



Crows Nest State-led Rezoning Economic Impact Assessment

NSW Department of
Planning, Housing and
Infrastructure

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Document Control

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Executive Summary

BACKGROUND

The NSW Government has announced a series of state-led priority rezonings located near Sydney metro stations and other key transport hubs to partly address the ongoing housing crisis. These rezonings will involve reviewing existing planning controls around identified transport hubs to ensure development is feasible and can deliver additional housing supply.

The NSW Government has established a program of proposed state-led rezonings precincts across Sydney, including the Crows Nest Precinct (**the Precinct**).

Precinct planning in the Crows Nest Precinct has been underway for several years and led by the NSW Department of Planning, Housing and Infrastructure (DPHI) in partnership with North Sydney Council, Lane Cove Council and Willoughby Council. This culminated in the *Crows Nest 2036 Plan (2036 Plan)* which was finalised in Q3 2020, though planning controls proposed in the 2036 Plan have yet to be fully implemented.

Figure ES-1: The Crows Nest Precinct



Source: Atlas Economics/MetroMap

DPHI has engaged a consultant team to carry out a review of the 2036 Plan to provide recommendations for how the planning controls proposed in the 2036 Plan could be amended to achieve the strategic intent of the Transit-oriented Development (TOD) program. New planning controls and a rezoning package are intended to be delivered by Q4 2024.

Atlas Economics (**Atlas**) is engaged by DPHI to prepare an Economic Impact Assessment to support the rezoning package.

Scope and Approach

The following tasks have been undertaken to complete the Economic Impact Assessment.

- Review of the strategic context of the Crows Nest, including the vision and objectives for the precinct as outlined in State and local government planning policy.
- Market appraisal to understand the patterns of supply and demand for commercial, retail and residential uses and the baseline market context of the broader area.
- Review of the revised Crows Nest Precinct Plan to observe how the proposed land uses respond to market demand.
- Estimate of the economic impacts of the revised Precinct Plan on the local economy and surrounding region.

REVISED CROWS NEST PRECINCT PLAN

DPHI has engaged a consultant team to carry out a review of the 2036 Plan, with this review led by urban design firm SJB. The findings of this review are detailed in the *Crows Nest Precinct: Urban Design Review (the Urban Design Review)*.

The Urban Design Review has investigated and tested alternate built form controls in parts of the Precinct considered appropriate for investigation based on detailed a detailed constraints and opportunities analysis. This incorporated technical urban design, planning, economic and social infrastructure input from the broader consultant team.

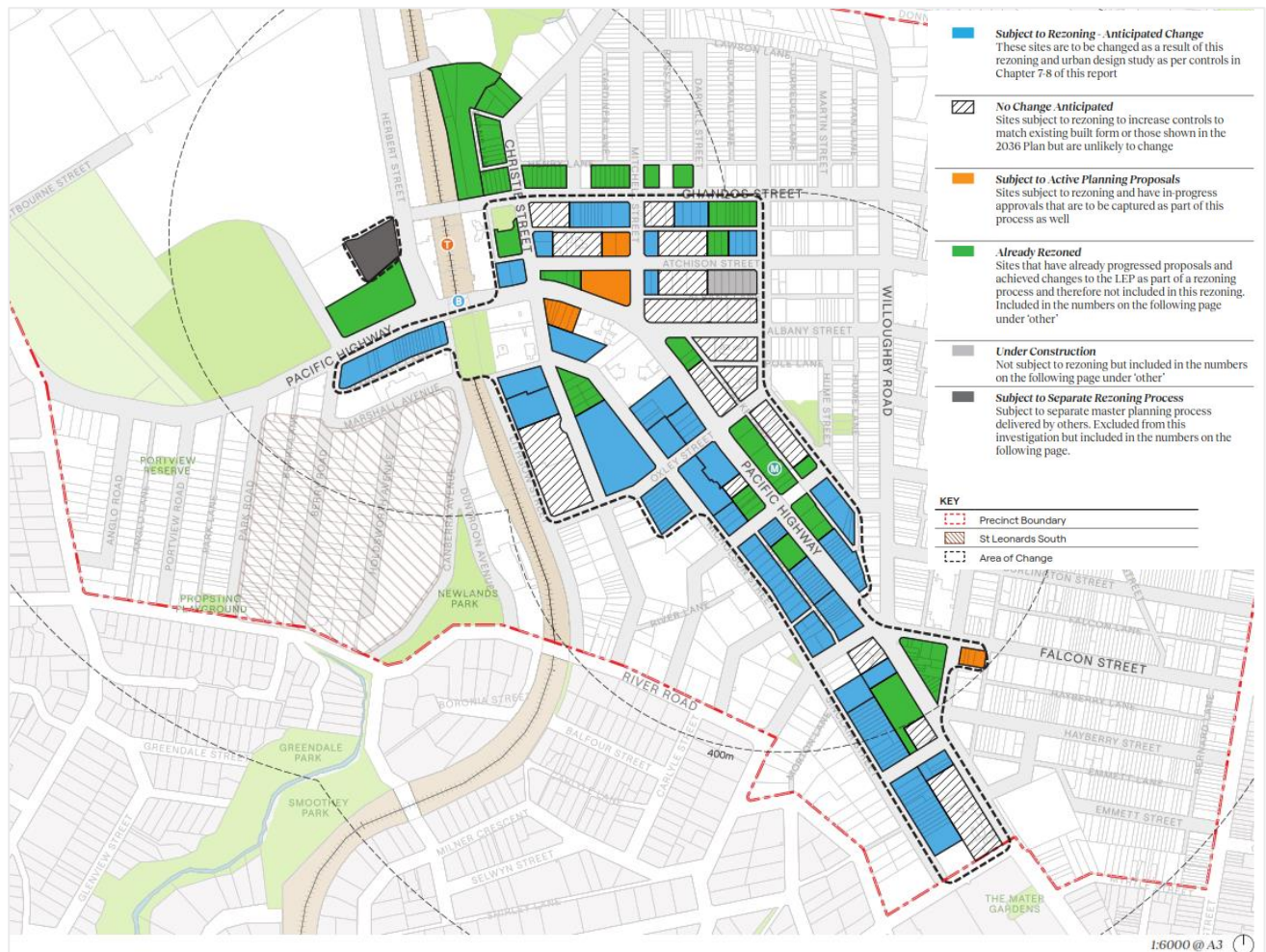
Based on extensive precinct analysis, built form testing and input from other technical disciplines, the Urban Design Review has developed a Revised Crows Nest Precinct Plan (**the Revised Precinct Plan**). The Revised Precinct Plan retains much of the principles and structure of the 2036 Plan, whilst identifying opportunities for additional housing in line with the objectives of the TOD program. It has also reduced capacity for commercial floorspace across the Precinct, reflecting the structural changes in demand for office floorspace following the COVID-19 pandemic).

Overall, the Revised Precinct Plan will enable the TOD Rezoning to deliver:

- 3,255 dwellings (representing an increase of 1,762 dwellings above the total capacity provided for in the 2036 Plan).
- ~89,700sqm non-residential GFA (representing a nominal decrease in capacity of ~28,900sqm of non-residential GFA compared to the 2036 Plan). This decrease in capacity is in response to structural reduction in demand for office floorspace, whilst also enabling the delivery of Affordable Housing.

Blocks shaded blue in **Figure ES-2** are those identified for changes to planning controls in the Revised Precinct Plan. Blocks shaded green have already been rezoned, blocks shaded orange are subject to active planning proposals and blocks shaded light grey are currently under construction.

Figure ES-2: Revised Crows Nest Precinct Plan, Yield Schedule



Source: SJB (2024)

DEMAND FOR PROPOSED LAND USES

The Precinct accommodates a broad range of existing land uses. Anchored by the Royal North Shore Hospital and a sizeable commercial office market, it is a key employment hub in Sydney's Lower North Shore. It has also become a focal point of high-density residential and mixed use development in recent years, notably along the Pacific Highway and within the St Leonards South rezoning area.

Based on market research and analysis, the following observations are made on the likely market need for the land uses proposed in Revised Precinct Plan.

Table ES-1: Viability of Proposed Land Uses, Crows Nest Precinct

Land Use	Observations	Comment
Residential	<ul style="list-style-type: none"> All levels of Government have identified that Australia is currently experiencing a 'housing crisis', with historically high dwelling prices and record low vacancy levels having significant social and economic impacts. The National Cabinet agreed to a National Housing Accord to collectively deliver 1.2 million dwellings across Australia over 2024-2029. NSW would need to deliver 375,000 dwellings over this period. Greater Sydney is at the forefront of Australia's housing crisis and is widely noted as recording the second most unaffordable housing market of the developed world. The most recent DPHI population projections for the North Sydney, Lane Cove and Willoughby LGAs indicate the over the coming decades to 2041, an additional ~16,400 dwellings will be required to satisfy population growth. The TOD Rezoning (which provides capacity for ~3,255 dwellings) could play an important role in meeting future housing demand in the context of highly constrained market. 	Residential capacity proposed in the Revised Precinct Plan (~3,255 dwellings) will respond to a clear market need for housing across the North Sydney, Lane Cove and Willoughby LGAs.
Office	<ul style="list-style-type: none"> The COVID-19 pandemic brought about and amplified a broad mix of structural changes to local office markets, including working from home (WFH), changing corporate structures and a shift towards higher quality office accommodation. These structural changes have driven a decline in office occupancy rates, and consequently less aggregate demand for purpose-built office space. This is directly observed in Crows Nest/St Leonards, where office vacancy levels remain elevated (particularly for older, secondary quality office stock). Whilst historically playing a relatively minor role in the Greater Sydney office market from a supply perspective, Crows Nest/St Leonards has been important in providing accommodation options for price conscious occupiers and supporting the growth of the St Leonards Health and Education Precinct. The TOD Rezoning provides capacity for ~89,400sqm non-residential GFA, a nominal reduction in capacity as compared to the 2036 Plan. Importantly, the Revised Precinct Plan will enable the Precinct to continue strengthening its role as a health and education hub. 	The non-residential floorspace capacity provided in the TOD Rezoning (~89,400sqm) appropriately reflects the future needs of the Precinct whilst being cognisant of the downward shift in demand for office floorspace.

Source: Atlas Economics

ECONOMIC IMPACTS OF THE TOD REZONING

The economic impacts resulting from the TOD Rezoning have been estimated using an Input-Output model and assessed at the North Sydney, Lane Cove and Willoughby LGA level. Economic activity is estimated in the following scenarios:

- Base Case**

The TOD Rezoning Sites have capacity under the planning controls in the *2036 Plan*; there is remaining development capacity for 118,606sqm of non-residential floorspace and 1,493 dwellings. Only a portion of this capacity is projected to be taken up over the next 20-years (~20,000sqm of non-residential floorspace and 1,076 dwellings).

- Proposal Case**

The TOD Rezoning Sites are rezoned (per Revised Precinct Plan), providing capacity for ~89,700sqm of non-residential floorspace and 3,255 dwellings. This represents a nominal decrease in non-residential capacity of ~28,900sqm GFA compared to the Base Case, though a significant increase in residential capacity (1,762 additional dwellings).

Some of this capacity is projected to be taken up over the next 20-years, with changes to planning controls facilitating an uptick in take-up (~31,000sqm of non-residential floorspace and 1,587 dwellings).

Construction Phase

During construction the Proposal Case is projected to generate significant economic impacts, including:

- **\$1.98 billion** in output (including \$1.37 billion in direct activity).
- **\$635.0 million** contribution to GRP (including \$326.8 million in direct activity).
- **\$399.4 million** in incomes and salaries paid to households (including \$224.6 million in direct income).
- **4,116 FTE jobs** (including 2,398 FTE directly employed over the course of construction activity).

Operational Phase

Compared to the Base Case, the Proposal Case is estimated to result in an annual **net increase in economic activity** with:

- **\$386.9 million** additional in output (including \$237.7 million in direct activity).
- **\$200.0 million** additional in contribution to GRP (including \$1.2 billion in direct activity).
- **\$114.1 million** additional incomes and salaries paid to households (including \$70.5 million directly).
- **1,050 additional FTE jobs** (including 596 additional FTE jobs directly related to activity on the TOD Rezoning Sites)

OTHER ECONOMIC IMPACTS

Beyond the economic impacts generated by the Proposal during the Construction Phase and upon becoming operational, other more indirect economic and social impacts are expected from delivery of the Revised Precinct Plan.

- **Capitalise on Significant Transport Infrastructure Investment**

The soon to be delivered, \$370 million Crows Nest Metro Station forms part of the Sydney Metro City and Southwest metro line. The total cost of this project is estimated to be in the order of \$20.5 billion. Development will capitalise on this significant level of public infrastructure investment, driving throughfare within the new station.

- **Partially Address Local Housing Demand**

The North Sydney, Lane Cove and Willoughby LGAs are projected to require an additional ~16,400 dwellings over the 2022-2041 period – equating to ~868 dwellings per annum. The TOD Rezoning provides theoretical capacity for 3,255 dwellings. This represents approximately 20% of these LGAs total dwelling need to 2041.

- **Support Housing Affordability**

Affordable housing contributions are anticipated to sought in conjunction with the Revised Precinct Plan. Delivery of Affordable Housing within the Precinct will support the creation of a diverse local community and provide accommodation for a mix of households, including key workers.

- **Increase in Rates and Taxation Revenues**

Along with greatly increased economic activity, development of the TOD Rezoning Sites will support significant taxation revenues to all levels of government including Council rates, local and State development contributions, payroll tax, stamp duty, land tax, and income tax.

The economic impacts estimated in this Study demonstrates the TOD Rezoning has economic merit, having the ability to contribute significantly to the local economy.

The TOD Rezoning is also considered to have strategic planning and market merit, catalysing upon significant public transport investment and delivery additional housing during a period of chronic undersupply.

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1. Introduction

1.1 Background

In accordance with the National Housing Accord, the NSW Government has committed to facilitating the delivery of 377,000 new homes by 2029 (which is equivalent to approximately 75,000 new homes annually for five years). Based on current supply forecasts, there is an expected shortfall of ~170,000 homes to meet the National Housing Accord target.

In response, the NSW Government has announced a series of state-led priority rezonings located near Sydney Metro stations and other key transport hubs, including the Crows Nest Precinct (**the Precinct**). This will involve amending planning controls around identified transport hubs to enable additional housing supply.

Precinct planning in the Crows Nest Precinct has been underway for several years and led by the NSW Department of Planning, Housing and Infrastructure (DPHI) in partnership with North Sydney Council, Lane Cove Council and Willoughby Council.

This culminated in the *Crows Nest 2036 Plan (2036 Plan)* which was finalised in Q3 2020. Planning controls recommended in the *2036 Plan* were not implemented into the planning framework, though multiple proponent-led planning proposals are in progress across the Precinct which broadly align with the controls outlined in the *2036 Plan*.

DPHI has engaged a consultant team to carry out a review of the 2036 Plan to provide recommendations for how the planning controls proposed in the 2036 Plan could be implemented to achieve the strategic intent of the Transport-oriented Development (TOD) program. New planning controls and a rezoning package are intended to be delivered by Q4 2024, referred to as the **TOD Rezoning**.

Atlas Economics (**Atlas**) is engaged by DPHI to prepare an Economic Impact Assessment to support the TOD Rezoning.

1.2 Crows Nest Precinct

The Precinct is located approximately 5km north-west of the Sydney CBD and stretches across the suburbs of Crows Nest, St Leonards, and Artarmon, along with parts of Greenwich, Naremburn and Wollstonecraft. Traversing the local government areas (LGAs) of North Sydney, Lane Cove and Willoughby, it is generally bounded by the Gore Hill Freeway in the north, the Pacific Highway and River Road in the west, River Road and Gillies Street in the south and West Street in the east.

Currently serviced by the St Leonards train station, the Crows Nest Metro Station (part of the Sydney Metro City and South West line) is due for completion in 2024.

The Precinct accommodates a broad range of existing land uses. Anchored by the Royal North Shore Hospital and a large commercial office market, it is a key employment hub in Sydney's Lower North Shore. It has also become a focal point of high-density residential and mixed use development in recent years, notably along the Pacific Highway and within the St Leonards South rezoning area.

Given the diversity of land uses across the Study Area, a broad mix of built form is observed:

- The Royal North Shore Hospital and TAFE NSW are centrally located within the Precinct.
- Office buildings (mix of low and medium rise), high rise residential flat buildings and single storey shop fronts traverse the Precinct along the Pacific Highway, Willoughby Road, Chandos Street and Atchison Street.
- Industrial warehouses, low rise commercial buildings, private hospitals and retail showrooms are observed north of the Royal North Shore Hospital within Artarmon.
- Low-density housing along the edges of the Precinct across Wollstonecraft, Crows Nest, Greenwich and Naremburn.

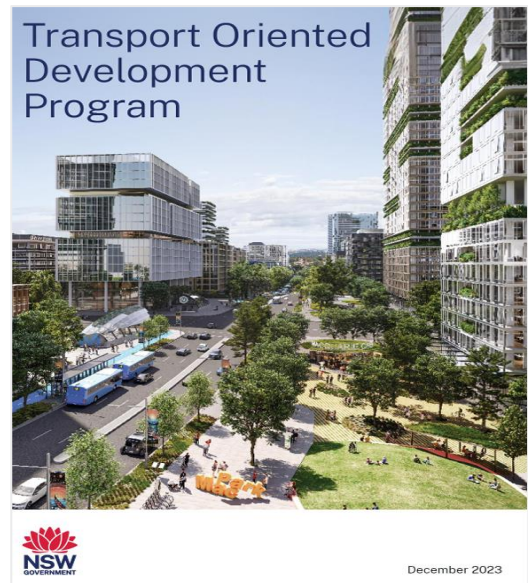


Figure 1-1 illustrates the formal boundaries of the Crows Nest Precinct with the orange shaded area denoting the part of the Precinct which was subject to a proposed change to planning controls in the 2036 Plan.

Figure 1-1: The Crows Nest Precinct



Source: Atlas Economics/MetroMap

1.3 Scope and Approach

Atlas is engaged by DPHI to support the review of the 2036 Plan and implementation of new planning controls. The Economic Impact Assessment (the **Study**) considers how revised planning controls respond to demand for various land uses and estimates the economic impacts that could result if the TOD Rezoning is implemented.

Approach to Economic Impact Assessment

The following tasks have been undertaken to complete the Economic Impact Assessment.

- Review of the strategic context of the Crows Nest, including the vision and objectives for the precinct as outlined in State and local government planning policy.
- Market appraisal to understand the patterns of supply and demand for commercial, retail and residential uses and the baseline market context of the broader area.
- Review of the revised Crows Nest Precinct Plan to observe how the proposed land uses respond to market demand.
- Estimate of the economic impacts of the TOD Rezoning on the local economy and surrounding region.

1.4 Assumptions and Limitations

Atlas acknowledges a number of limitations associated with the Study.

- The macro-economic outlook is currently subject to significant uncertainty due to, *inter alia*, global and domestic inflation, labour shortages and various military conflicts.
- The 2021 Census was administered during the COVID-19 pandemic and at a time of widespread lockdowns across Australia's east coast. Activity recorded at this time may not be accurately representative of employment levels.
- Data from third party sources is assumed to be correct and is not verified.
- Desktop market research has been undertaken without physical site surveys and inspections.
- Specific assumptions related to economic impact modelling are detailed in Chapter 4.
- Some economic impacts are not typically modelled within an Input-Output modelling framework, with alternative economic measures better placed to assess their impacts (e.g. Cost Benefit Analysis, Computable General Equilibrium).

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

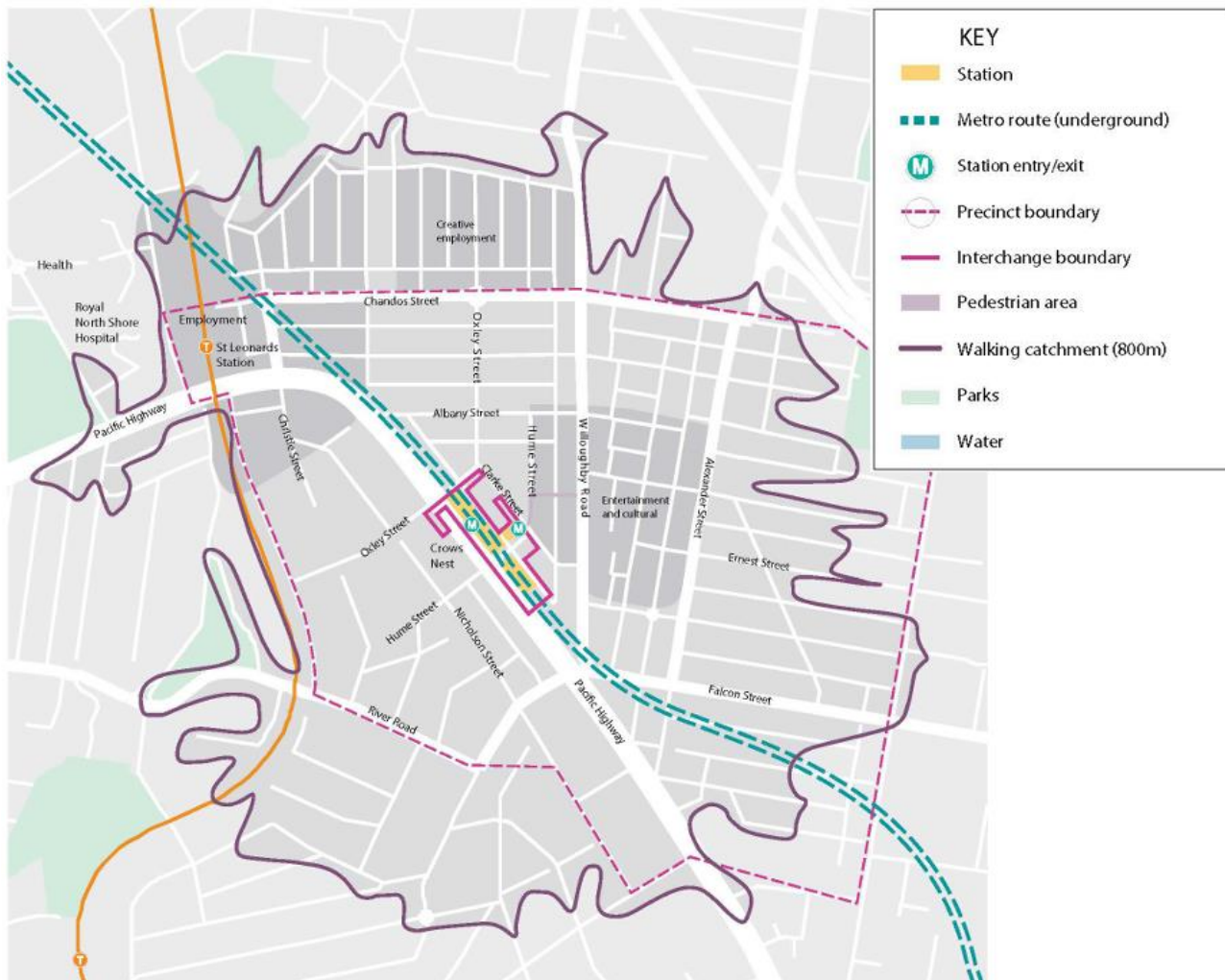
2. Strategic Context

2.1 Crows Nest Metro Station

The Crows Nest Metro Station was approved in 2017 by the Minister for Planning as part of the State Significant Infrastructure Application (SSIA) for the Sydney Metro City and Southwest metro line. Upon completion in late 2024, the line will provide high frequency access to Chatswood, North Sydney and the Sydney CBD in under 10-minutes.

The station is located off the Pacific Highway with entry points from Pacific Highway and Clarke Street. Much of the Crows Nest Precinct will fall within an 800m walking catchment of the station as shown in **Figure 2-1**.

Figure 2-1: Walking Catchment, Crows Nest Metro Station



Source: Sydney Metro (2020)

A Concept Development Application (SSD 9579) for an over station development (OSD) above the Crows Nest Metro station was approved in 2020. The approved Concept DA includes a maximum GFA of 56,400sqm for the OSD comprised:

- Site A - 40,300sqm (commercial) to be developed by a private developer.
- Site B - 13,000sqm (residential) to be developed by a private developer.
- Site C - 3,100sqm (commercial) to be developed by Sydney Metro.

In Q3 2023, an amended application for Site A and B was submitted to DPHI to facilitate a reduction in commercial floorspace given a structural softening in demand for office floorspace.

The new application also sought to deliver approximately 15% of all new dwellings as Affordable Housing dwellings. The amended application remains under assessment.

2.2 Strategic Planning

2.2.1 Greater Sydney Region Plan (2018)

The Greater Sydney Region Plan (the Region Plan) is the principal strategic planning framework for the Greater Sydney region.

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 Parklands City, Central River City, Eastern Harbour City, Northern District and the Southern District.

The Precinct falls within the boundaries of the Eastern Harbour City, and specifically an area defined as the 'Eastern Economic Corridor'.

The Eastern Economic Corridor

The Eastern Economic Corridor includes the areas of Macquarie Park, Chatswood, St Leonards, the Harbour CBD (which encompasses the Sydney CBD and the city fringe areas) including North Sydney and Green Square.

The Eastern Economic Corridor is recognised as economically significant to the Greater Sydney and NSW economy given the high concentration of jobs with good road and public transport connectivity. It also incorporates four major university campuses, four principal referral hospitals and six of the nine commercial office markets in Greater Sydney.

The Region Plan notes the potential for a larger labour market to be accessible by businesses in the Eastern Economic Corridor and improved productivity as committed transport infrastructure is completed.

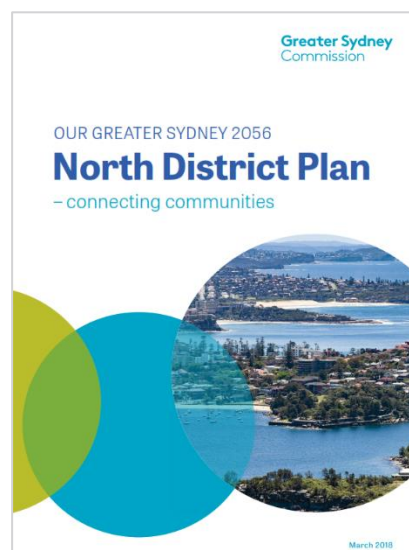
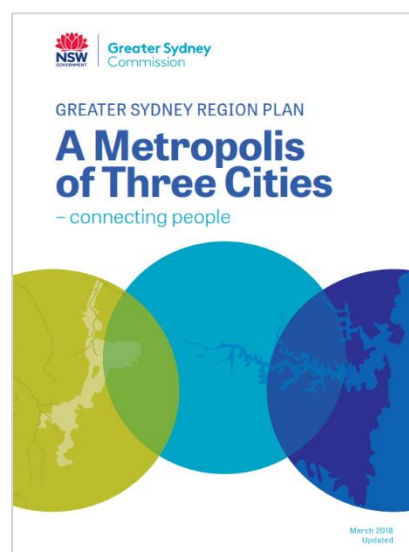
North District Plan (2018)

The North District Plan (the District Plan) identifies opportunity for intensification of health and education facilities and ancillary businesses at St Leonards and Crows Nest as a health and education precinct.

The District Plan identifies approaches to strengthen the Precinct through approaches that would:

- Leverage the new Sydney Metro Station at Crows Nest to deliver additional employment capacity.
- Increase employment across the Precinct.
- Reduce the impact of vehicle movements on pedestrian and cyclist accessibility.
- Protect and enhance Willoughby Road's village character and retail/restaurant strip.
- Deliver new high quality open space, upgrade public areas, and establish collaborative place-making initiatives.
- Promote synergies between the Royal North Shore Hospital and other health and education-related activities.
- Retain and manage the adjoining industrial zoned land for a range of urban services.

Future urban renewal across the Precinct is specifically identified within the District Plan.



2.2.2 St Leonards and Crows Nest 2036 Plan

Formally endorsed in August 2020, the *St Leonards and Crows Nest 2036 Plan (the 2036 Plan)* sets the strategic vision, objectives and guiding principles for future land use and development in the Precinct.

The vision for the Precinct as envisaged in the 2036 Plan is:

“Sitting at the heart of the Eastern Economic Corridor; connectivity, innovation and a commitment to great design will see the St Leonards and Crows Nest area transform as a jobs powerhouse. Mixing commercial and residential, the centre will offer workers, residents, students and visitors a variety of homes, jobs and activities with increased accessibility with a new world class metro service” (NSW DPHI, 2020).

Overall, the 2036 Plan proposes a series of planning controls which could provide capacity for:

- Approximately 6,700 new dwellings;
- Almost 120,000sqm of employment floorspace (providing capacity for 16,500 additional jobs).
- New and upgraded public open space, through site links and car parking facilities.

An Urban Design Study (SJB, 2020) was completed as part of the suite of technical investigations undertaken to inform the development of the 2036 Plan. The Urban Design Study identified nine distinct ‘Character Areas’ across the Precinct based on, *inter alia*, existing land uses, built form and environmental characteristics.

Changes to planning controls are only envisaged in two Character Areas – predominantly in the St Leonards Centre and Crows Nest Sydney Metro character area with select sites in the Crows Nest Village character area also suggested for planning uplift. The 2036 Plan incorporated the densities proposed for the St Leonards South Planning Proposal area as exhibited by Lane Cove Council in 2017. The areas of change proposed in the 2036 Plan are shown in **Figure 2-2**.

Figure 2-2: Areas of Change, Crows Nest 2036 Plan



Source: DPHI (2020)

Proposed Changes to Planning Controls

Figure 2-2 summarises the changes to planning controls as proposed in the 2036 Plan compared to existing planning controls. Some of these proposed changes have already been implemented through proponent-led planning proposals. Character Areas which were not subject to a proposed change in planning controls are excluded.

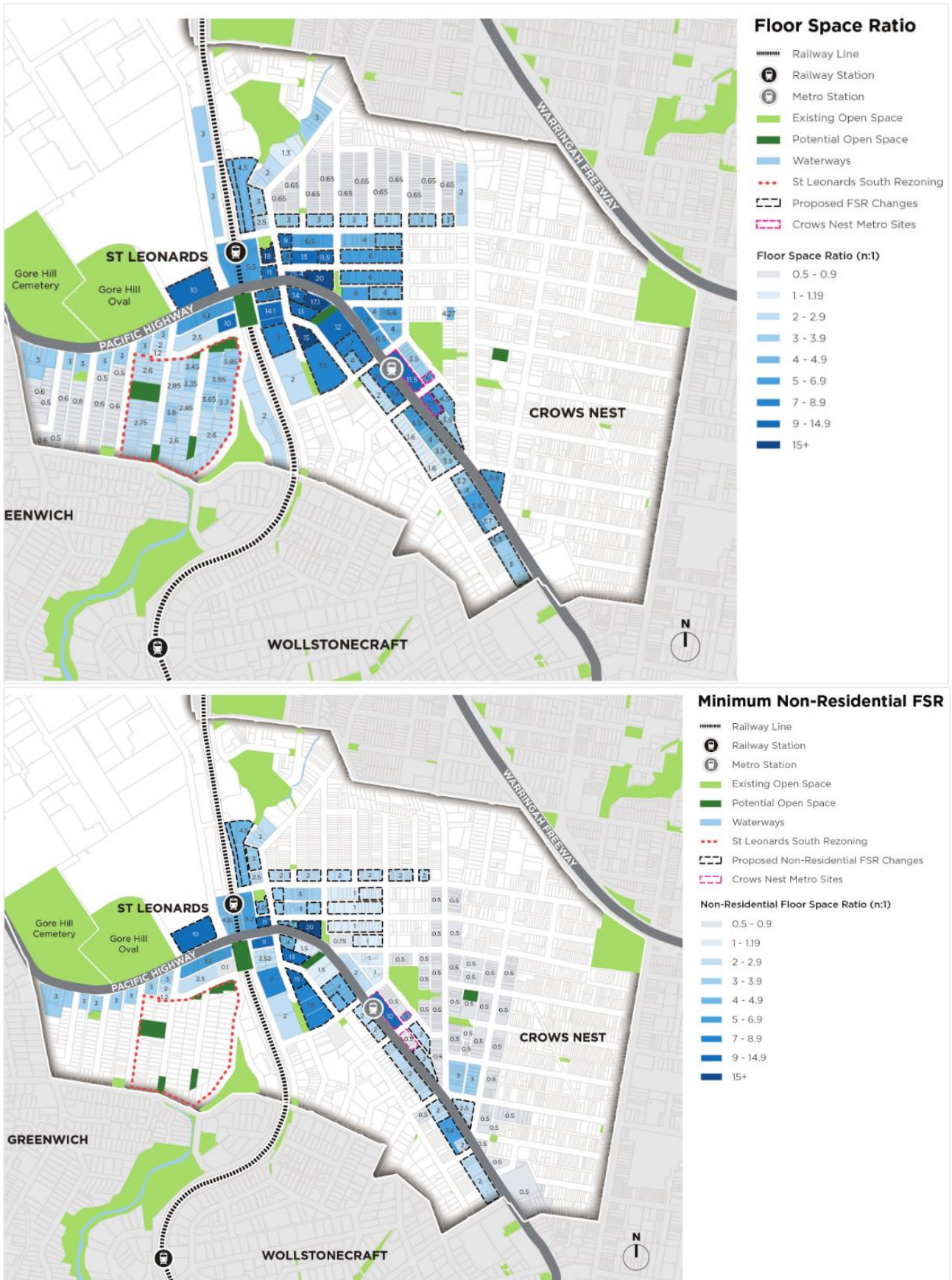
Rows highlighted in yellow are shown to indicate areas where planning controls are yet to be implemented.

Table 2-1: Proposed Changes to Planning Controls in 2036 Plan, Crows Nest Precinct

Character Area	Current Controls			2036 Plan Controls			Status	
	Zone	FSR	HOB	Zone	FSR	HOB		
Crows Nest Village	E2	-	10m	B3	-	10m	No change to planning controls.	
	R4	-	16m	R4	-	16m	No change to planning controls.	
	MU1	-	-	-	-	3.0	8-st	Planning controls from 2036 Plan still to be made.
		-	16m	-	-	3.7	8-st	
		-	-	-	B4	4.0	8-st	
		4.27	26m	-	-	4.27	26m	Planning controls from 2036 Plan now in place.
		5.6	54m	-	-	5.6	54m	Planning controls from 2036 Plan now in place.
5.8	58.5m	-	-	5.8	58.5m	Planning controls from 2036 Plan now in place.		
St Leonards Centre/ Crows Nest Metro	R3	-	8.5m-12m	R3	1.6-2.0	4-st	Planning controls from 2036 Plan still to be made.	
		2.0	15m	B4	4.0	5-st	Planning controls from 2036 Plan still to be made.	
		-	-	B4	7.0	30-st	Planning controls from 2036 Plan still to be made.	
	E2	2.5	20m	E2	2.5	20m	No change to planning controls.	
		3.0	20m	E2	3.0	5-6-st	No change to planning controls.	
		4.5	25m-41m	E2	4.5	13-st	Planning controls from 2036 Plan now in place.	
		5.1	36m	E2	5.1	9-st	Planning controls from 2036 Plan now in place.	
		5.5	115m	E2	5.5	115m	Planning controls from 2036 Plan now in place.	
		6.0	36m	B4	7.0	30-st	Planning controls from 2036 Plan still to be made.	
		10.0	83m-190m	E2	10.0	25-st	Planning controls from 2036 Plan now in place.	
		10.1	36m	B4	13.0	24-st	Proponent led planning proposal- new planning controls in place.	
		-	45m		7.5	18-st		
		17.1	72m	E2	14	35-st	Proponent led planning proposal- new planning controls in place.	
		25.4	180m	E2	25.4	50st		
		MU1	-	-	B4	3.5	8-st	Planning controls from 2036 Plan still to be made.
			-	10m	B4	4.0	8-st	
			-	-	B4	4.5	8-st	
	-		-	B4	5.5	18-st		
	-		16m	B4	7.5	24-st	Planning controls from 2036 Plan still to be made.	
	-		20m	B4	4.0	12-st	Planning controls from 2036 Plan still to be made.	
	-		-	B4	6.0	16-st		
	-		33m	B4	9.0	12-st	Planning controls from 2036 Plan still to be made.	
	-		40m	B4	6.0	16-st	Planning controls from 2036 Plan still to be made.	
	-		49m	B4	8.0	16-st	Planning controls from 2036 Plan still to be made.	
	2.5		25m	B4	2.5	7-st	Planning controls from 2036 Plan now in place.	
	5.5		164m	B4	5.5	18-st	Planning controls from 2036 Plan now in place.	
	6.0		127m	B4	6.0	9-st	Metro site. Planning controls from 2036 Plan now in place.	
6.4	56m		B4	6.0	16-st	Planning controls from 2036 Plan now in place.		
7.5	155m		B4	7.5	17-st	Planning controls from 2036 Plan now in place.		
10.0	94m		B4	10.0	29-st	Planning controls from 2036 Plan now in place.		
11.5	180m	B4	11.5	27-st	Metro site. Planning controls from 2036 Plan now in place.			
12.0	180.5	B4	12.0	30-40-st	No change to planning controls.			
14.1	166m	B4	14.1	26-48-st	No change to planning controls.			
17.1	227m	B4	17.1	45-st	No change to planning controls.			

Source: DPHI (2020)/Lane Cove LEP/North Sydney LEP/Willoughby LEP

Figure 2-3: FSR and Minimum Non-Residential FSR Maps, Crows Nest 2036



Source: DPHI (2020)

2.3 Revised Precinct Plan

DPHI has engaged a consultant team to carry out a review of the 2036 Plan, with this review led by urban design firm SJB. The findings of this review are detailed in the *Crows Nest Precinct: Urban Design Review (the Urban Design Review)*.

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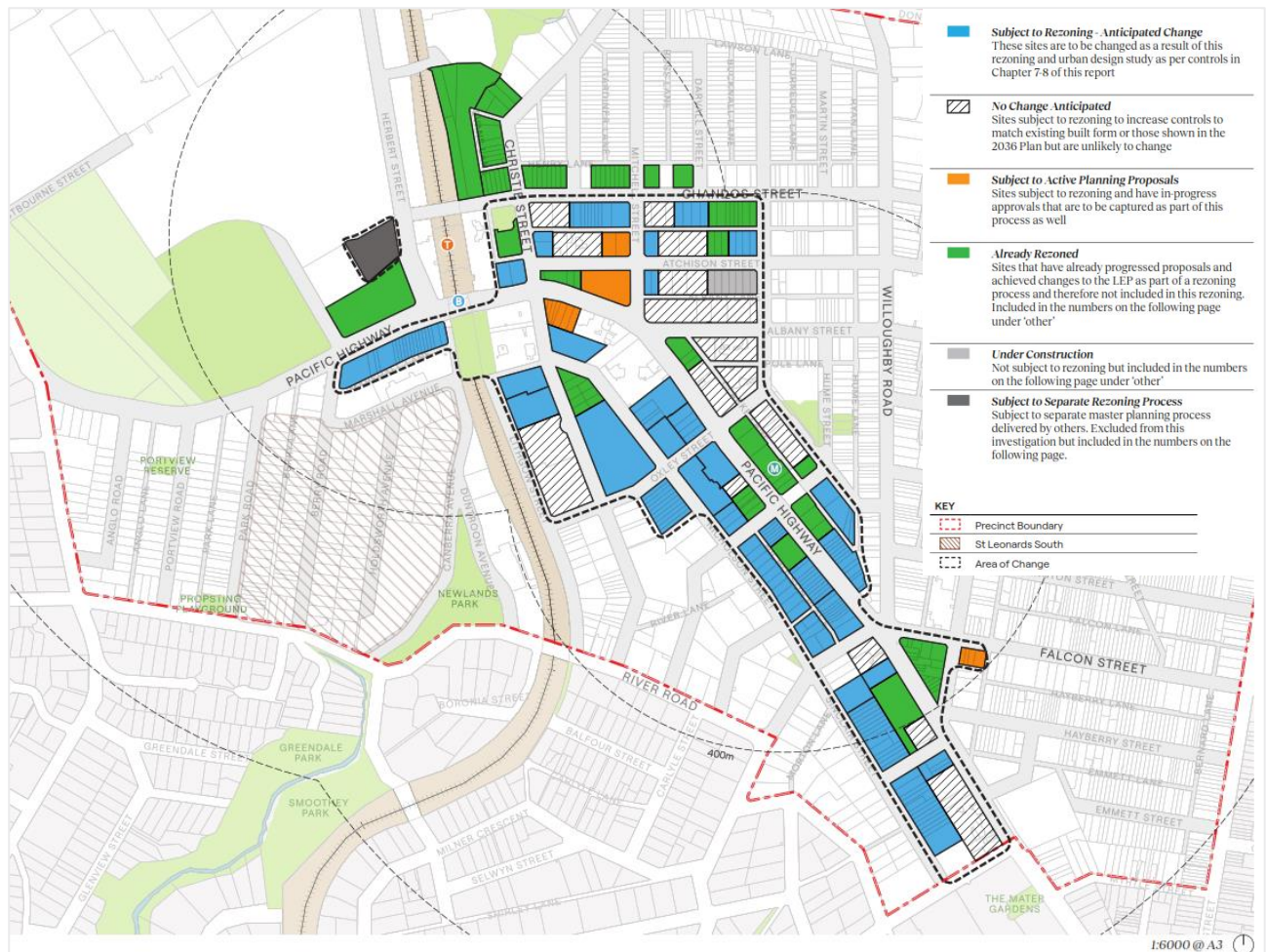
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Overall, the Revised Precinct Plan will enable the TOD Rezoning to deliver:

- 3,255 dwellings (representing an increase of 1,762 dwellings above the total capacity provided for in the 2036 Plan).
- ~89,700sqm non-residential GFA (representing a nominal decrease in capacity of ~28,900sqm of non-residential GFA compared to the 2036 Plan). This decrease in capacity is in response to structural reduction in demand for office floorspace, whilst also enabling the delivery of Affordable Housing.

Blocks shaded blue in **Figure 2-4** are those identified for changes to planning controls. Blocks shaded green have already been rezoned, blocks shaded orange are subject to active planning proposals and blocks shaded light grey are currently under construction.

Figure 2-4: Revised Crows Nest Precinct Plan, Yield Schedule



Source: SJB (2024)

2.4 Demographic Profile

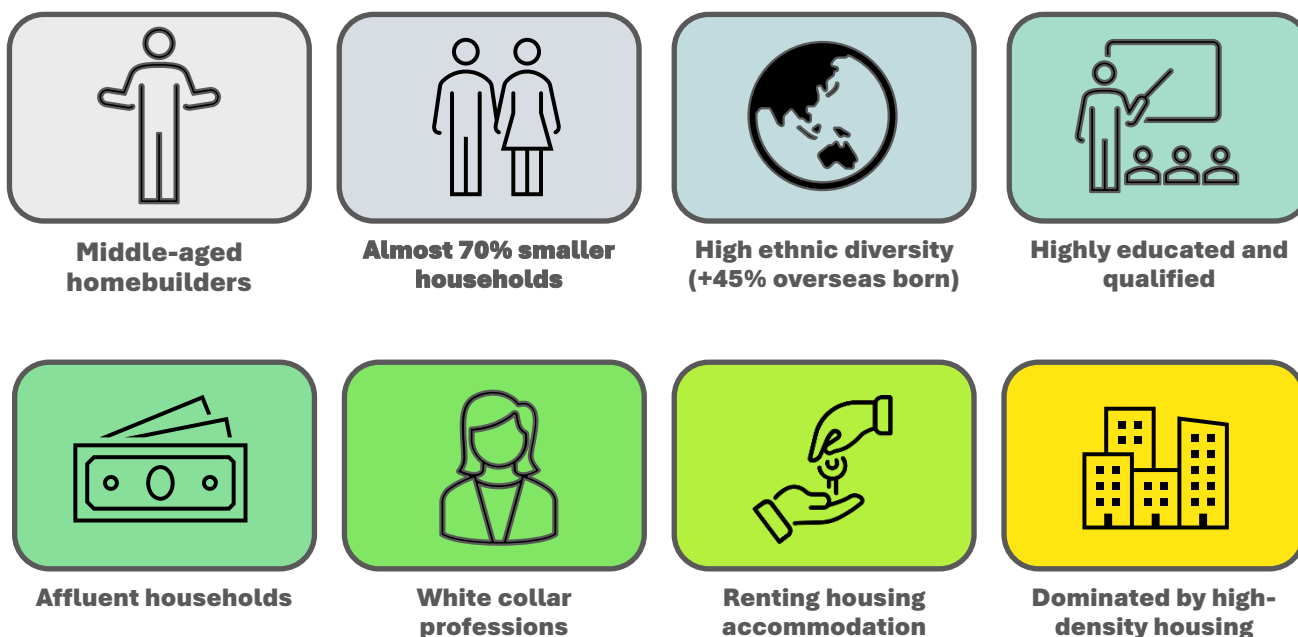
Understanding the current socio-demographic profile of local residents in Crows Nest and St Leonards areas provides insight into the need for more housing and employment opportunities as envisaged in the 2036 Plan.

A review of the 2021 Census shows most residents and households in Crows Nest and St Leonards are:

- **Middle-aged residents**, with almost **60%** of residents aged **between 25 and 49 years old**.
- **Smaller households**, with couple families without children and lone persons accounting for **68%** of all households.
- **Ethnically diverse**, with over **45%** residents born overseas, notably from the UK, China and India.
- **Highly educated**, with **72%** of local residents holding a Bachelor's degree or higher qualification.
- **Affluent**, with around **43%** of households earning incomes in the highest income group (\$3,135 and over per week).
- Mainly **professionals, managers and clerical and administrative workers**, representing **~80%** of local occupations.
- Generally **renters**, with renting households accounting for **57%** of all households.
- **Reside in medium and high-density housing formats**, with most households living in dwellings of 1-2 bedrooms.
- Live in one of Greater Sydney's most densely populated areas, with circa **9,200 residents per square kilometre**.

Figure 2-5 illustrates some of the key socio-demographic characteristics of Crows Nest and St Leonards areas as at 2021.

Figure 2-5: Common Socio-Demographic Characteristics, Crows Nest/St Leonards



Source: ABS (2021)/Atlas Economics

2.5 Economic Profile

Beyond being one of the Lower North Shore's most dense residential neighbourhoods, the Precinct is a significant employment hub. It is anchored by one of NSW's largest hospital precincts, a major commercial office market and popular retail and hospitality precinct along Willoughby Road.

As at the 2021 Census, the Precinct recorded approximately 43,550 workers. Unsurprisingly, the vast majority of these workers are employed in Health and Education and Knowledge Intensive sectors, accounting for 36% and 34% all workers respectively. Population-serving industries (such as retail trade, construction and accommodation and food services) collectively accounted for ~16% of local workers.

The rate of employment growth across the Precinct over the past decade has been significant. An additional ~10,950 jobs have been recorded over 2011-2021, reflecting an average annual growth rate of 2.9%. For context, the Eastern Harbour City recorded average annual employment growth of 2.1% over the same period.

The Health and Education sectors have accounted for majority of this growth, representing around 70% of all new jobs.

Table 2-2 summarises employment growth across the Precinct over the 2011-2021 period.

Table 2-2: Employment by Industry and BIC (2011-2021), Crows Nest Precinct

Industry (ANZSIC)	2011		2016		2021		Avg. Growth (p.a.)
	No.	%	No.	%	No.	%	
Agriculture, Forestry and Fishing	18	0%	35	0%	65	0%	14%
Mining	38	0%	103	0%	48	0%	2%
Manufacturing	1,932	6%	1,507	4%	1,426	3%	-3%
Electricity, Gas, Water and Waste Services	140	0%	101	0%	251	1%	6%
Construction	1,418	4%	1,652	4%	2,189	5%	4%
Wholesale Trade	1,664	5%	1,597	4%	1,509	3%	-1%
Retail Trade	1,820	6%	2,099	6%	1,823	4%	0%
Accommodation and Food Services	1,093	3%	1,339	4%	1,218	3%	1%
Transport, Postal and Warehousing	800	2%	860	2%	801	2%	0%
Information Media and Telecommunications	2,372	7%	3,371	9%	3,110	7%	3%
Financial and Insurance Services	1,673	5%	1,517	4%	1,299	3%	-2%
Rental, Hiring and Real Estate Services	686	2%	724	2%	895	2%	3%
Professional, Scientific and Technical Services	7,822	24%	7,356	19%	6,786	16%	-1%
Administrative and Support Services	911	3%	937	2%	1,205	3%	3%
Public Administration and Safety	270	1%	462	1%	1,689	4%	20%
Education and Training	1,082	3%	1,229	3%	1,567	4%	4%
Health Care and Social Assistance	6,969	21%	9,502	25%	14,054	32%	7%
Arts and Recreation Services	279	1%	340	1%	245	1%	-1%
Other Services	1,206	4%	1,417	4%	1,468	3%	2%
Total*	32,602	100%	37,844	100%	43,550	100%	2.9%
Broad Industry Classification (BIC)							
Population-Serving	5,816	18%	6,847	18%	6,943	16%	1.8%
Knowledge-Intensive	13,734	42%	14,367	38%	14,984	34%	0.9%
Health and Education	8,051	25%	10,731	28%	15,621	36%	6.9%
Industrial	4,592	14%	4,203	11%	4,100	9%	-1.1%
Total*	32,602	100%	37,844	100%	43,550	100%	2.9%

*Note: numbers do not sum as 'Inadequately Described' and 'Not applicable' categories have been excluded from table
Source: ABS (2022, 2017, 2012)

3. Demand for Land Uses

3.1 Economic Context

Like most advanced economies, the Australian economy has experienced sustained levels of high inflation over the past 12-18 months. Inflation reached its highest levels observed since the 1990s in late 2022, peaking at 7.8% year-on-year (YoY) in December 2022. These inflationary pressures have generated significant pressure on household budgets, notwithstanding an uptick in wages growth.

In response to a perceived overheating economy, the Reserve Bank of Australia (RBA) has been tightening monetary policy with successive increases to the official cash rate, rising from 0.1% in April 2022 to 4.35% in November 2023. No further increases to the cash rate have been made in the past five months, as inflation has been softening (last recorded at 3.6% in March 2024) and the RBA looks to avoid unnecessarily decelerating the economy beyond that required.

Whilst the RBA has thus far managed to secure a 'soft landing' across the Australian economy, the rapid increases to interest rates have begun to affect many parts of the economy – notably with substantial declines in investment activity, dwelling approvals and household consumption.

Against this backdrop, the housing and development sector has been impacted to varying degrees over the past 12-months:

- Dwelling values across Greater Sydney softened over the 2022-2023 period in response to the swift increase in interest rates, however, have more recently rebounded with **house and unit values rising by 11.7% and 7.8%** respectively in the year to February 2024 (CoreLogic, 2024).
- A **clear divergence in the rate of price growth between houses and strata titled dwellings** has been observed, as buyers place much greater value on space as work from home practices become increasingly entrenched.
- The robustness of housing demand has been supported by strong population growth, with NSW recording **net overseas migration of ~174,000 people** in the year to June 2023 (ABS, 2024a).
- Demand for housing has been most felt in the rental market, with a **chronic undersupply of rental properties** (resulting from a rise in owner occupiers during the COVID-19 period) driving historically low residential vacancy rates across Greater Sydney (SQM Research, 2024).
- Driven by **significant increases in the cost of building material and labour**, residential construction prices have increased by over 30% in the past 24-months across Greater Sydney (Rider Levett Bucknall, 2024).
- Owing to these rising cost pressures, **new dwelling commencements have been rapidly declining** and are now at their lowest levels seen in the past decade (ABS, 2024b).
- This is particularly acute in Greater Sydney, with the **predicted number of dwelling completions over 2022-2027 expected to be some 15% below** that previously observed in the previous period (DPHI, 2024).

Accordingly, the influence of current economic conditions on property markets is nuanced. Despite a softening in dwelling prices over 2022-2023, strong demand drivers are driving a rebound in prices. At the same time, increases in the cost of development has resulted in significant drop in supply.

Collectively, these conditions have resulted in Greater Sydney remaining the least affordable capital in Australia (ANZ/CoreLogic, 2023), and is now only outranked by Hong Kong in terms of unaffordability (Demographia, 2023).

All levels of Government recognise that Australia is facing a 'housing crisis', with the National Cabinet announcing a National Housing Accord in October 2023 with the ambitious aim of delivering 1.2 million new dwellings over 2024-2029.

It is against this economic backdrop that precinct planning within the Precinct must be cognisant.

3.2 Commercial Land Uses

The demand for commercial land uses has been subject to the headwinds of structural change following the COVID-19 pandemic. This section considers the structural trends that influence the demand for office space both internationally and domestically and draws out the implications for masterplanning at the Precinct.

This section firstly considers the historical context of the Crows Nest/St Leonards office market. The trends influencing commercial office markets are then explored, with implications of these trends in the context of the Precinct examined.

3.2.1 Crows Nest/St Leonards Office Market

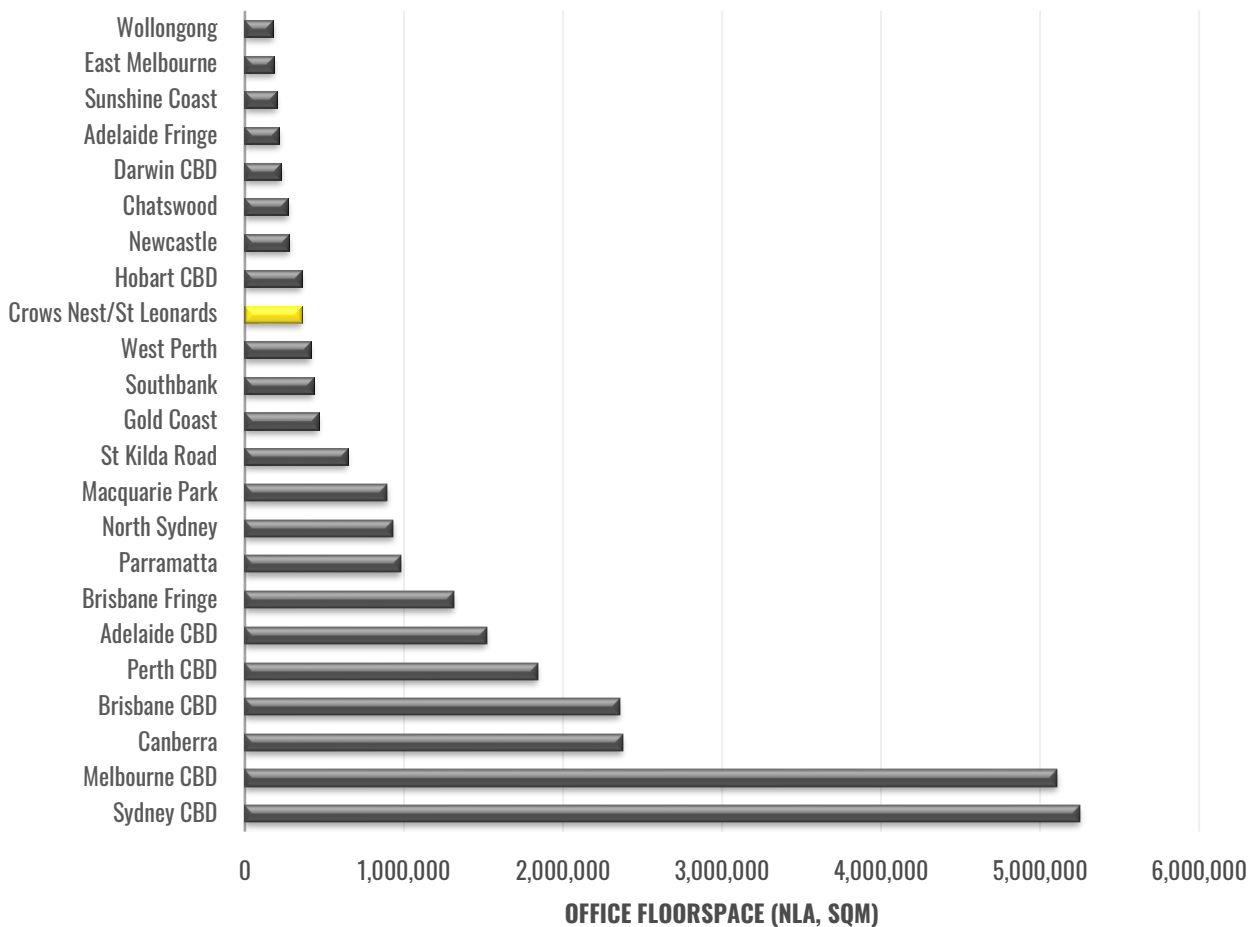
Crows Nest/St Leonards is the fifth largest office market in NSW, behind the Sydney CBD, Parramatta, North Sydney and Macquarie Park. Comprising just over 350,000sqm of office stock across over 120 buildings, the market is characterised by older, secondary grade buildings. Around 38% of stock is defined as ‘A-Grade’ space as per Property Council of Australia classifications (PCA, 2024).

Crows Nest/St Leonards has a well-established cluster of information technology, pharmaceutical, and business service occupiers which have organically grown over time. Multiple ASX-listed and multinational companies and headquartered and/or located in the precinct, including Optus, Foxtel, Ericsson, Medtronic and Sonic Healthcare.

Crows Nest and St Leonards have historically attracted a mix of occupiers, typically those requiring more affordable accommodation compared to other major office markets such as North Sydney or the Sydney CBD. The Royal North Shore Hospital has also been an important driver of demand for commercial floorspace, with a large cluster of medical, allied health and pharmaceutical occupiers across the Precinct.

Figure 3-1 illustrates the size of the Crows Nest/St Leonards office market in the context of Australia’s office major markets.

Figure 3-1: Australian Office Markets by Size (2023/24)



Source: PCA (2024)

3.2.2 Structural Re-setting of Demand

Structural trends refer to a major shift in the way an industry, an economy or a society functions. Like all real estate sectors, office markets are subject to structural changes that alter the type, location and quantum of space that is needed today and will be needed in the future to meet occupier demand.

Whilst many of these trends were underway prior to the COVID-19 pandemic, the impact of strict lockdowns accelerated the realisation of these structural changes. Three of the core structural trends that are re-setting demand for commercial floorspace across Australia (including the Precinct) include:

- Hybrid working and entrenched working from home practices.
- Occupier shift towards higher quality office floorspace.
- Changing corporate structures and practices.

Each of these trends are explored in turn.

Hybrid Working

Hybrid working refers to a working arrangement in which office-based workers split their working week between the office, their home and in some cases a third space such as a co-working facility, library or local coffee shop.

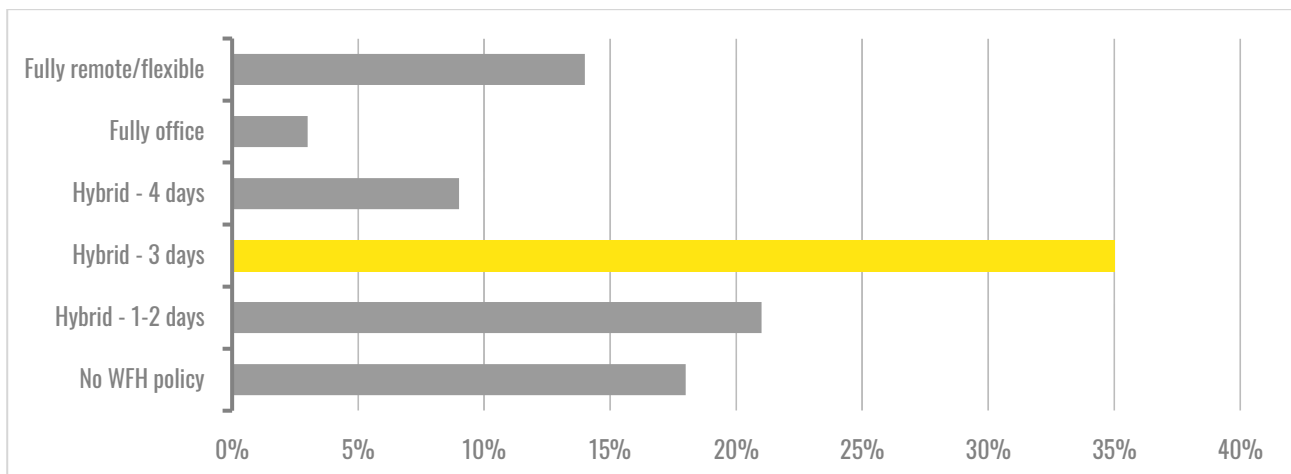
Government mandates during the COVID-19 pandemic (the pandemic) to contain the spread of the virus obligated all workers who could work from home (WFH) to do so. Millions of formerly office-based employees instantly gave up their daily commutes and workplaces. Hybrid working was a trend already underway prior to the pandemic, however the pandemic accelerated the realisation of this structural change from perhaps 5-10 years to 12-24 months.

Rather than leading to a collapse in output which had been feared, WFH led to the following outcomes:

- Organisations realised how some tasks could be performed at home with either neutral or positive productivity impacts.
- Employees valued the travel time and cost savings that WFH provided and its greater flexibility.
- Employers accepted the employee engagement benefits of hybrid working arrangements and the financial benefits achievable through reducing or consolidating their physical office footprint.

Hybrid working is now the default position for Australian corporates with office-based workers (**Figure 3-2**). Two-thirds of corporate occupiers have a hybrid working policy and 14% are fully remote. Only 3% of office workers are in the office 5 days a week. The average Australian worker now spends over a quarter of their working week (27%) outside the office.

Figure 3-2: Australian Corporate Working-from-home (WFH) Policies Breakdown



Source: The Aussie Corporate, March 2023

The entrenchment of hybrid working within office-based businesses has had major ramifications for demand in the commercial office sector. Overall, hybrid working has a negative impact on per person office demand as occupiers do not need to provide space for all full-time employees to have a permanent desk.

Shift Towards High Quality Space

Structural trends such as hybrid working are altering the demand for office space at a macro level. At a micro level, the characteristics of office demand are changing too with critical implications for submarkets and individual office assets.

In a post-COVID-19 market, occupier demand is focusing on a specific type of office space which provides:

- Flexible spaces that can be adapted to accommodate a wide variety of activities.
- High-quality sustainability credentials.
- Quiet spaces for phone calls or working.
- An abundance of meeting spaces and places for collaboration.
- Good access to public transportation.
- Food and beverage amenities such as an on-site café, health and wellness facilities.

To meet these requirements, demand is focusing on the best quality contemporary space at the expense of older-style buildings. This can be directly observed in recent net absorption data.

The 'preference' for prime quality space can be observed by vacancy levels (prime v secondary grade space). In all markets, secondary vacancies are generally higher than prime vacancies.

This is particularly influenced by the proportion of secondary grade stock in the market. The higher the proportion of secondary grade stock, the lower the prime grade vacancy - indicating market contestability for superior quality space (where that space is more limited in quantum).

Changing Corporate Structures

The rise of the internet and the availability of computer technology in the 2000s made working from anywhere possible, breaking the connection between an office and the ability to work. Forced WFH mandates demonstrated this. Today, approximately 14% of Australian companies are fully remote (**Figure 3-2**), a proportion that has risen significantly since the pandemic. Job postings in Sydney that offer fully remote working increased by a factor of 11 between 2019 and 2022.

Fully remote working is common in companies with technology/computer-based jobs, higher earners and highly educated workers. Fully remote working is seen as a talent attraction and retention tool and such roles rely less on face-to-face collaboration or sales, there is often no value benefit in terms of productivity or creativity for these roles to be office-based.

It is likely that the proportion of fully remote roles and companies will increase further in the future. This reflects an ongoing shift in the workforce towards technological-based work, increasing acceptability of fully remote companies and the preferences of younger worker cohorts - millennials and gen-z as they progress through their careers.

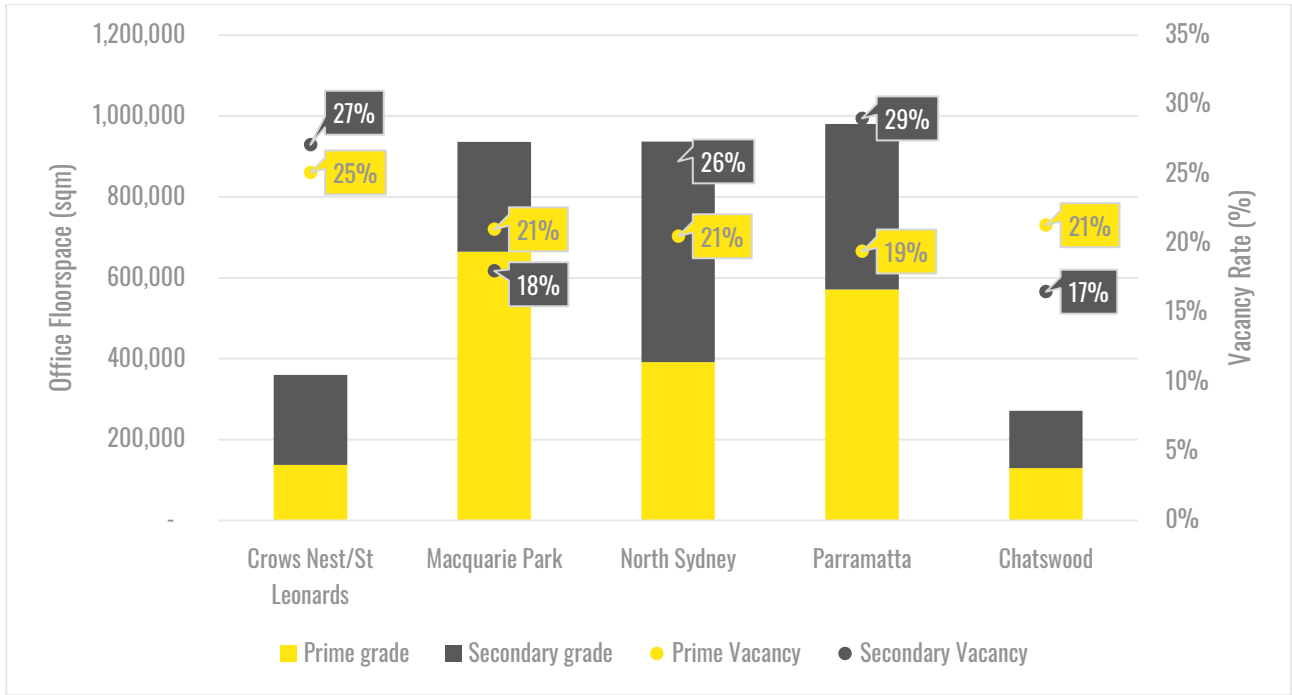
Gen-z and millennials currently make up approximately 38% of the global workforce but this will rise to 58% by 2030. As the most digitally savvy generation, they are comfortable working in a hybrid manner and may progress to more remote working as they age and prioritise lifestyle factors. A rising share of jobs and companies that are fully remote will reduce aggregate demand for physical office space over time.

3.2.3 Current Market Conditions

The shifting preference towards higher grade office accommodation is directly observed in the Crows Nest/St Leonards market, with secondary grade (i.e. B-grade and lower) office recording a higher vacancy rate compared to A-grade stock (27% and 25% respectively). This aligns with trends observed in other major office markets across Greater Sydney, including North Sydney, Parramatta and Chatswood.

Overall, there is a significant amount of vacant office floorspace across Crows Nest/St Leonards, in the order of 95,000sqm.

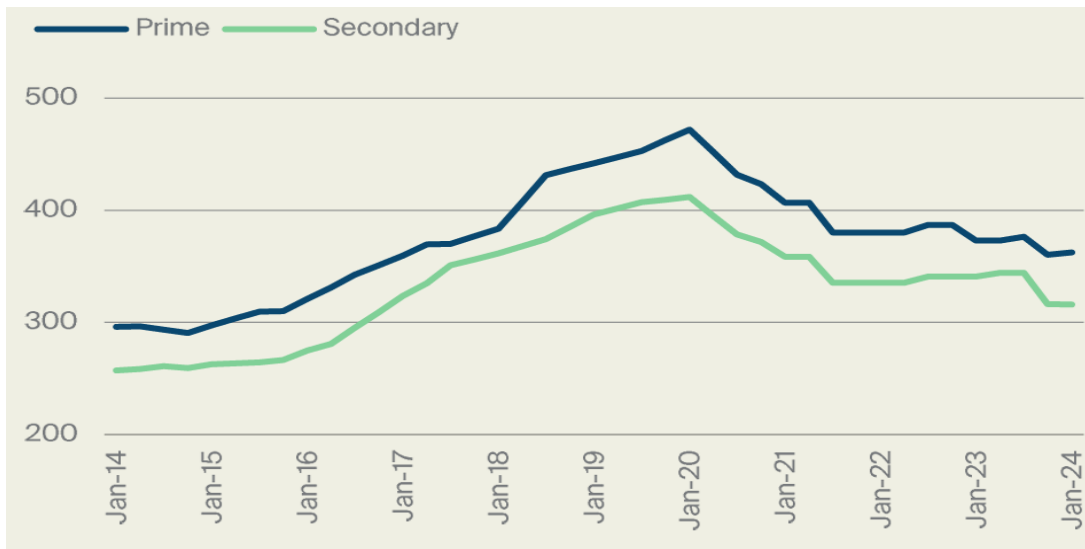
Figure 3-3: Proportion of Office Stock and Vacancy Levels by Grade (2024)



Source: PCA (2024)

Aligning with a softening in occupancy levels, office rents (both prime and secondary grade) in Crows Nest/St Leonards have remained depressed following substantial declines over the 2020-2021 period. Incentives are also amongst the highest across Greater Sydney, averaging at 37% (Knight Frank, 2024).

Figure 3-4: Average Office Rents (\$/sqm), Crows Nest/St Leonards



Source: Knight Frank (2024)

3.2.4 Market Outlook

Office employment activity today is now more dispersed than it was pre-COVID. In the past, most office employment activity took place in the office. Today, that activity is dispersed between the office, the home and a third place (which could be a co-working space or other place). The reduction in occupied office space does not mean there is less employment activity. Rather, it means that office employment is more footloose and mobile.

The dispersed nature of office employment activity has meant lower occupancy rates in the office, and consequently less aggregate demand for purpose-built office space. It has also meant higher demand for dwellings with flexible spaces.

Like other commercial office markets nationally, there has been a 're-setting' of demand for commercial floorspace in Crows Nest/St Leonards. Overall demand has been softer, with a significant amount of vacant floorspace across the market (95,000sqm or 26%). Until vacancy rates return to 'normal' levels (5%-10%), effective rents will remain depressed which negatively impacts on development feasibility and the viability of new office development in Crows Nest/ St Leonards.

In summary, the structural shifts at play across commercial office markets suggest that demand for office floorspace across suburban office markets will be softer than that historically observed.

3.3 Residential Land Uses

Like much of Australia's East Coast, demand for housing in the Crows Nest and St Leonards areas has outstripped supply in recent years, resulting in significant price escalation and historically low rental vacancy rates. All levels of Government recognise that Australia is facing a 'housing crisis', with the National Cabinet announcing a National Housing Accord in October 2023 with the ambitious aim of delivering 1.2 million new dwellings over 2024-2029.

The Crows Nest and St Leonards areas are amongst the popular high-density housing markets in Greater Sydney. Its significant retail amenity offering, public transport accessibility and mix of employment opportunities have driven a wave of apartment development, with 2,600 apartments delivered over the decade to 2021.

There are several new apartment projects currently being marketed off the plan across the Precinct, particularly within the St Leonards South precinct. Market investigation indicates that whilst demand has begun to soften in line with the broader housing market, take-up remains steady with good interest from a range of buyer cohorts.

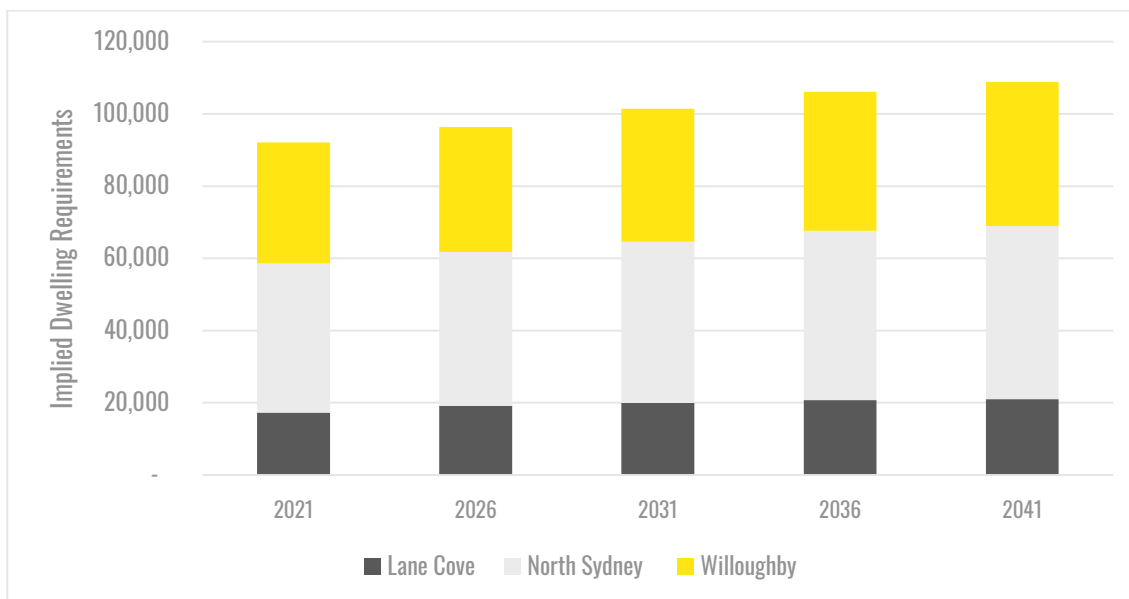
There is minimal need to proactively attract demand for new residential uses delivered in the Precinct – they will occur naturally and 'as of course' in response to a chronic undersupply of housing across Greater Sydney.

Looking Forward

Official population projections in NSW are carried out by the DPE Demography and Research Unit. These projections of population growth are divided by projected household occupancy rates to arrive at the number of implied dwellings required to accommodate the projected population.

The most recent population projections prepared by DPE (2022) suggest that the North Sydney, Lane Cove and Willoughby LGAs will record an additional ~23,900 residents over 2022-2041. To meet this level of growth, approximately 16,400 new dwellings will be required over the same period – equating to ~863 dwellings per annum. This is shown in Figure 3-5.

Figure 3-5: Implied Dwelling Requirements (2021-2041), North Sydney and Willoughby LGAs



Source: DPHI (2022)

3.4 Implications for Crows Nest Precinct

The TOD Rezoning provides capacity for ~89,700sqm of non-residential floorspace and 3,255 dwellings. This Chapter has examined the market need for the above land uses and makes the following observations.

Residential Land Uses

- All levels of Government have identified that Australia is in the midst of a 'housing crisis', with historically high dwelling prices and record low vacancy levels having significant and detrimental social and economic impacts.
- The National Cabinet agreed to a National Housing Accord to collectively deliver 1.2 million dwellings across Australia over 2024-2029. NSW would need to deliver 375,000 dwellings over this period to meet targets of the Accord.
- Greater Sydney is at the forefront of Australia's housing crisis and is widely noted as recording the second most unaffordable housing market of the developed world (Demographia, 2023).
- The most recent DPHI population projections for the North Sydney and Willoughby LGAs indicate the over the coming decades to 2041, an additional ~16,400 dwellings will be required to satisfy population growth.

Accordingly, the TOD Rezoning (which provides capacity for ~3,255 dwellings) could play an important role in meeting future housing demand in the context of highly constrained housing market.

Commercial Land Uses

The demand for commercial floorspace has been re-set following structural changes in human behaviour following the COVID-19 pandemic. Office employment activity is now dispersed across an employee's place of work, their home and a third place (which could be a co-working space or other place). The aggregate demand for office space has therefore shifted. Longer absorption timeframes are therefore the consequence of this re-setting of demand.

Whilst historically playing a relatively minor role in the Greater Sydney office market from a supply perspective, Crows Nest/St Leonards has been important in providing accommodation options for price conscious occupiers and supporting the growth of the St Leonards Health and Education Precinct.

The TOD Rezoning provides capacity for ~89,700sqm of non-residential GFA, a nominal reduction in remaining capacity as compared to the 2036 Plan of 28,900sqm. This is considered an appropriate response to structural changes in demand for commercial office floorspace, whilst facilitating increased residential capacity. Importantly, the TOD Rezoning will enable the Precinct to continue strengthening its role as a health and education hub.

The next Chapter examines the economic impacts of the TOD Rezoning during construction and upon completion.

4. Economic Impact Assessment

4.1 Overview and Approach

Economic impact modelling (using models known as Input-Output models) are a method to estimate the overall economic impact within a certain area resulting from a stimulus to the economy, such as a new development or policy.

This chapter carries out economic impact modelling to assess the economic activity and impacts that could result if the TOD Rezoning planning controls were implemented. Economic impacts are analysed during both the construction and operational phase over the 2024-2044 period. The analysis estimates the economic activity supported in the following scenarios:

- **Base Case**

The TOD Rezoning Sites have capacity under the planning controls in the *2036 Plan*; there is remaining development capacity for 118,606sqm of non-residential floorspace and 1,493 dwellings. Only a portion of this capacity is projected to be taken up over the next 20-years (~20,000sqm of non-residential floorspace and 1,076 dwellings).

- **Proposal Case**

The TOD Rezoning Sites are rezoned (per Revised Precinct Plan), providing capacity for ~89,700sqm of non-residential floorspace and 3,255 dwellings. This represents a nominal decrease in non-residential capacity of ~28,900sqm GFA compared to the Base Case, though a significant increase in residential capacity (1,762 additional dwellings).

Some of this capacity is projected to be taken up over the next 20-years, with changes to planning controls facilitating an uptick in take-up (~31,000sqm of non-residential floorspace and 1,587 dwellings).

Refer to SCHEDULE 1 for the assumed development program in the Base Case and Proposal Case.

Economic impacts are assessed at the North Sydney, Willoughby and Lane Cove 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/Willoughby/Lane Cove economy (see SCHEDULE 1 for further details).

Input-Output modelling considers economic activity through examining four types of impacts as 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 a final product. Care must 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 activity.
Gross Regional 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 or Proposal (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 Economics

Types of Economic Impacts

Input-Output modelling traces the economic impact resulting from a stimulus to a local economy through measuring a series of impacts – referred to as ‘Direct’ and ‘Flow-on’ impacts.

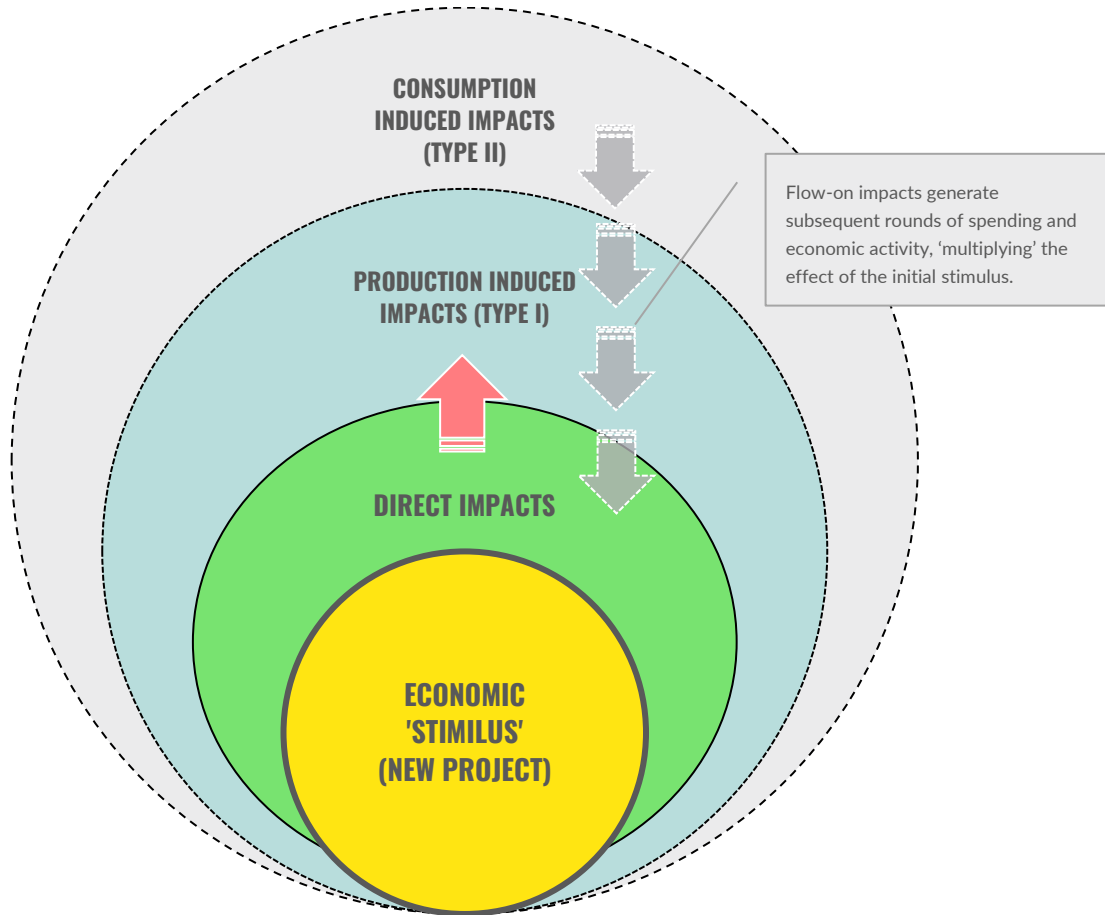
- **Direct impacts**, which are the first round of effects from direct operational expenditure on goods and services.
- **Flow-on impacts**, which comprise the second and subsequent round effects of increased purchases by suppliers in response to increased sales. Flow-on impacts can be disaggregated to:
 - **Production-induced impacts (Type I)** show the effects of additional activities undertaken by supply chain industries increasing their production in response to direct and subsequent rounds of 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.

Figure 4-1 illustrates the types of economic impacts and their subsequent rounds of impacts.

Figure 4-1: Types of Economic Impacts (Direct and Flow-on)



Source: Atlas Economics

Drivers of Economic Activity

To properly understand the economic impacts likely to result from the Revised Precinct Plan, it is necessary to distinguish economic impacts during the construction phase and those economic impacts that will be more permanent in nature following completion of construction and commencement of operations.

- **Construction Phase**
Construction activity will draw resources from and thereby generate economic activity within and from outside the North Sydney, Lane Cove and Willoughby LGAs. Assumptions are made on the proportion sourced from within and from outside these LGAs.
- **Operational Phase**
On build out, the TOD Rezoning Sites are expected to generate ongoing economic/ operational activity through the direct activity generated by:
 - Ongoing employment from new non-residential floorspace.
 - Dispersed employment through persons working from home in new housing.

Refer to SCHEDULE 1 for a description of the drivers and assumptions that underpin the assessed economic impacts.

4.2 Economic Activity and Impacts

4.2.1 Construction Phase

Over the total course of constructed, development of the yields proposed under the Revised Precinct Plan are projected to generate significant economic impacts for the North Sydney, Lane Cove and Willoughby LGA economies:

- **\$1.98 billion** in output (including \$1.37 billion in direct activity).
- **\$635.0 million** contribution to GRP (including \$326.8 million in direct activity).
- **\$399.4 million** in incomes and salaries paid to households (including \$224.6 million in direct income).
- **4,116 FTE jobs** (including 2,398 FTE directly employed over the course of construction activity).

The estimated construction impacts in **Table 4-2**. Construction impacts are reported **in total** from 2024-2044, and do not represent an average annual estimate.

Table 4-2: Construction Impacts, Base and Proposal Case (TOD Sites, 2024-2044)

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
Base Case				
Direct	\$921.5	\$220.2	\$151.1	1,617
Flow-on Type I (Production-induced)	\$278.2	\$134.6	\$78.7	689
Flow-on Type II (Consumption-induced)	\$135.5	\$73.1	\$39.1	469
Total	\$1,335.3	\$427.9	\$268.9	2,774
Proposal Case				
Direct	\$1,368.5	\$326.8	\$224.6	2,398
Flow-on Type I (Production-induced)	\$412.7	\$199.7	\$116.7	1,021
Flow-on Type II (Consumption-induced)	\$201.3	\$108.5	\$58.1	696
Total	\$1,982.5	\$635.0	\$399.4	4,116
Net Construction Impacts				
Direct	\$447.0	\$106.6	\$73.5	781
Flow-on Type I (Production-induced)	\$134.5	\$65.1	\$38.0	332
Flow-on Type II (Consumption-induced)	\$65.8	\$35.4	\$19.0	227
Total	\$647.2	\$207.1	\$130.5	1,342

Note: Totals may not sum due to rounding.
Source: Atlas Economics

Compared with the Base Case, the Proposal Case facilitates an uptick in take-up and accordingly more construction activity, resulting in greater levels of output and contribution to the local economy.

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

- **\$647.2 million** additional in output (including \$447.0 million in direct activity).
- **\$207.1 million** additional in contribution to GRP (including \$106.6 million in direct activity).
- **\$130.5 million** additional incomes and salaries paid to households (including \$73.5 million directly).
- **1,342 additional FTE jobs** (including 781 additional FTE jobs directly related to additional construction activity).

4.2.2 Operational Phase

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

- **\$984.1 million** in output (including \$603.9 million in direct activity).
- **\$509.6 million** contribution to GRP (including \$310.3 million in direct activity).
- **\$290.8 million** in incomes and salaries paid to households (including \$180.0 million in direct income).
- **2,648 ongoing FTE jobs** (including 1,492 FTE directly related to activity in the TOD Rezoning Sites).

Table 4-3: Operational Impacts, Base and Proposal Case (TOD Sites, 2024-2044)

Indicator	Output (\$M)	GRP (\$M)	Incomes (\$M)	Employment (FTE)
Base Case				
Direct	\$366.2	\$188.5	\$109.5	896
Flow-on Type I (Production-induced)	\$132.4	\$67.9	\$38.8	340
Flow-on Type II (Consumption-induced)	\$98.7	\$53.2	\$28.5	362
Total	\$597.2	\$309.6	\$176.7	1,598
Proposal Case				
Direct	\$603.9	\$310.3	\$180.0	1,492
Flow-on Type I (Production-induced)	\$217.9	\$111.8	\$63.9	560
Flow-on Type II (Consumption-induced)	\$162.4	\$87.5	\$46.9	596
Total	\$984.1	\$509.6	\$290.8	2,648
Net Operational Impacts				
Direct	\$237.7	\$121.8	\$70.5	596
Flow-on Type I (Production-induced)	\$85.5	\$43.9	\$25.1	220
Flow-on Type II (Consumption-induced)	\$63.7	\$34.3	\$18.4	234
Total	\$386.9	\$200.0	\$114.1	1,050

Note: Totals may not sum due to rounding.
Source: Atlas Economics

Compared with the Base Case, the Proposal Case facilitates an uptick in development take-up, providing more floorspace to accommodate a greater number of businesses and employment activity. This accordingly results in greater levels of output and contribution to the local economy.

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

- **\$386.9 million** additional in output (including \$237.7 million in direct activity).
- **\$200.0 million** additional in contribution to GRP (including \$1.2 billion in direct activity).
- **\$114.1 million** additional incomes and salaries paid to households (including \$70.5 million directly).
- **1,050 additional FTE jobs** (including 596 additional FTE jobs directly related to activity on the TOD Rezoning Sites).

4.3 Other Socio-Economic Impacts

Beyond the economic impacts generated by the Proposal during the Construction Phase and upon becoming operational, other more indirect economic and social impacts are expected from delivery of the Revised Precinct Plan.

- **Capitalise on Significant Transport Infrastructure Investment**

The soon to be delivered, \$370 million Crows Nest Metro Station forms part of the Sydney Metro City and Southwest metro line. The total cost of this project is estimated to be in the order of \$20.5 billion.

Development of the surrounding area will capitalise on this significant level of public infrastructure investment, driving throughfare within the new station and generate additional taxation revenue through the delivery of new housing and employment floorspace.

- **Partially Address Local Housing Demand**

The North Sydney, Lane Cove and Willoughby LGAs are projected to require an additional ~16,400 dwellings over the 2022-2041 period – equating to ~868 dwellings per annum. The TOD Rezoning provides theoretical capacity for 3,255 dwellings. This represents approximately 20% of these LGAs total dwelling need to 2041.

- **Support Housing Affordability**

Affordable housing contributions are anticipated to sought in conjunction with the Revised Precinct Plan. Delivery of Affordable Housing will support the creation of a diverse local community and provide accommodation for a mix of households, including key workers seeking housing proximate the St Leonards Health and Education Precinct.

- **Increase in Rates and Taxation Revenues**

Along with greatly increased economic activity, development of the TOD Rezoning Sites will support significant taxation revenues to all levels of government including Council rates, local and State development contributions, payroll tax, stamp duty, land tax, and income tax.

4.4 Summary of Findings

Overall, development resulting from the TOD Rezoning is shown to deliver significant and positive economic impacts to the local economy and will be an important in facilitating additional housing supply in the current housing crisis.

During construction, the TOD Rezoning is projected to generate significant economic impacts for the North Sydney, Lane Cove and Willoughby LGAs:

- **\$1.98 billion** in output (including \$1.37 billion in direct activity).
- **\$635.0 million** contribution to GRP (including \$326.8 million in direct activity).
- **\$399.4 million** in incomes and salaries paid to households (including \$224.6 million in direct income).
- **4,116 FTE jobs** (including 2,398 FTE directly employed over the course of construction activity).

When operational, development facilitated through the TOD Rezoning is estimated to result in an annual **net increase in economic activity** with:

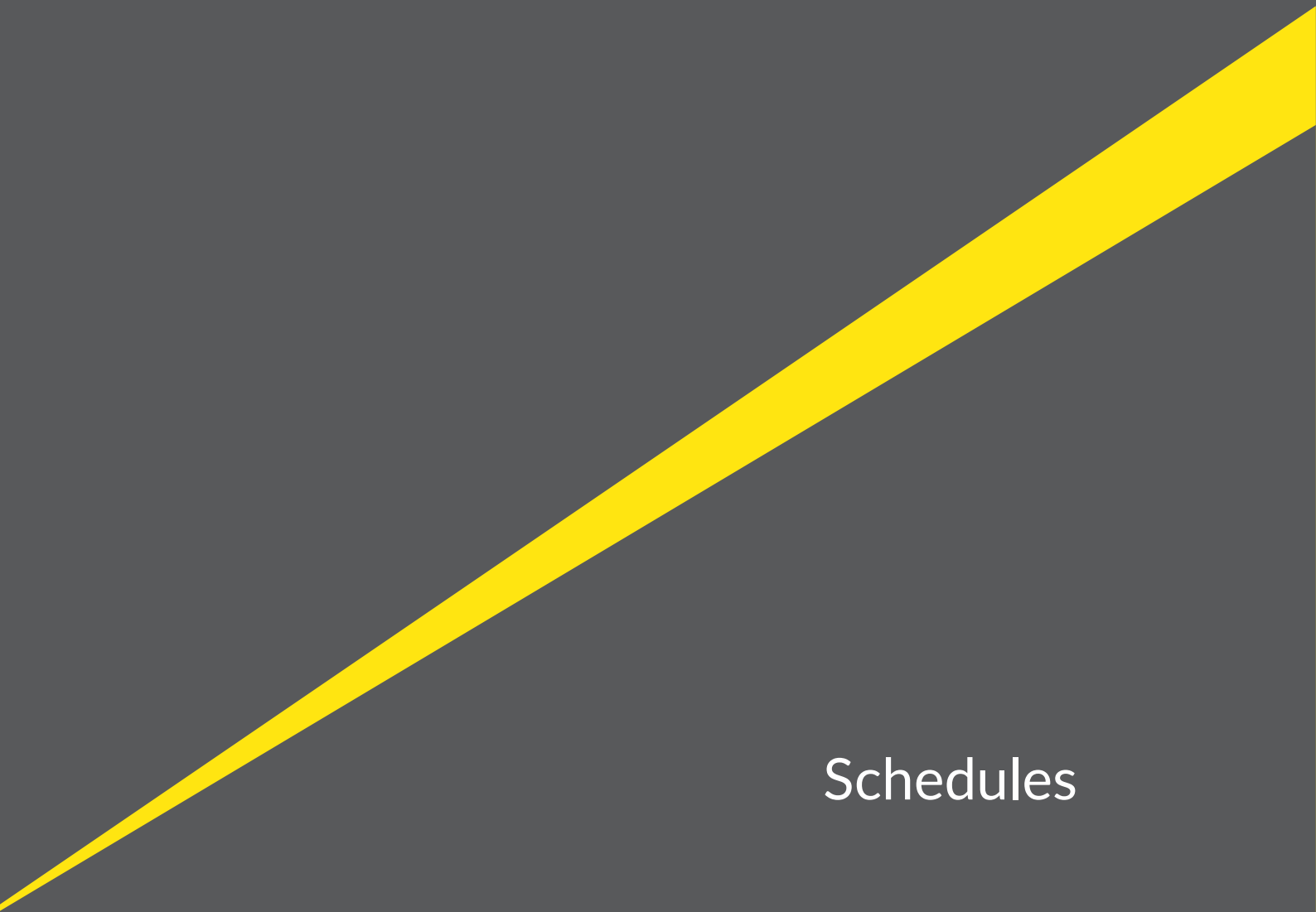
- **\$386.9 million** additional in output (including \$237.7 million in direct activity).
- **\$200.0 million** additional in contribution to GRP (including \$1.2 billion in direct activity).
- **\$114.1 million** additional incomes and salaries paid to households (including \$70.5 million directly).
- **1,050 additional FTE jobs** (including 596 additional FTE jobs directly related to activity on the TOD Rezoning Sites).

The economic impacts estimated in this Chapter demonstrates the TOD Rezoning has economic merit, having the ability to contribute significantly to the local economy.

The TOD Rezoning is also considered to have strategic planning and market merit, catalysing upon significant public transport investment and delivery additional housing during a period of chronic undersupply.

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Schedules

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** (indirect 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 S1-1: 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 or Proposal either directly or indirectly.
Employment	Employment positions generated by the Project or Proposal (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 2021-2022 Australian transaction table (ABS, 2024a).

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, 2022) using the Flegg Location Quotient and Cross Hauling Adjusted Regionalisation Method (CHARM). See Norbert (2015) and Kronenberg (2009) for further details. Where required, values were indexed to current dollar values using CPI (ABS, 2024b).

Modelling Limitations and Assumptions

Input-Output modelling is subject to a number of key assumptions and limitations (ABS, 2024a):

- **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 Base Case and Proposal, it is necessary to distinguish economic impacts during the construction phase and those economic impacts that will be more permanent following construction completion.

- **Construction Phase:** Construction activity will draw resources from and thereby generate economic activity in the North Sydney and Willoughby LGA economies, as well as from outside both LGAs. Assumptions are made on the proportion sourced from within and from outside the North Sydney and Willoughby LGAs.
- **Operational Phase:** Estimated ongoing economic activity has been divided into:
 - Economic activity from businesses operating within the Precinct (including dispersed employment activity from persons working from home in residential dwellings created under the Proposal Case).

Construction Phase

For modelling purposes, construction costs (including contingency) for the Proposal Case were broken down into their respective Australian and New Zealand Standard Industrial Classification (ANZSIC) industries based on the projected take-up of development to 2044:

- **Base Case**
 - Take-up of ~20,100sqm of non-residential floorspace over 2024-2044 (avg. of 1,000sqm per annum).
 - Take-up of 1,076 dwellings over 2024-2044 (~54 dwellings per annum).
- **Proposal Case:**
 - Take-up of ~31,000sqm of non-residential floorspace over 2024-2044 (avg. of 1,500sqm per annum).
 - Take-up of 1,587 dwellings over 2024-2044 (~80 dwellings per annum).

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

Table S1-2: Construction Cost Allocation (Including Contingency)

Work Type	Base Case (\$M)	Proposal Case (\$M)	ANZSIC
Commercial	\$126.7	\$195.4	Non-Residential Building Construction (90%) Construction Services (10%)
Residential	\$711.8	\$1,049.8	Residential Building Construction (90%) Construction Services (10%)
Site Works and Landscaping	\$16.8	\$24.9	Heavy and Civil Engineering Construction (90%) Construction Services (10%)
Professional Services	\$85.52	\$127.01	Professional, Scientific and Technical Services (100%)
Total	\$940.8	\$1,397.1	-

Note: Totals may not sum due to rounding.

Source: Atlas Economics

Of the above capital outlay, not all activity will be undertaken within the North Sydney, Lane Cove or Willoughby LGAs. It was assumed:

- ~75% of direct expenditure on construction-related activity 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, Lane Cove or Willoughby LGAs 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 the North Sydney, Lane Cove or Willoughby LGAs).
 - 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 the North Sydney, Lane Cove or Willoughby LGAs would purchase goods/ services locally.

Operational Phase

In order to model the economic impacts, operational employment levels were categorised into the ANZSIC industries.

Employment was estimated through converting the envisaged floorspace in each scenario based on industry standard workspace ratios (Landcom, 2019, Atlas estimates).

Estimates were also generated for potential dispersed employment (i.e. residents working from home). Direct employment was then converted to an annual turnover estimate using the ratios in the transaction tables developed for this project.

Table S1-3 summarises the operational employment and turnover estimates for both the Base and Proposal Cases over the 2024-2024 period.

Table S1-3: Operational Employment and Turnover Estimates (2044)

Florspace Type	Florspace (sqm)	Job Density (sqm/FTE)	Employment (FTE)	Direct Turnover (\$M)	ANZSIC Allocation
Base Case					
Retail	5,028	50.0	100	\$15.6	<ul style="list-style-type: none"> Food and Beverage Services (50%) Retail Trade (50%)
Commercial	15,083	20.0-50.0 (avg. of 27.2/sqm)	679	\$308.0	<ul style="list-style-type: none"> Information Media and Telecommunications (12.5%) Financial and Insurance Services (12.5%) Rental, Hiring and Real Estate Services (12.5%) Professional, Scientific and Technical Services (12.5%) Administrative and Support Services (12.5%) Public Administration and Safety (12.5%) Education and Training (12.5%) Health Care and Social Assistance (12.5%)
Dispersed Employment ²	1,076 dwellings	2% vacancy rate, avg. 1.5 workers/ with 7.5% of residents WFH ¹	119	\$42.6	As per the North Sydney, Lane Cove and Willoughby LGA Place of Usual Residence employment mix (ABS, 2022).
Proposal Case					
Retail	7,753	50.0	155	\$24.3	<ul style="list-style-type: none"> Food and Beverage Services (50%) Retail Trade (50%)
Commercial	23,260	20.0-50.0 (avg. of 27.2/sqm)	1,047	\$475.1	<ul style="list-style-type: none"> Information Media and Telecommunications (12.5%) Financial and Insurance Services (12.5%) Rental, Hiring and Real Estate Services (12.5%) Professional, Scientific and Technical Services (12.5%) Administrative and Support Services (12.5%) Public Administration and Safety (12.5%) Education and Training (12.5%) Health Care and Social Assistance (12.5%)
Dispersed Employment ²	1,587 dwellings ¹	2% vacancy rate, avg. 1.5 workers/ with 7.5% of residents WFH ¹	292	\$104.5	As per the North Sydney, Lane Cove and Willoughby LGA Place of Usual Residence employment mix (ABS, 2022).

Totals may not sum due to rounding.

¹ Estimate considering post-COVID trends.

Source: Atlas Economics

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