking forward, the following factors are expected to influence demand for office floorspace:

- A shift in the type of activities undertaken in the office (to include more collaboration and meeting space, high quality amenity and recreation space).
- An increase in tenant expectations on building quality and amenity resulting in more discerning and selective behaviour.
- A need for flexibility for space to be adaptable for various activity types and for lease tenure to be more flexible.

A 'permanent flight to quality' is expected to be witnessed across all markets, as tenants demand more value from their office space.

Businesses and employees alike are expected to re-evaluate and experiment with their office footprints, making decisions on an office footprint that would result in better productivity.

In the short and long term, this means that the office market environment will become more competitive. Landlords will need to ensure their buildings 'work harder' to be competitive. Older buildings will need to be retrofitted with contemporary services (like end-of-trip facilities) and common areas refurbished/upgraded to preserve building prestige/image.

For many secondary grade buildings, the cost-value proposition for comprehensive refurbishment may not allow them to compete viably. This will inevitably lead to falling rents, increasing vacancies and asset deterioration over time.

The next section examines the North Sydney CBD market in particular.



3.2 North Sydney Commercial Market

3.2.1 Existing Supply

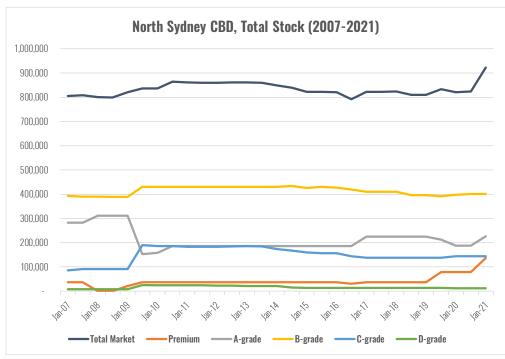
The North Sydney CBD office market encompasses areas zoned B3 Commercial Core and B4 Mixed Use. The concentration of purpose-built office towers is mostly in the B3 Commercial Core (to the southeast of the Site). The core of the CBD has accommodated the most jobs growth over the 2011-2016 period. **Figure 3-3** illustrates the location of the Site in the context of the broader North Sydney CBD.

Figure 3-3: North Sydney Office Market by Zone



Source: Atlas/Nearmap

Figure 3-4: Total Office Stock, North Sydney CBD (2009-2021)



Source: PCA (2021)



As shown in **Figure 3-4**, office stock has remained relatively stagnant in North Sydney CBD with total floorspace in 2020 at or around 2009 levels (i.e. circa 820,000sqm floorspace). A large number of recent completions in the second half of 2020 has added approximately 100,000sqm of new floorspace to the market, bringing total office supply to 920,000sqm.

Table 3-2: Proportion of Prime Grade v Secondary Grade Space, Comparable Office Markets (January 2021)

Office Market	Total Supply	Prime Grade			Secondary Grade			
	(sqm)	Premium	A-grade	Total	B-grade	C-grade	D-grade	Total
North Sydney	922,793	15%	25%	40%	43%	16%	1%	60%
Macquarie Park	904,710	-	70%	70%	27%	3%	0%	30%
Crows Nest/St Leonards	331,047	-	33%	33%	25%	39%	3%	67%
Chatswood	273,454	-	48%	48%	21%	30%	0%	52%
Parramatta CBD	809,526	-	45%	45%	29%	16%	10%	55%
Sydney CBD	5,082,117	24%	38%	62%	26%	9%	4%	38%

Source: PCA (2021)

The proportion of prime grade to secondary grade office space in North Sydney is low (40%) compared to competitor markets such as Macquarie Park (70%) and Sydney CBD (62%).

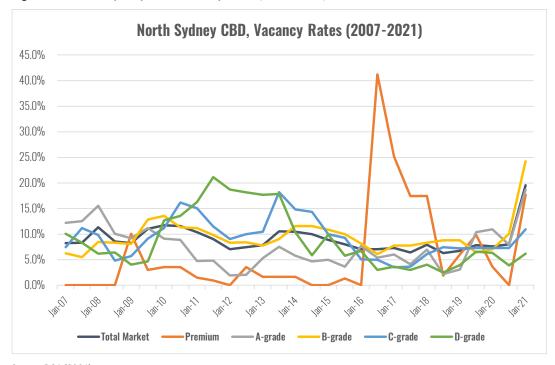
North Sydney CBD has a notably high proportion of B-grade office space (43%) compared to competitor markets (21%-29%). This has implications for overall market competitiveness, particularly when tenants and occupiers are discerning and selective with regard to building quality and amenity.

3.2.2 Vacancy Levels

Vacancy rates are highly responsive to tenant demand. In any economic downturn (including the present), occupancy rates for secondary grade buildings are not only challenged by falling tenant demand but also by a 'flight to quality' by existing tenants upgrading to prime grade buildings.

Figure 3-5 illustrates the vulnerability of secondary grade stock, in particular B-grade stock whose vacancy rates are the highest at 24%. This is not surprising given the volume of B-grade stock (43%) in the North Sydney market. As more prime grade office buildings are completed and absorbed, many secondary grade buildings will struggle even more to be competitive.

Figure 3-5: North Sydney CBD, Vacancy Rates (2007-2021)



Source: PCA (2021)



3.2.3 Development Activity

A number of large commercial projects have recently completed, adding approx. 100,000sqm to North Sydney office stock. Many of the new developments were substantially pre-let prior to completion.

A review of the development pipeline indicates approximately 160,000sqm of new commercial development activity in the pipeline. These developments generally offer large floorplates, in excess of 1,800sqm.

Table 3.3 summarises the commercial office pipeline by project.

Table 3.3: Development Pipeline, North Sydney

Address	Office Floorspace (sqm)*	Stage	Estimated Completion
88 Walker Street	13,000	Under Construction	2022
2-4 Blue Street/ 1-5 William Street	13,500	Development Approval	2023
105-151 Miller Street	66,000	Development Application	2023
173 Pacific Highway	11,000	Development Application	2024
Victoria Cross Tower over metro station	55,000	Development Approval	2024

Source: Atlas/Cordell Connect

3.3 Economic Sustainability of the Site

All properties and markets operate within a competitive context. The principle of substitutability holds that where accommodation is unavailable in one property or market, occupiers will seek the most comparable alternative.

The Site is a B-grade office asset that is almost 50 years old (construction 1970's). Its ageing nature means that building refurbishments and upgrades are required to keep it competitive in a market that is increasingly selective on quality. The building's operating expenses (2020/21) at \$170/sqm provide an indication of the ageing (and less efficient) of the building. According benchmarks of office operating expenses, office buildings in North Sydney average \$150/sqm.

Market investigations, including discussions with local agents indicate that occupiers within the North Sydney office market are dominated by professional services firms and technology and media occupiers. Prospective occupiers are often larger corporates with medium to large floorspace requirements. The primary markets which compete with North Sydney from a commercial occupier perspective are identified as Macquarie Park and to a lesser extent Parramatta.

Macquarie Park

Now the third largest office market in NSW, Macquarie Park comprises approx. 905,000sqm of office floorspace and is located 14km northwest of North Sydney. Comprising a mix of 4-6 storey 'campus style' office buildings in addition to more recently developed office towers, Macquarie Park accommodates a vibrant mix of multinational organisations in the health, education, technology and electronics and telecommunication sectors.

Its co-location with other major assets such as Macquarie University, Macquarie Shopping Centre and CSIRO facilities have made it a popular precinct. The recently completed Sydney Metro Northwest, which upgraded both Macquarie University and Macquarie Park train stations to Metro standards, has amplified interest in the precinct.

Parramatta

The Parramatta office market comprises more than 800,000sqm of commercial office floorspace with a mix of prime and secondary grade office stock. Parramatta accommodates a broad range of corporate, government and education anchors – many of which have relocated to the Parramatta CBD in recent years. This is a result of a whole-of-government focus to facilitate the development of Parramatta as Sydney's 'second CBD', with city shaping projects such as the Parramatta Light Rail, Sydney Metro West and Parramatta Square transforming the precinct.

North Sydney CBD has a disproportionate amount of secondary office space (60%) compared to its peer markets, making it less competitive. Council's LSPS identified the large amounts of B-grade and C-grade space as a weakness of the North Sydney CBD, recognising the importance of renewal and redevelopment to offer new and modern floorspace.



^{*}The proposed office floorspace represents 'total' floorspace, not 'net additional' floorspace. In order to estimate net additional floorspace, existing floorspace that is to be demolished should be deducted from the total floorspace amount.

In assessing the economic sustainability of the Site, we examine business and employee requirements as well as development requirements which ultimately underpin any redevelopment decision.

Business Requirements

The factors that attract businesses to a location and property are linked to strategic and operational requirements of that business. Whilst every business is unique, many of the key location and site selection criteria are common across different industries and sectors.

Office-based businesses are arguably most sensitive to location and amenity. Skilled labour is valuable which businesses actively seek to attract and retain through their property decisions. Key location criteria for commercial occupiers include:

- Affordability the cost of accommodation is a key consideration for all businesses. Some industries and/or business
 functions require a large component of capital be attributed to accommodation to attract staff and clientele. This
 'prestige' requirement is commonly observed in top-tier law, accounting, and management consultancy firms.
 Successful office markets have a sufficient diversity of stock to provide a range of spaces at various price points.
- Public Transport Access to public transport is important for business as it provides accessibility to labour pools throughout Greater Sydney, providing greater access to skilled talent. Businesses also recognise the importance of public transport to office workers who view locations with multiple public transport options as a key requirement.
- Employee Amenity Employee amenity is a critical selection factor for many office-based businesses, particularly those in industries where they must compete for talent. Access to a variety of retail and hospitality uses, recreational facilities and other key services is expected. Areas lacking these amenities can struggle to both attract and retain skilled labour.
- Critical Mass Businesses gravitate to where there is a critical mass of occupiers. Critical mass is needed for facilities that support employee amenity to be viable, whilst providing opportunities to locate proximate customers/suppliers.

Employee Requirements

The workspace expectations of office workers have been steadily rising over the past decade as technological, social and occupational changes have spurred demand for higher quality office space in well-located locations. These higher expectations have been well-documented by various workspace tenant surveys conducted across Australia, the UK and US.

A summary of recent office worker surveys (CBRE, 2019; Clutch; 2020; JLL; 2020; Savills; 2019; Staples; 2019) shows a number of common locational criteria is sought by office workers. Some of these include:

- Public Transport Options Research suggests the availability of train station access can form a key job consideration
 for employees with bachelor degree qualifications or greater. Whilst this has historically been less important in
 suburban office markets where private vehicle has been the primary mode of transport, growing traffic congestion and
 work-life balance is making high-quality public transport options a key requirement for office workers. Many office
 workers prefer locations accessible through a direct transport mode and do not require multi-trips or modal changes.
- **Proximity to Home** all studies note the importance of working in close proximity to home or in areas where commute times can be minimised in order to achieve work-life balance.
- Retail and Services Offering proximity to surrounding retail, hospitality and other services is critical to the desirability and sustainability of office precincts. This includes proximity to gyms, fitness studios and allied health services.
- Modern Design and Tech Integration with most office workers intending on partly working from home on a
 permanent basis, the amenity offering of office buildings is even more important in a post-COVID environment. Offices
 are no longer just a workspace those with high quality fitout, interior design and tech-integrated features are
 becoming increasingly important to office workers.
- Access to Green Spaces the availability of nearby green spaces such as parks or eating areas is an important drawcard for office precincts with desirable office precincts typically comprising multiple spaces for workers to utilise.



Development Requirements and Options

In order for existing office buildings to be redeveloped, that redevelopment must be a commercially viable proposition.

In essence, development is commercially viable where the potential revenues of the completed development exceed *all* development costs, including the cost of land and an allowance for profit and risk. The value of the existing office building is critical, as it represents the 'opportunity cost' which development must exceed in order to be considered viable.

Simply put, any redevelopment option and its corresponding site value will need to exceed the value of the existing 15 storey building if it were retained.

The planning controls of the Site enable the following development options:

- Commercial-only building (13,260sqm³);
- Mixed use residential building (estimated at 9,300sqm⁴).

The Planning Proposal envisages a commercial-only building of approximately 22,750sqm GFA.

For illustrative purposes, **Table 3.4** compares the site values of various development options against the existing-use value of the 15 storey commercial building (assuming the existing building is retained and refurbished to defensively preserve value). This comparison allows an assessment of the commercial viability of various redevelopment options.

Table 3.4: Comparative Analysis of Viability of Development Options

	Total GFA (sqm)	Commercial (sqm)	Residential (sqm)	Estimated Value	
Existing Commercial Building (Retain and Refurbish)	9,902	9,902	-	\$105,397,500	n/a
Development Option	Total GFA (sqm)	Commercial (sqm)	Residential (sqm)	Estimated Value	Feasible?
Compliant Commercial-only	13,260	13,260	-	\$66,300,000	No
Compliant Mixed Use Residential	9,300	4,173	5,127	\$51,448,500	No
Proposed Commercial-only	22,750	22,750	-	\$113,750,000	Yes

Source: Atlas

Both development options that are compliant with existing planning controls are not feasible for the Site. This is because their respective site values (\$66m and \$51m) are lower than the Site's value in existing use (\$105m) as an investment property, giving no incentive to displace the current use.

It therefore follows that the Base Case (for the purposes of the Study) is defined as a scenario where the existing commercial building is to be retained and refurbished. This is the most likely outcome in a Do-Nothing approach.

The Proposal's Commercial-only option results in a site value that is greater than the Site's value in existing use, thereby making it a commercially viable proposition.

Implications for the Site

Structural changes in office market trends have been accelerated by the COVID-19 pandemic, shifting business and employee expectations and entrenching a 'permanent flight to quality' mindset.

In any economic downturn (including the present), occupancy rates for secondary grade buildings are not only challenged by falling tenant demand but also by a 'flight to quality' by existing tenants upgrading to prime grade buildings.

In a post-COVID world, office assets will be required to 'work harder' in order to be competitive. Secondary grade assets will be particularly vulnerable to tenant selectiveness and amenity expectations.

The analysis demonstrates that if the Site were to be redeveloped, amendments to the planning controls are required. In a Do-Nothing scenario, the Site is likely to remain 'as is' - the building is likely to progressively reduce in competitiveness and market desirability. With investment return in decline, the motivation to reinvest in the building will also decline.

The next chapter tests the economic impacts of the Base Case and the Proposal Case.



³ Tested by Turner Studio

⁴ Estimated at 30% lower than a compliant commercial-only building

4. Economic Impact Assessment

4.1 Overview and Approach

This chapter examines the economic activity and impacts that could be facilitated through progression of the Proposal during construction and upon completion. The analysis estimates the economic activity supported in the following scenarios:

Base Case: There are no changes to the existing planning controls.

Chapter 3 investigated the likely development and built form outcomes were there be no change to the planning controls. The following would be permissible under the existing planning controls:

- Retention (and refurbishment) of existing commercial building (9,902sqm) which could accommodate 330 workers directly;
- Development of new commercial building (13,260sqm) which could accommodate 600 workers directly;
- Development of new mixed use development (estimated at 9,300sqm) which could accommodate 190 workers directly in the non-residential GFA component of the mixed use development.

From a financial feasibility perspective, retention of the existing commercial building would be the most likely outcome. Redevelopment into commercial or mixed use residential (as permitted by existing density controls) are not commercially viable options.

Accordingly, the economic modelling adopts the first option (i.e. retention of the existing commercial building) as the Base Case.

Proposal Case: Planning controls are amended to allow development of 22,750 sqm GFA of commercial floorspace.

The economic impacts are assessed at the North Sydney Local Government Area (LGA) level. An Input-Output model (including the development of specific regional Input-Output transaction tables) was developed to reflect the economic structure of the North Sydney LGA (see Schedule 2 for further detail).

Input-Output modelling describes economic activity through the examination of four types of impacts described in Table 4.1.

Table 4.1: Economic Indicators

Indicator	Description
Output	The gross value of goods and services transacted, including the cost of goods and services used in the development and provision of the final product. Care should be taken when using output as an indicator of economic activity as it counts all goods and services used in one stage of production as an input to later stages of production, thus overstating economic activity.
Gross Product	The value of output after deducting the cost of goods and services inputs in the production process. Gross product (e.g. Gross Regional Product (GRP)) defines a net contribution to economic activity.
Incomes	The wages and salaries paid to employees as a result of the Project either directly or indirectly.
Employment	Employment positions generated by the Project (either full time or part time, directly or indirectly). Employment is reported in terms of Full-time Equivalent (FTE) positions or person-years.

Source: Atlas

Input-Output modelling estimates show the impacts of direct spending in a particular industry as well as from Production-induced impacts (Type I) or Consumption-induced impacts (Type II).

- **Production-induced impacts (Type I)** show the effects of industrial support effects of additional activities undertaken by supply chain industries increasing their production in response to direct spending.
- Consumption-induced impacts (Type II) estimate the re-circulation of labour income earned as a result of the initial spending through other industry impacts (or impacts from increased household consumption).

The estimates of economic impacts consider production and consumption-induced flow-on impacts. Type II impacts are commonly considered to overstate economic activity and therefore the types of flow-on impacts are reported separately.



Drivers of Economic Activity

To understand the economic impacts likely to result from the Proposal compared to the Base Case, it is necessary to distinguish economic impacts during the construction phase and those economic impacts that will be more permanent in nature following construction completion and operations commencement and stabilisation.

- Construction Phase: Construction activity will draw resources from and thereby generate economic activity in the North Sydney LGA as well as from outside the LGA. Assumptions are made on the proportion sourced from within and from outside the LGA. Construction activity is assessed for the Proposal Case only
- Operations Phase: The Site is expected to generate ongoing economic/operational activity through commercial activities undertaken on the site (Proposal and Base Case).

Refer to Schedule 2 for a description of the drivers and assumptions that underpin the assessed economic impacts.

4.2 Economic Activity and Impacts

Economic impacts arising in the Construction phase are estimated separately to the Operational phase. Construction impacts are expected to be short-term in nature and will conclude when development activity is completed.

4.2.1 Construction Phase

During construction the Proposal Case is projected to generate significant economic impacts for North Sydney LGA, including:

- \$110.5 million in output (\$68.1 million directly).
- \$46.5 million contribution to GRP (\$23.3 million direct contribution).
- \$26.9 million in wages and salaries paid to local workers (\$15.7 million directly).
- **289** FTE jobs (167 direct FTE).

Table 4.2 summarises the estimated economic impacts during the construction phase in the Proposal Case.

Table 4.2: Construction Impacts (Proposal Case), North Sydney LGA

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
Direct	\$68.1	\$23.3	\$15.7	167
Flow-on Type I (Production-induced)	\$20.6	\$10.5	\$6.2	59
Flow-on Type II (Consumption-induced)	\$21.8	\$12.8	\$4.9	63
Total	\$110.5	\$46.5	\$26.9	289

Note: Totals may not sum due to rounding.

Source: Atlas

4.2.2 Operational Phase

In the Base Case, the existing commercial building is assumed to be retained and refurbished (as a defensive strategy to preserve value). Given its age and base building layout configuration, refurbishment works would address code compliance and obsolescence issues, however will not necessarily result in the level of use intensity (number of workers per sqm) that a new building would accommodate.

Following the completion of construction, the Proposal Case is estimated to support the following annual economic activity through direct and indirect (flow-on) impacts associated with operations on the Site:

- \$762.5 million in output (including \$443.6 million in direct activity).
- \$400.7 million contribution to GRP (including \$224.4 million in direct activity).
- \$191.9 million in incomes and salaries paid to households (including \$111.5 million in direct income).
- 1,905 FTE jobs (including 1,034 FTE directly related to activity on the Site).

Table 4.3 summarises the estimated economic impacts during the operational phase in both the Base and Proposal Case.



Table 4.3: Operational Impacts in North Sydney LGA, Base Case and Proposal Case

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
Base Case				
Direct	\$111.0	\$56.2	\$35.1	330
Flow-on Type I (Production-induced)	\$37.7	\$19.3	\$11.1	104
Flow-on Type II (Consumption-induced)	\$46.9	\$27.6	\$10.7	135
Total	\$195.7	\$103.1	\$56.9	570
Proposal Case				
Direct	\$443.6	\$224.4	\$111.5	1,034
Flow-on Type I (Production-induced)	\$160.5	\$83.0	\$44.5	414
Flow-on Type II (Consumption-induced)	\$158.4	\$93.3	\$36.0	457
Total	\$762.5	\$400.7	\$191.9	1,905
Net Operational Impacts				
Direct	\$332.6	\$168.2	\$76.4	704
Flow-on Type I (Production-induced)	\$122.8	\$63.7	\$33.4	310
Flow-on Type II (Consumption-induced)	\$111.5	\$65.7	\$25.3	322
Total	\$566.8	\$297.6	\$135.0	1,335

Note: Totals may not sum due to rounding.

Source: Atlas

Compared with the Base Case, the Proposal Case facilitates a significantly intensified use of the Site, accommodating more businesses and employment activity, resulting in greater levels of output and contribution to the North Sydney LGA economy.

The Proposal is estimated to result in a net increase in economic activity through direct and indirect (flow-on) annually at:

- \$566.8 million additional in output (including \$332.6 million in direct activity).
- \$297.6 million additional in contribution to GRP (including \$168.2 million in direct activity).
- \$135.0 million additional in incomes and salaries paid to households (including \$76.4 million directly).
- 1,335 additional FTE jobs (including 704 additional FTE jobs directly related to activity on the Site).

The economic impacts estimated in this section demonstrates the Proposal has economic merit, having the ability to contribute significantly to the North Sydney local economy.

4.3 Economic Justification for Planning Proposal

North Sydney CBD's Employment Aspirations

The District Plan outlines an employment target of between 76,000 and 81,500 by 2036, compared to an estimated 60,400 jobs in 2016. This reflects additional jobs of 15.600 to 21,100 and a required rate growth of between 750 and 1,150 jobs per annum (on average).

At a generic workspace ratio of 22sqm GFA per worker (equivalent to 18sqm to 20sqm lettable area), 20,000 additional workers would require 440,000sqm of additional GFA (net of demolitions).

The North Sydney LSPS identifies the value and significance of the North Sydney CBD to the Eastern Economic Corridor and to North Sydney's ability to provide for employment. It also identifies the challenges that the CBD has faced, including:

- Decline in competitiveness against Macquarie Park which replaced it as the second largest office market (2016).
- Encroachment of residential development on commercial uses.
- High proportion of B and C grade commercial office buildings.
- Low pedestrian amenity due in part to high levels of traffic in the CBD.
- Limited activity outside business hours.



The LSPS acknowledges the challenges of achieving commercial office growth given the limited opportunities to expand laterally. Retention of the B3 Commercial Core zone is an action to ensure there is sufficient employment capacity in the CBD and that residential development is restricted to the periphery.

Challenges to Delivering Growth

One of the key challenges for the North Sydney CBD will be the ability of its high proportion of secondary grade office space (B and C-grade) to renew and redevelop. The District Plan and LSPS identify the importance of capacity to grow employment.

The notion of capacity is two-fold - **theoretical capacity** (planning capacity) and market capacity. **Market capacity** refers to whether capacity in the planning framework is deliverable from a commercial viability perspective - firstly whether there is market demand, and secondly whether the planning controls enable viable development. In order for existing office buildings to be redeveloped, that redevelopment must be a commercially viable proposition.

Taking the Site as an example, there is planning capacity in the current controls for 3,358sqm (13,260sqm in a compliant commercial development less 9,902sqm of existing GFA). However, development of a compliant commercial building of 13,260sqm (which includes demolition of the existing building) is shown to be not a commercially viable proposition. This is a clear example there is **theoretical capacity** (planning capacity) but not **market capacity** for growth.

The Site being located on the edge of the B3 Commercial Core has the potential to help spur greater employment activity in the B4 zone, maximising the land use opportunities provided by the new metro station. Employment growth in the B4 zone has generally been softer than in the commercial core given the permissibility of non-employment uses such as residential.

The ability of North Sydney CBD to 'turn the tide' will importantly depend on the capacity of its secondary grade stock to renew, improving its commercial office offer and transforming parts of the centre that are aged and in need or reinvestment.

Need for the Proposal

Structural changes in office market trends have been accelerated by the COVID-19 pandemic, shifting business and employee expectations and entrenching a 'permanent flight to quality' mindset.

In any economic downturn (including the present), occupancy rates for secondary grade buildings are not only challenged by falling tenant demand but also by a 'flight to quality' by existing tenants upgrading to prime grade buildings.

In a post-COVID world, office assets will be required to 'work harder' in order to be competitive. Secondary grade assets like the Site (which is nearly 50 years old) will be particularly vulnerable to tenant selectiveness and amenity expectations.

The analysis demonstrates that if the Site were to be redeveloped, amendments to the planning controls are required. In a Do-Nothing scenario, the Site is likely to remain 'as is' - the building is likely to progressively reduce in competitiveness and market desirability. With investment return in decline, the motivation to reinvest in the building will also decline.

Development options (commercial-only and mixed use residential) that are compliant with existing planning controls are not feasible for the Site. This is because their respective site values are lower than the Site's value in existing use as an investment property, giving no incentive to displace the current use.

The Proposal results in a site value that is greater than its existing use, thereby making it a commercially viable proposition.

Contribution to Employment Diversity

The District Plan employment targets (15,600 to 21,100 additional jobs) require circa 340,000sqm to 460,000sqm GFA⁵ of additional floorspace (net of demolished floorspace).

Since 2016, the North Sydney CBD has had office net floorspace additions of 130,000sqm (approx. 5,900 workers⁶). There is approximately 160,000sqm in the supply pipeline. Assuming 100% delivery of the supply pipeline and deducting 20% of pipeline supply for existing floorspace to be demolished, the pipeline supply could potentially accommodate 5,800 workers⁶. This would bring the North Sydney CBD about halfway to meeting its 2036 employment targets.

 $^{^5}$ Based on a generic workspace ratio of 22sqm GFA per worker (equivalent to 18sqm to 20sqm lettable area)



Atlas

The Proposal envisages smaller floorplates compared to other new A-grade buildings (recently completed or in the pipeline). Majority of the new prime grade commercial buildings comprise floorplates in excess of 1,900sqm and up to 4,000sqm. With typical floorplates of 800sqm to 900sqm, the Proposal adds a diversity of stock to the North Sydney CBD office market. This caters to smaller occupiers who may want A-grade space in a boutique offer building.

The Proposal offers a boutique commercial building with smaller floorplates that could accommodate just over 1,000 workers. It would enable the Site's existing B-grade building to redevelop, contributing to Council's objective of renewing the large proportion of B and C-grade office space in the North Sydney CBD. Under the current planning framework, the Site is not able to viably redevelop.

The economic modelling in sections 4.1 and 4.2 demonstrates the Proposal can make a significant contribution to the North Sydney economy by addressing clear and growing demand for modern and contemporary office floorspace.

Compared with the Base Case, the Proposal is estimated to result in a net increase in economic activity during construction through direct and indirect (flow-on) at:

- \$110.5 million in output (\$68.1 million directly).
- \$46.5 million contribution to GRP (\$23.3 million direct contribution).
- \$26.9 million in wages and salaries paid to local workers (\$15.7 million directly).
- 289 FTE jobs (167 direct FTE).

Longer term when operational, the Proposal is estimated to result in an annual net increase in economic activity with:

- \$566.8 million additional in output (including \$332.6 million in direct activity).
- \$297.6 million additional in contribution to GRP (including \$168.2 million in direct activity).
- \$135.0 million additional in incomes and salaries paid to households (including \$76.4 million directly).
- 1,335 additional FTE jobs (including 704 additional FTE jobs directly related to activity on the Site).

The Study demonstrates a clear need for the Proposal to assist with the strategic planning objectives of growing North Sydney CBD and making it more competitive. North Sydney CBD has a disproportionately high volume of secondary grade office stock (60%) compared to other markets, with B-grade commercial stock notably high (43%).

The Proposal will result in the redevelopment of a B-grade commercial asset and contribute to accommodating employment opportunities in the B4 Mixed Use, which has historically comprised much less intense employment activity.



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Schedules

SCHEDULE 1

Employment by Industry (2011-2016), Catchment Area

Broad Industry Classifications

The ABS categorises employment activity into 19 industry sectors referred to as ANZSICs (Australian New Zealand Standard Industry Classification). It is often more useful to consider employment composition in broader industry terms.

Broad industry classifications (BICs) group the 19 ANZSIC sectors into four main categories - population-serving, knowledge-intensive, health and education and industrial.

Table 4.4: Broad Industry Classifications (BICs) by 19-Digit ANZSICs

Population Serving		Knowledge-Intensive Health	and Education	Industrial	
•	Construction Retail Trade		Education & Fraining	MiningManufacturing	
•	Accommodation & Food Services	Rental, Hiring & Real Estate Services	Health Care & Social Assistance	Electricity, Gas, Water & Waste Services	
•	Arts & Recreation Services	Administrative & Support Services		Wholesale TradeTransport, Postal &	
•	Other Services	Public Administration & Safety		Warehousing	

Source: ABS/Atlas

The following tables outlines the employment profile of the B3 Catchment Area and B4 Catchment Area respectively.

Table S1.1: B3 Catchment Employment by Industry

Industry	2011		2016		Change (2011-16)				
	No.	%	No.	%	No.	%			
Australian and New Zealand Standard Industrial Classin	Australian and New Zealand Standard Industrial Classification (ANZSIC)								
Agriculture, Forestry and Fishing	20	0.1%	50	0.2%	30	150.0%			
Mining	150	0.6%	162	0.5%	12	8.0%			
Manufacturing	401	1.6%	261	0.9%	-140	-34.9%			
Electricity, Gas, Water and Waste Services	311	1.3%	648	2.2%	337	108.4%			
Construction	1236	5.0%	1831	6.1%	595	48.1%			
Wholesale Trade	962	3.9%	804	2.7%	-158	-16.4%			
Retail Trade	539	2.2%	734	2.5%	195	36.2%			
Accommodation and Food Services	574	2.3%	702	2.4%	128	22.3%			
Transport, Postal and Warehousing	682	2.8%	1038	3.5%	356	52.2%			
Information Media and Telecommunications	1195	4.9%	2768	9.3%	1,573	131.6%			
Financial and Insurance Services	5204	21.2%	5,759	19.3%	555	10.7%			
Rental, Hiring and Real Estate Services	424	1.7%	425	1.4%	1	0.2%			
Professional, Scientific and Technical Services	7449	30.3%	8,702	29.1%	1,253	16.8%			
Administrative and Support Services	1661	6.8%	1541	5.2%	-120	-7.2%			
Public Administration and Safety	1125	4.6%	961	3.2%	-164	-14.6%			
Education and Training	607	2.5%	396	1.3%	-211	-34.8%			
Health Care and Social Assistance	892	3.6%	808	2.7%	-84	-9.4%			
Arts and Recreation Services	74	0.3%	242	0.8%	168	227.0%			
Other Services	688	2.8%	743	2.5%	55	8.0%			
Inadequately Described/Not Stated	362	1.5%	1,286	4.3%	924	255.2%			
Total	24,556	100.0%	29,861	100.0%	5,305	21.6%			



Industry	2011		2016		Change (2011-16)	
	No.	%	No.	%	No.	%
Broad Industry Classification (BIC)						
Population Serving	3,111	12.7%	4,252	14.2%	1,141	36.7%
Knowledge-Intensive	17,058	69.5%	20,156	67.5%	3,098	18.2%
Health and Education	1,499	6.1%	1,204	4.0%	-295	-19.7%
Industrial	2,526	10.3%	2,963	9.9%	437	17.3%
Inadequately Described/Not Stated	362	1.5%	1,286	4.3%	924	255.2%
Total	24,556	100.0%	29,861	100.0%	5,305	21.6%

Source: ABS (2012, 2017)

Table S1.2: B4 Catchment Employment by Industry

Industry	2011		2016		Change (2011-16)	
	No.	%	No.	%	No.	%
Australian and New Zealand Standard Industrial Classificat	ion (ANZSIC)					
Agriculture, Forestry and Fishing	9	0.1%	34	0.3%	25	277.8%
Mining	46	0.4%	46	0.4%	-	0.0%
Manufacturing	748	6.4%	796	6.2%	48	6.4%
Electricity, Gas, Water and Waste Services	16	0.1%	9	0.1%	- 7	-43.8%
Construction	346	2.9%	606	4.7%	260	75.1%
Wholesale Trade	445	3.8%	435	3.4%	- 10	-2.2%
Retail Trade	451	3.8%	363	2.8%	-88	-19.5%
Accommodation and Food Services	258	2.2%	305	2.4%	47	18.2%
Transport, Postal and Warehousing	114	1.0%	148	1.1%	34	29.8%
Information Media and Telecommunications	1562	13.3%	791	6.1%	- 771	-49.4%
Financial and Insurance Services	836	7.1%	801	6.2%	-35	-4.2%
Rental, Hiring and Real Estate Services	205	1.7%	247	1.9%	42	20.5%
Professional, Scientific and Technical Services	4041	34.3%	4,379	33.9%	338	8.4%
Administrative and Support Services	589	5.0%	755	5.9%	166	28.2%
Public Administration and Safety	502	4.3%	602	4.7%	100	19.9%
Education and Training	909	7.7%	1298	10.1%	389	42.8%
Health Care and Social Assistance	280	2.4%	459	3.6%	179	63.9%
Arts and Recreation Services	72	0.6%	64	0.5%	- 8	-11.1%
Other Services	194	1.6%	230	1.8%	36	18.6%
Inadequately Described/Not Stated	152	1.3%	535	4.1%	383	252.0%
Total	11,775	100.0%	12,903	100.0%	1,128	9.6%
Broad Industry Classification (BIC)						
Population Serving	1,321	11.2%	1,568	12.2%	247	18.7%
Knowledge-Intensive	7,735	65.7%	7,575	58.7%	- 160	-2.1%
Health and Education	1,189	10.1%	1,757	13.6%	568	47.8%
Industrial	1,378	11.7%	1,468	11.4%	90	6.5%
Inadequately Described/Not Stated	152	1.3%	535	4.1%	383	252.0%
Total	11,775	100.0%	12,903	100.0%	1,128	9.6%

Source: ABS (2012, 2017)





SCHEDULE 2

Input-Output Modelling Methodology

Input-Output models are a method to describe and analyse forward and backward economic linkages between industries based on a matrix of monetary transactions. The model estimates how products sold (outputs) from one industry are purchased (inputs) in the production process by other industries.

The analysis of these industry linkages enables estimation of the overall economic impact within a catchment area due to a change in demand levels within a specific sector or sectors.

Impacts are traced through the economy via:

Direct impacts, which are the first round of effects from direct operational expenditure on goods and services.

Flow-on impacts, which comprise the second and subsequent round effects of increased purchases by suppliers in response to increased sales. Flow-on impacts can be disaggregated to:

- Industry Support Effects (Type I) derived from open Input-Output models. Type I impacts represent the production induced support activity as a result of additional expenditure by the industry experiencing the stimulus on goods and services, and subsequent round effects of increased purchases by suppliers in response to increased sales.
- Household Consumption Effects (Type II) derived from closed Input-Output Models. Type II impacts represent the
 consumption induced activity from additional household expenditure on goods and services resulting from
 additional wages and salaries being paid within the catchment economy.

Economic analysis considers the following four types of impacts.

Table S2-1: Economic Activity Indicators

Indicator	Description
Output	The gross value of goods and services transacted, including the cost of goods and services used in the development and provision of the final product. Care should be taken when using output as an indicator of economic activity as it counts all goods and services used in one stage of production as an input to later stages of production, thus overstating economic activity.
Gross Product	The value of output after deducting the cost of goods and services inputs in the production process. Gross product (e.g. Gross Regional Product (GRP)) defines a net contribution to economic activity.
Incomes	The wages and salaries paid to employees as a result of the Project either directly or indirectly.
Employment	Employment positions generated by the Project (either full time or part time, directly or indirectly). Employment is reported in terms of Full-time Equivalent (FTE) positions or person-years.

Source: Atlas

REGIONAL MODEL DEVELOPMENT

Multipliers used in this assessment have been created using a regionalised Input-Output model derived from the 2017-18 Australian transaction table (ABS, 2020).

Estimates of gross industry production in the catchment area were developed based on the share of employment (by place of work) of the Catchment Area within the Australian economy (ABS, 2017a) using the Flegg Location Quotient and Cross Hauling Adjusted Regionalisation Method (CHARM). See Norbert (2015) and Kronenberg (2009) for further details.



MODELLING LIMITATIONS AND ASSUMPTIONS

Input-Output modelling is subject to a number of key assumptions and limitations (ABS, 2020):

- Lack of supply-side constraints: The most significant limitation of economic impact analysis using multipliers is the implicit assumption that the economy has no supply-side constraints. That is, it is assumed that extra output can be produced in one area without taking resources away from other activities, thus overstating economic impacts. The actual impact is likely to be dependent on the extent to which the economy is operating at or near capacity.
- **Fixed prices:** Constraints on the availability of inputs, such as skilled labour, require prices to act as a rationing device. In assessments using multipliers, where factors of production are assumed to be limitless, this rationing response is assumed not to occur. Prices are assumed to be unaffected by policy and any crowding out effects are not captured.
- **Fixed ratios for intermediate inputs and production:** Economic impact analysis using multipliers implicitly assumes that there is a fixed input structure in each industry and fixed ratios for production. As such, impact analysis using multipliers can be seen to describe average effects, not marginal effects. For example, increased demand for a product is assumed to imply an equal increase in production for that product. In reality, however, it may be more efficient to increase imports or divert some exports to local consumption rather than increasing local production by the full amount;
- No allowance for purchasers' marginal responses to change: Economic impact analysis using multipliers assumes that households consume goods and services in exact proportions to their initial budget shares. For example, the household budget share of some goods might increase as household income increases. This equally applies to industrial consumption of intermediate inputs and factors of production.
- Absence of budget constraints: Assessments of economic impacts using multipliers that consider consumption induced
 effects (type two multipliers) implicitly assume that household and government consumption is not subject to budget
 constraints.

Despite these notable limitations, Input-Output techniques provide a solid approach for assessing the direct and flow on economic impacts of a project or policy that does not result in a significant change in the overall economic structure.

DRIVERS OF ECONOMIC IMPACT

In order to understand the economic impacts likely to result from the Proposal, it is necessary to distinguish economic impacts during the construction phase and those economic impacts that will be more permanent in nature following construction completion and operations commencement.

- Construction Phase: Construction activity will draw resources from and thereby generate economic activity in the North Sydney LGA as well as from outside the LGA. Assumptions are made on the proportion sourced from within and from outside the LGA.
- Operational Phase: On completion of development, the Site is expected to generate ongoing economic/ operational activity through the direct turnover generated by the food and beverage and commercial office operational activities, as well as the dispersed jobs of residents working from home.

Construction Phase

For modelling purposes, construction costs (including contingency) for the Base and Proposal Cases were broken down into their respective Australia and New Zealand Standard Industrial Classification (ANZSIC) industries.

The breakdowns were developed based on the following assumptions by Atlas regarding the most appropriate ANZSIC industries for each activity.

Table S2-2: Construction Cost Allocation (including Contingency)

Work Type	Proposal Case (\$M)	ANZSIC
Proposal Case		
Main Commercial Building	\$49.8	Non-Residential Building Construction
Parking	\$1.6	Non-Residential Building Construction



Work Type	Proposal Case (\$M)	ANZSIC
Site Works and Services Infrastructure	\$1.0	Construction Services (50%), Heavy and Civil Engineering Construction (50%)
Professional Fees	\$57.6	Professional, Scientific and Technical Services
Total	\$110.0	-

Source: Atlas

Of the above capital outlay, not all activity will be undertaken within the North Sydney LGA economy. It was assumed:

- Approximately 75% of the direct expenditure on construction-related (i.e. Non-Residential Building Construction and Construction Services) activity would be sourced from local businesses and labour. Of this:
 - Approximately 25% of purchases on goods and services (supply chain related activity) made by construction-related businesses sourced from outside the North Sydney LGA would be spent within the local economy (i.e., 25% of the Type I flow on activity associated with non-local construction companies is assumed to represent additional local activity in North Sydney LGA).
 - Approximately 5% of wages and salaries paid to construction-related workers sourced from outside the region would be spent on local goods and services, such as food and beverages (i.e. 5% of the Type II).

Only flow-on activity of locally sourced professional, scientific and technical services activity (75%) is included, as it is not anticipated professional, scientific and technical services businesses located outside of North Sydney LGA would purchase goods/ services locally.

Operational Phase

In order to model the economic impacts, operational employment levels for the economic activity occurring in the two scenarios were categorised into the ANZSIC industries based on the area's existing employment profile (ABS 2017a).

Employment by industry estimates were converted to a direct output value using a multiplier based on the national transaction table (ABS, 2020). The resultant estimates of output were modelled as the direct activity associated with the Base Case, Proposal Case and Existing Use.

Table S2-3: Operational FTE Allocation of Floorspace

9,902	30	000		
9,902	30	000		
		330	\$111.0	Split as per the current Destination Zone employment profile DZ 114173340 (ABS 2017a)
9,902	30	330	\$111.0	
22,750	22	1,034	\$443.6	Split as per the current employment profile combining:
				DZ 114173339
				DZ 114173337
				DZ 114173336
				DZ 114173334
22,750	22	1,034	\$443.6	-
	22,750	22,750 22	22,750 22 1,034	22,750 22 1,034 \$443.6

Source: Atlas



Appendices

APPENDIX 1

Appendix heading



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