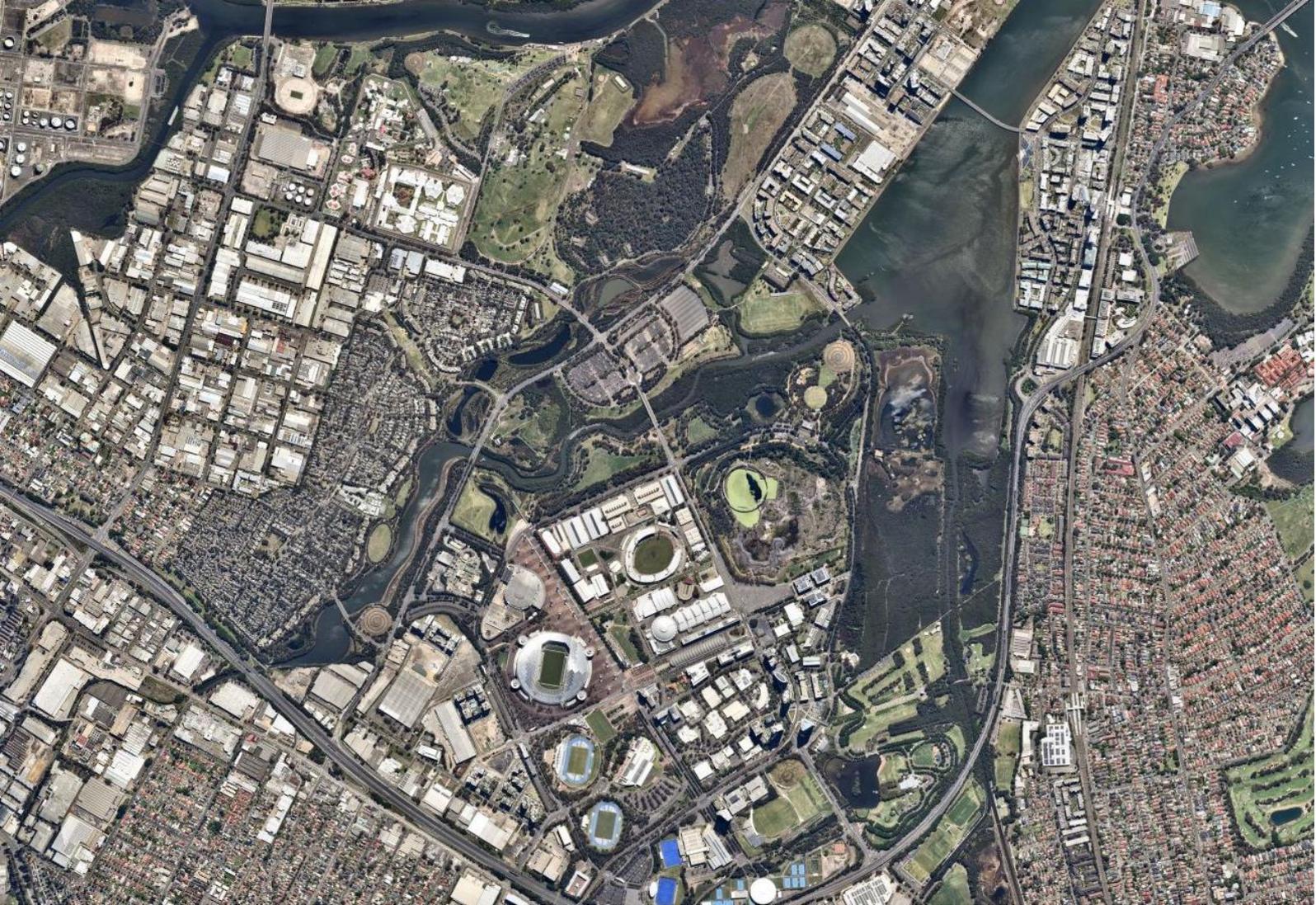


Annexure H:

Economic Inputs into Sydney Olympic Park Master Plan 2050



Economic inputs into Sydney Olympic Park Master Plan 2050

Sydney Olympic Park Authority

February | 2024

August | 2025 (Post Exhibition Addendum)

Final Report





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Addendum

Introduction

Sydney Olympic Park Master Plan 2050 (Master Plan 2050) provides a coordinated, long term development plan to support the ongoing transformation of Sydney Olympic Park into a thriving suburb, strategically located in the centre of Greater Sydney.

Master Plan 2050 aims to balance certainty with flexibility enabling Sydney Olympic Park's future to be resilient, dynamic and able to leverage future opportunities and technologies not yet known.

The draft Master Plan 2050 was exhibited from 28 October 2024 to 29 November 2024. The exhibition package included the following:

- The Master Plan 2050
- Explanation of Intended Effects identifying associated amendments to *State Environmental Planning Policy (Precincts – Central River City) 2021* (Central River City SEPP 2021)
- Supporting technical reports.

A total of 498 submissions were received from stakeholders, the community, and leaseholders.

A range of issues were raised in the submissions to the draft Master Plan 2050 and supporting technical reports, which related to:

- Housing and job targets
- Land uses
- Building heights, floor space ratio (FSR) and miscellaneous built form controls
- Transport and parking
- Open space and landscaping
- Infrastructure provision
- Environmental considerations
- Events

In response to the submissions, Master Plan 2050 has been refined, and supplementary or updated technical reports have been provided.

This document responds to issues raised regarding economics both within Master Plan 2050 and the economic inputs for Master Plan 2050.

Submissions summary

Following public exhibition of Master Plan 2050, the following key issue themes emerged from relevant submissions:

- **Balance of jobs to population:** submissions generally questioned the overall balance of jobs to housing or population. On one hand, concerns were raised around the proposed increase in residential density and recommended the preservation of jobs capacity. On the other hand, concerns were raised around the supportability of non-residential floorspace (addressed separately below), in particular the supportability of proposed retail FSRs. There was also a submission requesting an updated view of the population and employment projections from DPHI, given that the Master Plan documentation had been finalised prior to the release of new projections from the Department. This addendum provides additional evidence and updated information in response.
- **Knowledge sector jobs:** a submission requested further consideration and clarification on the presence and/or importance of knowledge sector jobs to Master Plan 2050. In response, this addendum considers, along with commentary around the jobs to population balance above, the importance of maintaining urban agglomeration or critical mass to non-residential floorspace.
- **Retail market analysis:** several submissions raised concerns about the supportability of proposed retail floorspace in Master Plan 2050. Concerns generally pointed in the direction of preparing a retail assessment for the precinct that provides evidence in support of the floorspace and direction and types of retail supportable. This addendum includes a high-level retail market analysis in response to address the issue.
- **Visitor accommodation and services:** a submission questioned whether visitor demographics and visitor accommodation had been factored into Master Plan 2050. A brief section in this addendum has been added providing a response to the issue.

Balance of jobs to population

The nature of submissions regarding the jobs-to-housing balance in Master Plan 2050 generally centred around the need to understand rationales and the evidence in support of those urban design targets. This section provides a context and additional evidence in support of the questions raised by highlighting:

- The **benefits of achieving urban agglomeration** which underpin clustering of jobs, housing, infrastructure and services
- A **comparative analysis of other strategic and employment centres** throughout the Greater Sydney region
- **Updated projections of population and employment** from the Department of Planning Housing and Infrastructure (DPHI)

Benefits of urban agglomeration

Urban agglomeration – where dense centres provide housing, jobs, services, and infrastructure – is a central element to the balance of jobs and population within Sydney Olympic Park. Providing a variety of amenities, services, and attractions means that residents and local workers have access to their daily needs, and visitors can achieve more in one trip when more things they need can be accomplished in one place. Such successful centres generate meaningful benefits including:

- Better utilisation of existing infrastructure (such as the Metro and existing green spaces)
- Reduced need for car travel, lowering costs for residents and workers
- Commercial activity and business clustering to generate collaboration and industry specialisation.

Clustering of organisations in related industries stimulates competition and cooperation. It increases the productivity of organisations, leads to efficiencies and encourages innovation, ultimately supporting jobs and economic growth. However, the value of physical proximity is changing with virtual agglomeration lessening the need to physically cluster.¹

Jobs to population balance

One way to view urban agglomeration is from a jobs-to-population balance. As an easily quantifiable metric, the ratios for the exhibited and amended Master Plan 2050 (**Table 1**) viewed alongside with an analysis of the ratios in 45 other precincts (**Figure 1**) illustrates how the amended Master Plan 2050 jobs-to-population balance mirrors those of most other centres (especially master-planned infill centres) in the Greater Sydney area.

Table 1 shows key statistics for the exhibited and amended Master Plan. With amendments, the Master Plan 2050 job totals have declined by more than 6,000, whereas the implied population (in dwellings) has increased by approximately 2,300 persons. Resulting from these changes is a drop in the jobs-to-population balance from 1.1 jobs per person to 0.8 jobs per person.

TABLE 1: MASTER PLAN 2050 JOBS TO POPULATION BALANCE

	Exhibited Master Plan 2050	Amended Master Plan 2050
Jobs	32,333	Up to 26,000
Population	28,650	Up to 33,000
Dwellings	12,689	Up to 15,000
Ratios		
Jobs-to-Housing ²	2.5	1.7
Jobs-to-Population	1.1	0.8

Source: SJB; SGS Economics & Planning, 2025

¹ Schmahmann, L (2016) as cited in Gilbert + Tobin (2021), *Innovation Precincts -How to Make Lightning in a Jar*, https://cdn.bfldr.com/FM3YDCO2/at/kfnm6kcgscb5brcx27pknr9h/Innovation_Precincts_How_to_Make_Lightning_in_a_Jar_21102021.pdf

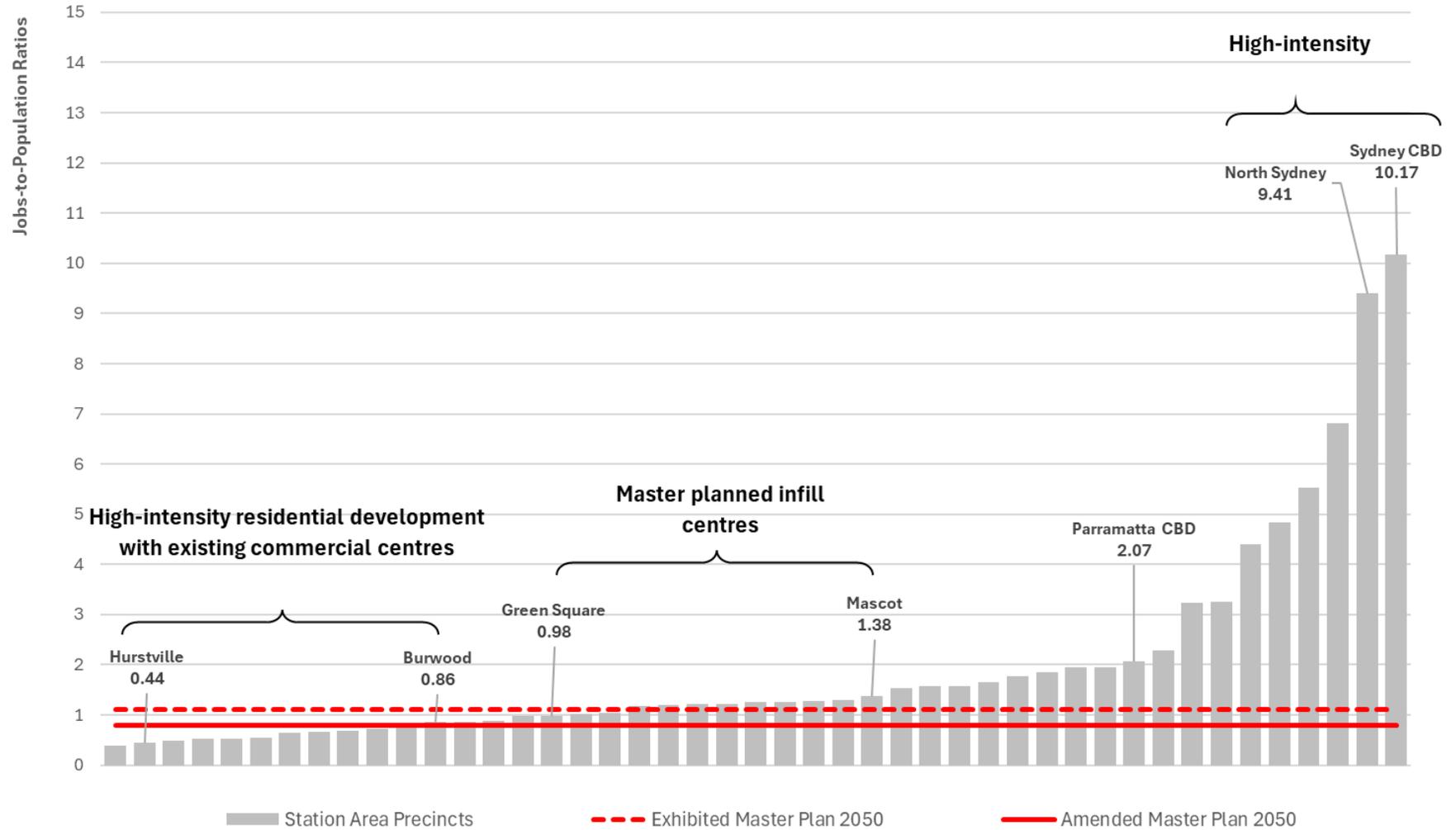
² The exhibited Master Plan assumed a ratio of 2.3 persons per household in the precinct.

Although a static metric on its own, the jobs-to-population ratio, in the context of other strategic centres, becomes a more meaningful characterisation. As illustrated in **Figure 1**, the exhibited and amended jobs-to-population ratios for Sydney Olympic Park are illustrated against 45 other strategic centres throughout the Greater Sydney area. This contextualisation found:

- **Master-planned infill precincts:** Master Plan 2050 sits within the range of what could be characterised as other master-planned infill precincts. The amended Master Plan 2050 sits at the lower end of this range, which includes Green Square at 0.98 jobs to population and Mascot at 1.38 jobs to population.
- **Higher-intensity residential precincts:** this typology is characterised by higher-intensity residential precincts within existing commercial centres. In this context, Hurstville sits on the low end at 0.44 jobs to population and Burwood at the upper end at 0.86 jobs to population.
- **High-intensity employment precincts:** At the very upper end of precincts are those of North Sydney or the City of Sydney CBD with jobs to population ratios between 9 jobs to 1 resident. And while not in this very high range, even the City of Parramatta CBD sits at 2 jobs to 1 resident, more than double the employment intensity of the amended Master Plan 2050.

The analysis was completed using population and employment statistics from the most recent TfNSW Travel Zone Projections (TZPs), and data points representative of today's conditions. The analysis was completed by analysing the travel zones surrounding transit station areas, i.e., to reflect the transport system accessibility to Sydney Olympic Park .

FIGURE 1: JOBS TO POPULATION RATIOS IN GREATER SYDNEY EMPLOYMENT CENTRES

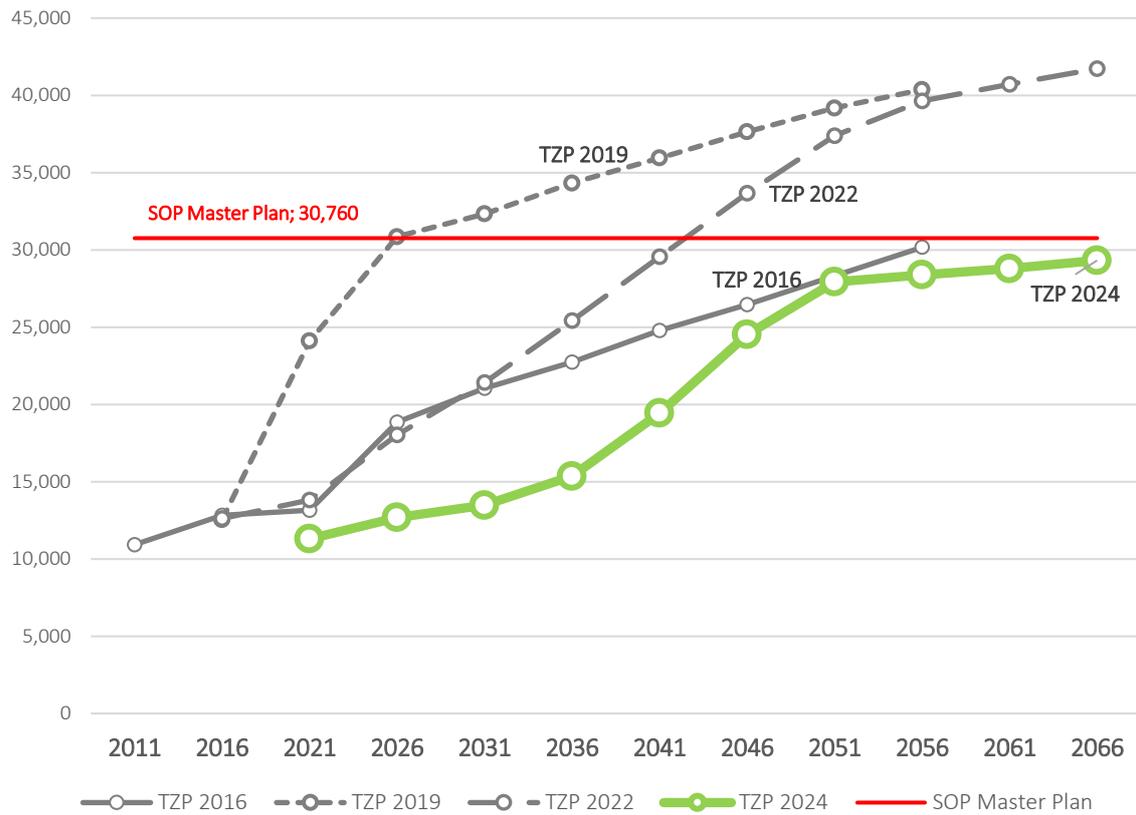


Source: TfNSW TZP; SGS Economics & Planning, 2025

Projections

A review of the most recently-released employment and population projections was undertaken to identify current understanding of growth potentials in Sydney Olympic Park over the longer-term. As illustrated in **Figure 2**, a few of the previous employment projections had anticipated SOP growing to more than 40,000 jobs (the 2019 and 2022 projections), while the older (2016) and newest (2024) projections imply that the precinct could grow to approximately 30,000 jobs by build out.

FIGURE 2: HISTORIC TZP EMPLOYMENT PROJECTIONS FOR SYDNEY OLYMPIC PARK

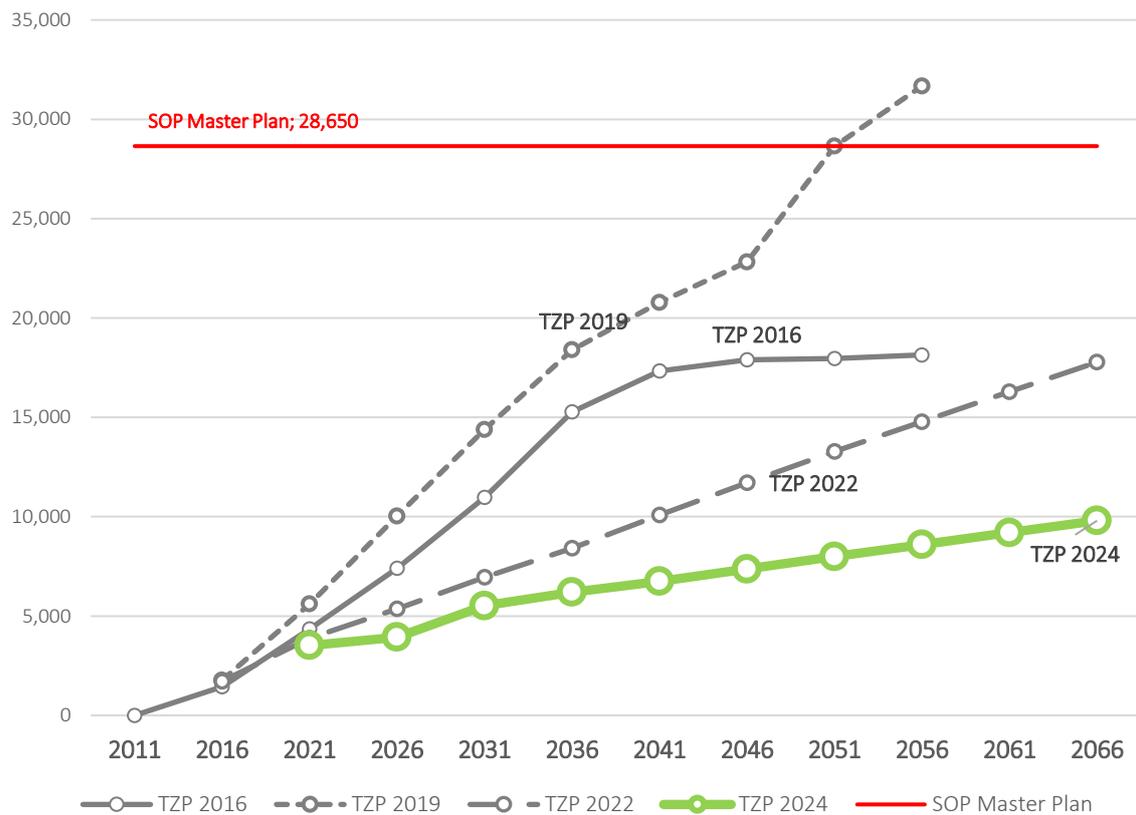


Source: TfNSW; DPHI; SGS Economics & Planning, 2025

As illustrated in **Figure 3**, past projections of population for the precinct seem to differ substantially on the precinct as a population centre. In this review of historic projections, it appears that, while the oldest (2016) projections had the precinct growing to just under 20,000 residents by build out, the 2019 projections seemed to gear the precinct for a larger population of more than 30,000 residents. More recently, the 2022 projections seemed to return to the build out figure of approximately 20,000 residents but pushed back that growth by a decade. In the most recent version of the projections, not only has the scale of population been reduced to approximately 10,000 residents, but the growth has been subsequently pushed back further.

In viewing these population and employment projections, however, it is important to note the circularity of reasoning influencing such projections. In part, these projections have ostensibly been produced via considerations for infrastructure capacity, zoning and rezoning efforts, density assumptions, all of which are related to the Sydney Olympic Park master planning efforts themselves. In other words, current or contemporary strategic planning process have always influenced projections for strategic centres and precincts like Sydney Olympic Park. As such, constraining master planning efforts to such projections creates a circularity of reasoning that ultimately points back to the need for a well-articulated master plan vision that contains guidance for a balance of jobs, housing, infrastructure, amenity, and accessibility.

FIGURE 3: HISTORIC TZP POPULATION PROJECTIONS FOR SYDNEY OLYMPIC PARK



Source: TfNSW, 2024; SGS Economics & Planning, 2025

Knowledge sector economy

Focusing on the commercial floorspace provisions in Master Plan 2050, the intent is to accommodate a diversity of jobs, and capitalise on projections of growth in the knowledge sector economy. Below is a high-level summary of alignments with national and regional drivers:

- **National drivers:** National jobs projections³ show that Australia is anticipated to add 1,962,000 jobs between 2024 and 2034. Of those, professional, scientific and technical services, which are a cornerstone of knowledge-based employment and a driver of commercial office space, are projected to grow from 9.2% of total employment to 9.7% - a total increase of 254,000 jobs overall, and the second-largest increase in employment by industry (behind healthcare and social assistance).
- **Regional drivers:** As a share of national job growth, NSW is anticipated to be the recipient of approximately 523,000 jobs between 2024 and 2034.⁴ Moreover, population growth **increases demand for industrial, commercial, and mixed-use employment land** – particularly in urban areas. As it relates to Master Plan 2050, as land availability in the Sydney CBD and other centres becomes more limited and competition for land intensifies for higher-order residential uses in the Parramatta CBD in particular, provision of commercial floorspace (and supportable rents) in Sydney Olympic Park will be in a prime position to absorb demand⁵.
- **The NSW Industry Policy⁶ also emphasises the role of local manufacturing and industry as a key sector for growth.** Manufacturing, and high-tech manufacturing specifically, requires a strong underpinning of an innovation and startup ecosystem. Sydney Olympic Park has optimal connectivity to the Sydney road network, and is in a position to support connections to local industrial areas. A crucial resource in the startup ecosystem is access to R&D, fabrication, and manufacturing space. These allow for startups to scale into high-growth companies. Sydney Olympic Park provides close access to such areas, which are not easily provided in established commercial zones.
- **The NSW Intergenerational Report⁷** highlights the long-term growth in social and business services, with these anticipated to account for 52% of total jobs in 2034/35. Demand is anticipated to be high for analytical and problem-solving skills. These jobs are likely to be more office-based, with businesses benefiting from physical proximity to their customers, and each other.

³ Jobs and Skills Australia, *Employment projections for the decade ahead* <https://www.jobsandskills.gov.au/publications/towards-national-jobs-and-skills-roadmap-summary/employment-projections-for-the-decade-ahead>

⁴ Jobs and Skills Australia, *Employment projections for the decade ahead* <https://www.jobsandskills.gov.au/publications/towards-national-jobs-and-skills-roadmap-summary/employment-projections-for-the-decade-ahead>

⁵ City of Parramatta, December 2024, *Jobs must be the focus to grow our City's commercial heart*

<https://www.cityofparramatta.nsw.gov.au/council/latest-news/jobs-must-be-the-focus-to-grow-our-citys-commercial-heart>

⁶ Investment NSW March 2025, *NSW Industry Policy* via <https://www.investment.nsw.gov.au/assets/2025-Policy-and-Strategies/NSW-Industry-Policy/Investment-NSW-NSW-Industry-Policy-V8-accessible.pdf>

⁷ <https://www.nsw.gov.au/sites/default/files/noindex/2024-11/nsw-treasury-2021-22-nsw-intergenerational-report.pdf>

Retail

Table 2 summarises the retail floorspace demand for Sydney Olympic Park by 2051 with key retail category distributions. The total columns display the total retail floorspace demand generated from residents, job holders and visitors combined.⁸ The analysis supporting these summary figures, including methodology, data sources, boundary definitions and assumptions is provided under separate cover.

TABLE 2: RETAIL FLOORSPACE DEMAND SUMMARY BY RETAIL CATEGORY, 2051 (SQM)

Retail category	Source of demand				Total Floorspace Demand ⁹	
	Residents		Job holders	Visitors	Base	High
	Base	High				
	A	B	C	D	A+C+D	B+C+D
Food & Groceries	4,900	9,400	8,000	70	13,000	17,500
Personal and recreational goods	19,000	21,100	2,400	0	21,500	23,600
Clothing and shoes	13,400	22,100	2,800	30	16,300	24,900
Restaurants & Cafes & Take-away	18,200	20,200	1,600	10	19,800	21,800
Personal services	3,400	3,800	1,000	0	4,500	4,800
Print Media and Books	80	90	100	0	160	170
Total	59,100	76,700	15,900	100	75,100	92,700

Source: SJB; SGS Economics & Planning, 2025

Visitor demographics

As Master Plan 2050 does not specifically put forward a vision for an increase in event activities and therefore visitors, visitor demographics and their relationship with the demand for short term accommodation was not explored in this study. Visitor spending was examined as part of the retail floorspace demand assessment (referenced earlier), but the assumption was made that no changes to profile were appropriate.

⁸ The total low scenario is based on the residents base demand. The total high scenario is based on the residents high demand.

⁹ Numbers have been rounded to the nearest 100. The Print, Media and Books category has been rounded to the nearest 10. Numbers in totals column, therefore, may not add up exactly.

1. Introduction

Sydney Olympic Park is transforming into a thriving suburb strategically located in the centre of Greater Sydney. It is a suburb that benefits from diverse land uses, proximity to Sydney and Parramatta central business districts, and is of national significance, all of which have played an important role in its evolution since hosting the Sydney 2000 Olympic and Paralympic Games. As the 640-hectare site continues to evolve into vibrant neighbourhoods, it will reconnect with its Wangal roots and extensive natural assets to provide a meaningful connection to Country.

The Sydney Olympic Park 2050 Vision & Strategy (the Vision) was released in June 2022 and serves as a roadmap to inform decision-making for the next three decades. Sydney Olympic Park Master Plan 2050 (Master Plan 2050) is the next stage of strategic planning for Sydney Olympic Park. Master Plan 2050 will ensure a coordinated, long-term development plan is prepared for the whole precinct.

The most recent iterations of a master plan for Sydney Olympic Park were completed in 2018 and 2021, to support the delivery of Sydney Metro West. Building upon the Vision, Master Plan 2050 considers Sydney Olympic Park holistically, seeking opportunities to integrate thinking about the parklands and urban core together, enhancing its role in Greater Sydney.

The Vision articulates an aspiration to position Sydney Olympic Park as Sydney's Green Beating Heart: a place energised with everyday life, Country-first, nature positive and where Sydney comes to play.

In 2050, Sydney Olympic Park will be a complex, layered suburb offering a rich and varied range of experiences. Many will live and work here, and others will visit for events, diverse attractions, or everyday retail and entertainment. Master Plan 2050 aims to balance certainty with flexibility enabling Sydney Olympic Park's future to be resilient, dynamic and able to leverage future opportunities and technologies not yet known.

This report contains analysis to support the development of Master Plan 2050. These are divided into the following chapters:

Chapter 1: Future population profile. This chapter provides an estimation of the 2050 population forecast for Sydney Olympic Park, including scenarios that reflect different total populations and population compositions.

Chapter 2: Future employment profile. This chapter provides an estimation of total employment numbers in Sydney Olympic Park by 2050. It includes a breakdown of industries to align with the intent of the 2050 Place Vision and Strategy.

Chapter 3: Land ownership considerations. This chapter compares alternative approaches to land ownership and dispensation.

Chapter 4: Affordable Housing. This chapter outlines the rationale for affordable housing provision and provides a proposed approach to how it can be delivered across Sydney Olympic Park.

Chapter 5: Benefits of Master Plan 2050. This chapter describes a range of benefits that Master Plan 2050 can provide.

The study requirements covered in this report are outlined in Table 3 below:

TABLE 3: STUDY REQUIREMENTS

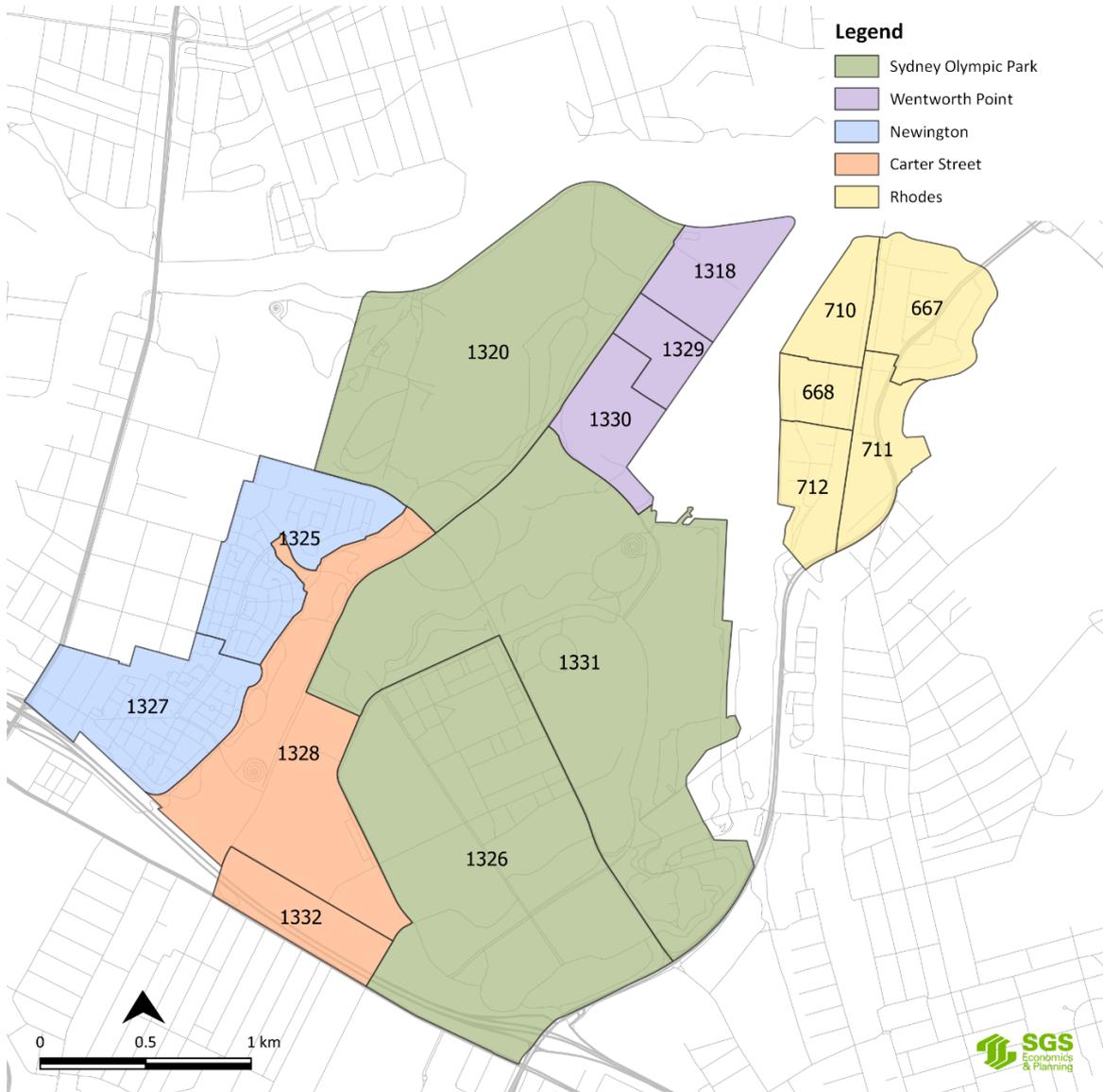
Additional Economic Study Requirement	Addressed Within
Employment and floorspace demand assessment	Chapter 2
Describe strategic economic benefits	Chapter 5
Demographic and population overview (existing and projected)	Chapters 1 and 2
Affordable rental housing mechanisms	Chapter 4

Defining the areas for analysis

In analysing residential and employment scenarios in later chapters, the geographic areas were selected from the Transport for NSW population and dwelling travel zone projections (TZP). The projections are created from several data sources, including population and dwelling projections from the Department of Planning and Environment (DPE), census data, and data regarding future infrastructure. The current TZP numbers were finalised in 2022. For the Sydney Olympic Park travel zones, this also accounts for Sydney Metro West.

The TZP zones in the Sydney Olympic Park locality are shown in Figure 4 below. Two *different* geographic definitions have been considered for the residential population and the employment scenarios considered in later chapters. This is discussed further below.

FIGURE 4: TRAVEL ZONES OF SYDNEY OLYMPIC PARK AND SURROUNDS



Source: SGS via TfNSW (2019)

The travel zones used for projections are typically defined geographically to consider the density of uses within an area. This is why zone 1320 is larger than the zones in Wentworth Point and Rhodes, where there are high densities of both residents and employment. Regardless, the geographies used to divide travel zones, are not always perfectly logical in following development patterns. As such, these geographic boundaries, in consideration with the current development patterns, need to be considered when understanding the study area and the tasks at hand below.

For population, only zones 1331 and 1326 have been included. Zone 1320 was excluded from the population analysis, as it includes parts of the north-west corner which have been developed in conjunction with Wentworth Point, which is outside of the study area.

For the employment analysis, all three Sydney Olympic Park travel zones have been considered. This includes zone 1320, which includes some development in the far north-east corner associated with Wentworth Point. However, jobs in this area, for instance groundskeeping and tourism jobs for the Newington Armory, are considered relevant and thus warrant the inclusion of this zone.

This is discussed further below.

Sydney Metro West

The Sydney Metro West business case prepared by SOPA in 2018 identified both a **Master Plan 2030 (2018 review)** scenario, as well as a **Master Plan 2030 (2018 review) Aspirational Growth** scenario. These outlined potential population and job scenarios. These have been taken as the existing expectations for Sydney Olympic Park. The scenarios are outlined in Table 4 below and form the basis for analysis and recommendations discussed throughout this report. These figures were also reflected within other strategic planning documents and are discussed further within Chapters 2 and 3.

TABLE 4: SUMMARY OF THE SYDNEY OLYMPIC PARK 2030 MASTER PLAN (2018 REVIEW)

Scenario	SOP Master Plan (2018 Review)	SOP aspirational growth	Difference between SOP MP and aspiration
Total floorspace	1,960,000	2,226,600	266,600
Dwellings	10,700	11,400	700
Residents	23,500	25,000	1,500
Jobs	34,000	46,400	12,400
Affordable housing (5%)	535	570	35

Source: Sydney Olympic Park Authority (2018)

Rethinking the 2030 Master Plan delivery timeframe

In understanding the context of the existing strategic plans of Sydney Olympic Park, the Master Plan 2030 (2018 review) scenario population and jobs figures, have been considered as a ‘full build-out’. Particularly with Sydney Metro West not forecast to be completed before 2030, it is considered unlikely that this full growth will be completed by that point (that is, in the next seven years from the writing of Master Plan 2050). This is considering the speed at which progress which would need to be made in strategic planning, development approvals, and construction, in order for residents and businesses to move in.

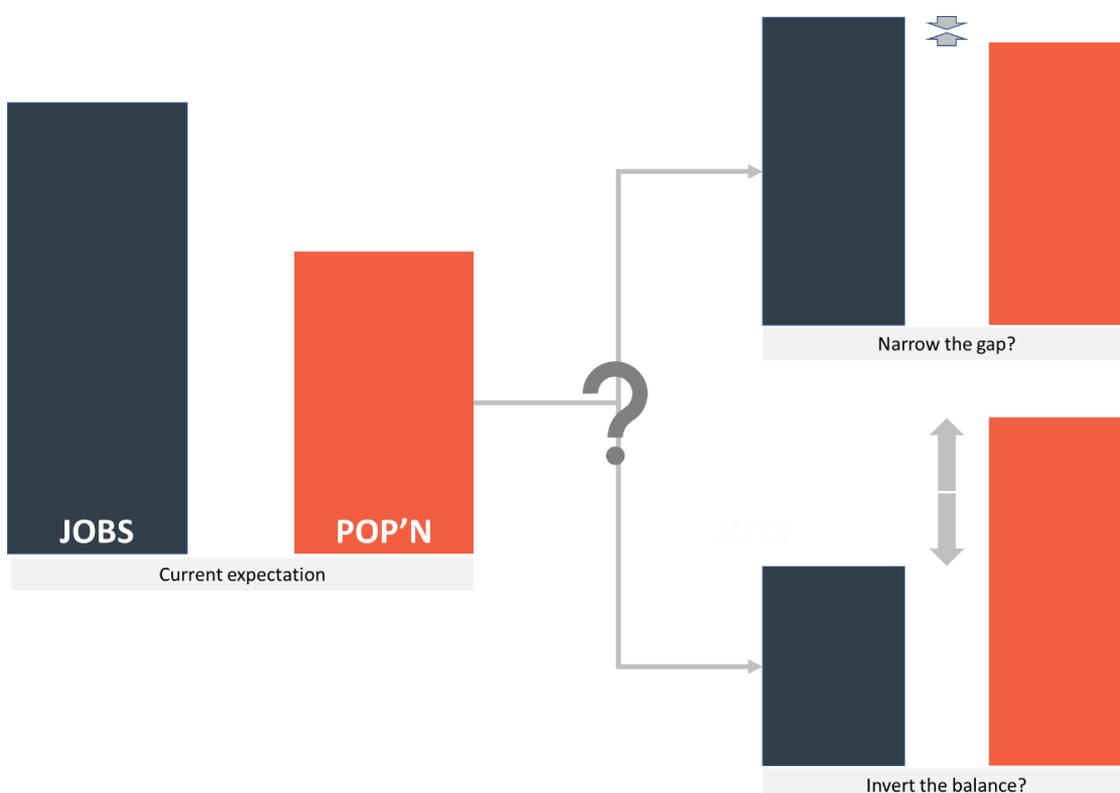
Accordingly, it is considered that the Master Plan 2030 population and jobs scenarios are a goal for the completion of Sydney Olympic Park’s next phase of development, not a projection that that growth will happen in that timeframe. This means that they continue to be suitable for analysis when considering the 2050 goal of the current work.

Rethinking Sydney Olympic Park’s jobs and population balance

In the scenario shown at the left-hand side of Figure 5, approximately representing the existing Master Plan 2030, jobs significantly outnumber residents. This is also reflected within the 2019 (pre-COVID-19) and 2022 (post-COVID-19) TZP forecasts, which are discussed in further detail in the following chapters. However, the Vision has a strong focus on housing and creating a thriving suburb. This raises the question of whether Master Plan 2050 should retain this balance towards jobs, whether the gap should be closed, or tip the balance towards a higher proportion of residents. These are illustrated on the right-hand side of Figure 5, and shown numerically in Table 5.

This report examines both the population and jobs profiles of Sydney Olympic Park to consider this balance as it was explored throughout the master planning process.

FIGURE 5: CONCEPTUAL PROCESS OF JOB-POPULATION BALANCE



Source: SGS 2023

TABLE 5: EMPLOYMENT AND POPULATION OVERVIEW

Scenario	Population	Employment
Master Plan 2030	23,500 – 25,000	34,000 – 46,400
TZP19 2051	28,650	39,181
TZP22 2051	14,511	37,380
Master Plan 2050 Provision	25,000 – 28,650	30,760

Source: SGS 2023 via TfNSW (2019 and 2022) and SJB (2023)

2. Future population profile

This chapter profiles the possible future population of Sydney Olympic Park in 2050.

There are three population forecasts that exist currently for Sydney Olympic Park, which are from the 2030 Master Plan (2018 review), the SOP aspirational growth scenario and the travel zone projections.

This chapter examines these to do four things:

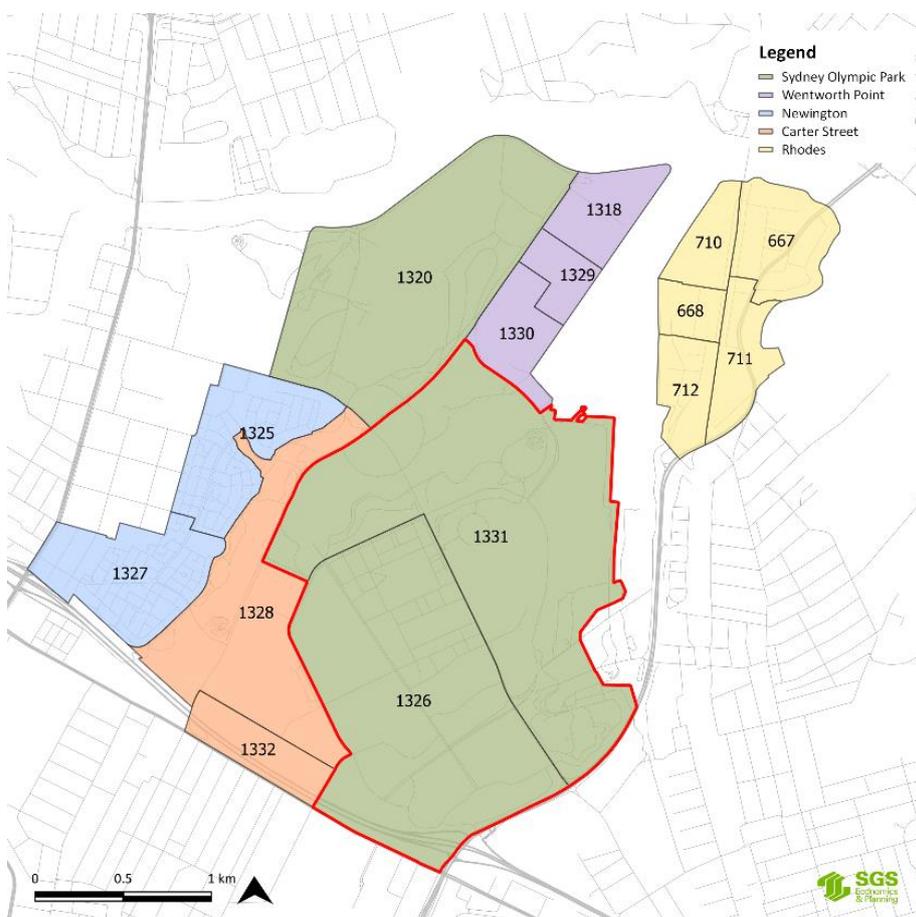
1. Validate the Master Plan 2050 dwelling supply
2. Test different population profiles to inform the likely future community profile in 2050 and need for greater housing diversity as outlined in the 2050 Place Vision and Strategy
3. Infers a potential projected population by 2050
4. Tests growth rate scenarios

2.1 Current population profile of Sydney Olympic Park

Current population breakdown

For the purposes of forecasting the population, the small area TZP population projections were used. As shown within Figure 6, zone 1320 was excluded from the analysis. This is because that zone includes parts of the north-west corner which have already been developed in conjunction with Wentworth Point, which is outside of the study area.

FIGURE 6: POPULATION ANALYSIS GEOGRAPHY



Source: SGS via TfNSW (2019)

2.2 Projected population profile of Sydney Olympic Park (2051)

Table 6 shows the population in 2016 and 2021 from ABS census data, with projected growth of the selected travel zones to 2051 for both the TZP22 and TZP19:

TABLE 6: PAST AND PROJECTED POPULATION OF SYDNEY OLYMPIC PARK

Year	Population – Census	Population – TZ22	Population – TZ19
2016	1,789		
2021	3,854		
2031		7,079	14,393
2046		11,882	22,824
2051		13,463	28,650

Source: SGS via TfNSW (2019 and 2022) and ABS Census data (2021)

The 2046 population projection has been included to understand the anticipated trajectory and growth rates in the latter half of the planning period. The reduction in projected population illustrated in the

2022 travel zone projections is likely in light of changes brought about by the COVID-19 pandemic, as well as the additional capacity in surrounding areas such as Camellia¹⁰. The reduction in the new 2051 projection should not detract from the vision underpinning Master Plan 2050, as providing the capacity for that growth to take place is still a priority, regardless of when it is delivered.

2.3 Insights from 2050 Place Vision and Strategy

The Sydney Olympic Park Place Vision and Strategy (the Vision) envisages a transformation of Sydney Olympic Park over the coming decades. While it does not specify total numbers of residents or jobs, it is built upon the premise that Sydney Olympic Park will grow as a thriving, high density, community-centric 21st Century suburb. The Vision is thus for Sydney Olympic Park to be home to significantly more people by 2050.

In addition to this aspiration, two key Strategic Directions are relevant to the development of the Master Plan 2050. The Place Vision and Strategy is supported by ten Strategic Directions that will form the basis of the Master Plan 2050 and will bring the place to life. The Strategic Directions are the distinctive elements of Sydney Olympic Park that, together, will define its identity. Each Direction covers specific aspects of the role Sydney Olympic Park will play as a thriving, interconnected neighbourhood. The two relevant strategic directions and actions are documented in the following table.

TABLE 7: STRATEGIC DIRECTIONS AND ACTIONS FROM THE 2050 VISION

	<p>Strategic Direction 1</p> <p>A place to call home</p>	<ul style="list-style-type: none"> ▪ Deliver diverse housing options, including affordable, essential worker, student, inter-generational, accessible and social housing ▪ Develop innovative housing solutions, including leasehold models for new residential, delivering nonprivate market housing, build-to-rent and the potential for different tenure models ▪ Ensure housing is integrated seamlessly with other uses and reflects the character, scale and diversity of the neighbourhood
	<p>Strategic Direction 2</p> <p>A liveable and complete community</p>	<ul style="list-style-type: none"> ▪ Provide social infrastructure to support a growing population and connect the Olympic Peninsula ▪ Activate the public domain with spaces for informal participation in and out of event time and create the conditions for local community use ▪ Provide a range of smaller spaces and events that cater to local interest and deliver new social infrastructure for creative and cultural production and participation ▪ Embed ongoing community participatory design and idea exchange processes into future planning and design activities

Source: Sydney Olympic Park Authority (2022)

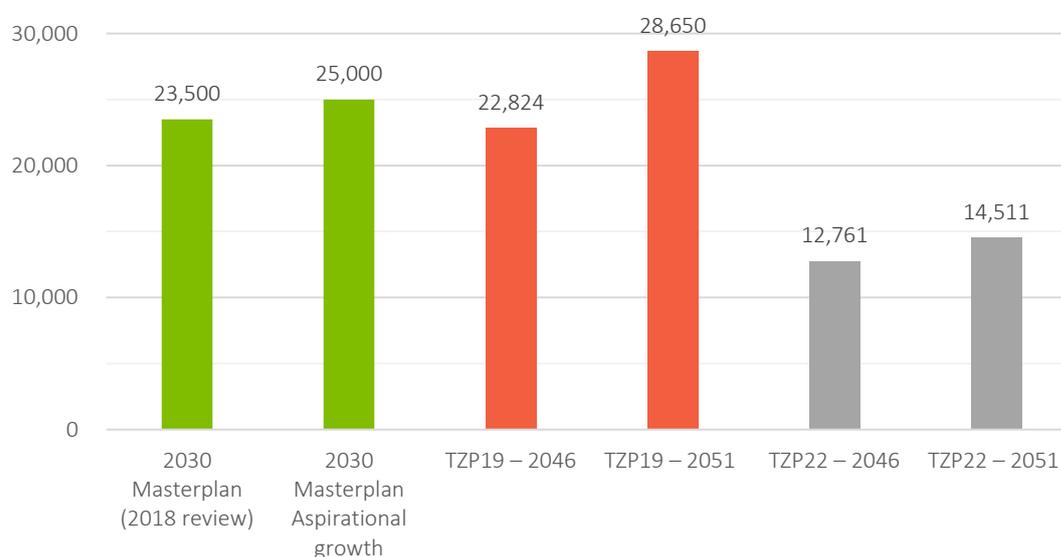
¹⁰ Department of Planning and Environment 2022, Camellia-Rosehill Place Strategy, via <https://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Camellia>

Translating this for Master Plan 2050 requires consideration of what type of place Sydney Olympic Park is aspiring to be by 2050. The intention to create a vibrant suburb presents an opportunity to examine what population target might be considered appropriate for 2050. The following sections examine this in more detail.

2.4 Comparing TZP and Master Plan 2030

The Sydney Olympic Park Master Plan 2030 (2018 Review) (current prevailing Master Plan) identified not only an anticipated 2030 Master Plan (2018 review) scenario, but also a 2030 Master Plan (2018 review) Aspirational Growth scenario: these were 23,500 and 25,000 residents respectively. These are considered in relation to the TZ projections below.

FIGURE 7: SOP POPULATION SCENARIOS



Source: SGS (2023) via Sydney Olympic Park Authority (2018) and TfNSW (2019 and 2022)

In the evaluation of land use forecasts, users are advised that demographic and economic totals at the individual travel zone level are not provided with the same level of confidence as those totals at the LGA, regional or statewide levels. Given the substantial change in recently-released travel zone projections, however, a few considerations may help to contextualise the significance of those changes:

- Integration of recently-released demographic data (e.g., estimated residential population, migration, etc.), which would reflect a part of the pandemic. Given the subordination and responsiveness of TZPs to control total changes, such shifts in overall demand potentials could have resulted in a rebalancing of these and surrounding TZs.
- Consideration for the impact that such fundamental shifts in demand drivers may have had on the calibration of underlying growth assumptions.
- Potential changes to the underlying assumptions of land use development capacity (e.g., built form, highest-and-best use, etc.)

- Potential changes to the assumptions regarding major land use developments (i.e., those projects with significant trip generation potentials), such as scale in dwellings or floorspace, phasing or timing, etc.
- However, the vision for Sydney Olympic Park as a thriving suburb remains the priority for the master planning process. Providing the capacity for the targets identified is a strategic imperative for this plan.
- The 2030 Master Plan (2018 review) assumes 23,500 people by final build out (notionally 2030 but likely to be later). The ‘aspirational growth’ case only increases this by 1,500 to 25,000 people. This number is a mid-point between the 2046 and 2051 TZ19 projections.
- The Sydney Olympic Park 2050 Place Vision and Strategy envisages Sydney Olympic Park becoming a thriving suburb. While it does not specify what the balance of jobs and population will be, it can be argued that the balance outlined in the current aspirational scenario (25,000 residents and 46,000 jobs, as discussed further in Chapter 3) does not fully reflect the focus on Sydney Olympic Park as a suburb. Nor does it take into consideration the changing nature of work. An increase in resident population by 2050, coupled with a decrease in jobs, can help to balance this.

The population scenario reflecting lower growth can be considered as the *minimum* that the Master Plan 2050 should plan for, while the upper bound could reflect an aspiration to try to achieve. Combined, these provide a range that Master Plan 2050 should aim for, while balancing out the need to deliver on a range of other aspirations of the 2050 Place Vision and Strategy

TABLE 8: POPULATION SCENARIOS SELECTED

Population scenario	2050 Population
Minimum level	25,000
Upper range	28,650

2.5 Master Plan 2050 dwelling capacity

The Sydney Olympic Park Master Plan 2050 identifies the following distribution of residential floorspace (1,167,409 sqm) and number of units (Table 9).

TABLE 9: PROPOSED MASTER PLAN DWELLING PROVISION

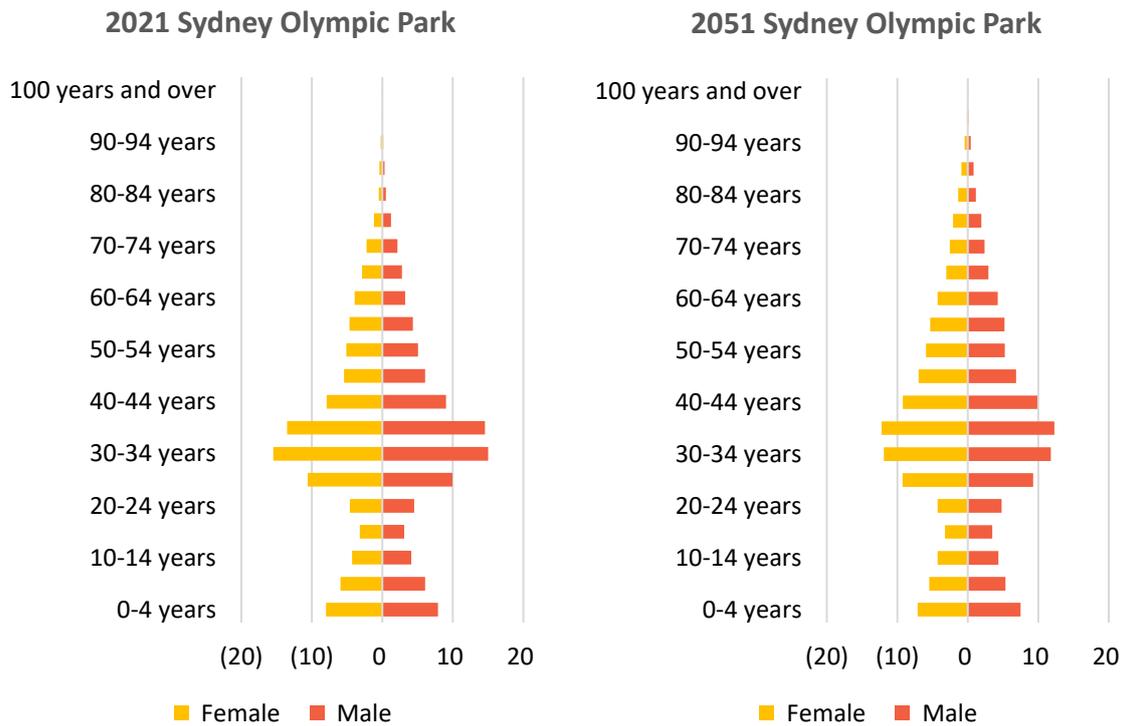
Unit type	Split	Size of unit (sqm)	Number of units
Studio	2%	40	254
1 bedroom	20%	55	2,538
2 bedroom	55%	80	6,979
3 bedroom	20%	100	2,538
3 + bedroom	3%	110	381
Total	100%		12,689

Source: SJB 2023

2.6 Population profile 2051

Beyond the total population number, it is important that there is some consideration of the demographic profile of the Sydney Olympic Park population by 2050. The population profile from the 2021 census shows a significant proportion of 24-39 year olds, as well as infants of 0-4 years old, with fewer older children or older adults. The 2051 TZP22 projections show that it is expected that there will be a reduction in the proportion of residents aged 24-39 in Sydney Olympic Park. Both profiles are shown in Figure 8.

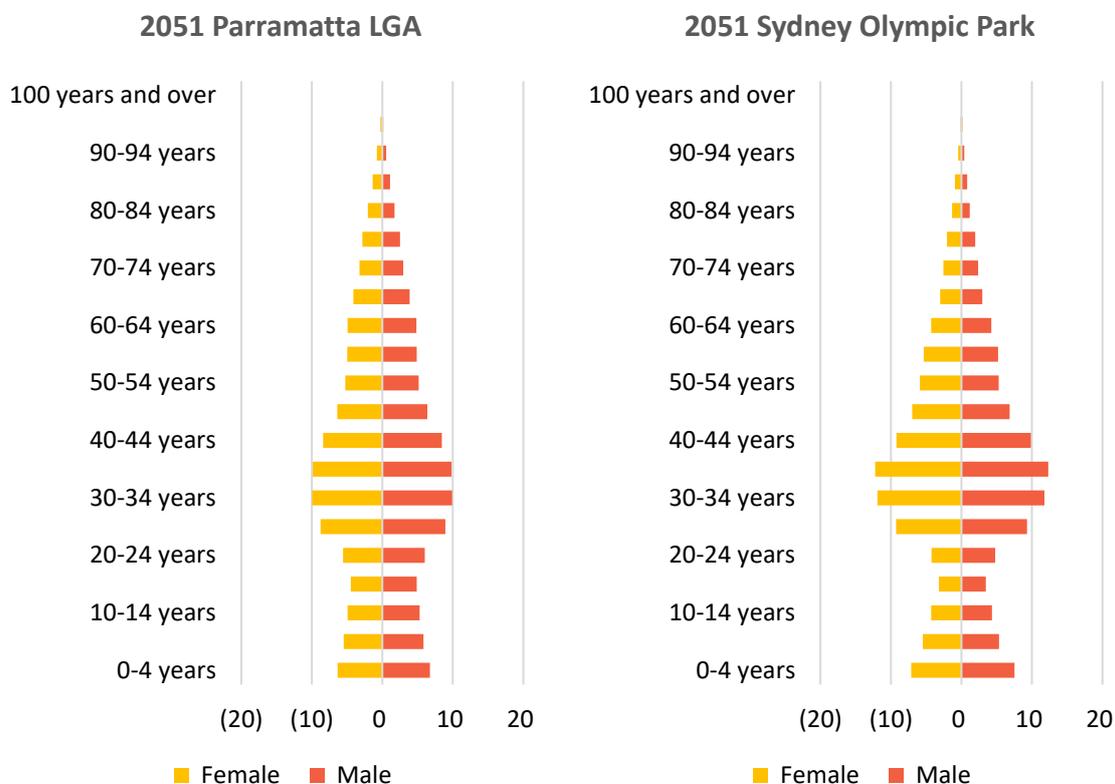
FIGURE 8: SOP POPULATION – PROPORTION OF POPULATION BY AGE AND SEX - 2021 (LEFT) AND 2051 (RIGHT)



Source: SGS via TfNSW (2022) and ABS Census (2021)

While this projected rebalancing is important, when compared with the Parramatta LGA as a whole (see Figure 9, projected to have a population of 462,347), Sydney Olympic Park exhibits greater proportions of young adults, and fewer children and mature adults.

FIGURE 9: PARRAMATTA LGA (LEFT) AND SYDNEY OLYMPIC PARK (RIGHT) POPULATION COMPARISON – PROPORTION OF POPULATION BY AGE AND SEX - 2051

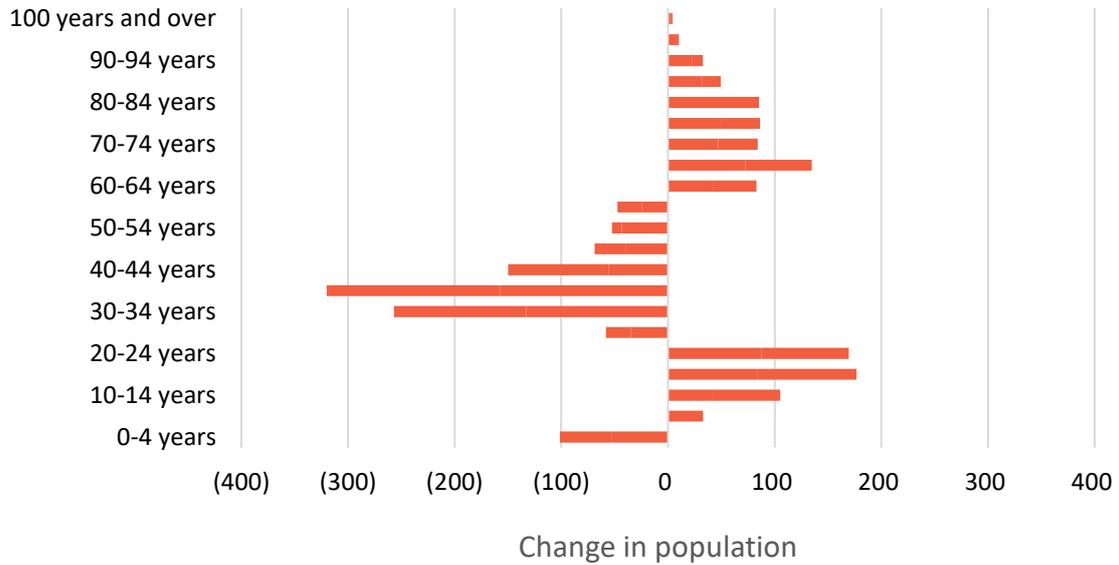


Source: SGS via TfNSW (2022)

In assessing the suitability of the 2051 forecasts, it was considered that the LGA-level age distribution, as illustrated within Figure 9, better represented a balanced demographic distribution. This was to better consider Sydney Olympic Park as a balanced precinct within its context of the LGA. The nature of the travel zone forecasts implicitly emphasises past trends: in the study area’s case, this results in fewer school-aged children and people over the age of 70 years old in particular.

Considering the potential for the precinct to accommodate that demographic profile, the net change of each age group was considered if the proportions of the Parramatta LGA were replicated across the projected population of the study area. This is shown in Figure 10 below. It illustrates fewer small children, but more school-aged children, with significantly more people over the age of 70. This is considered to represent a more balanced locality.

FIGURE 10: CHANGE IN SYDNEY OLYMPIC PARK DEMOGRAPHICS TO FIT PROPORTIONS OF PARRAMATTA LGA



Source: SGS via TfNSW (2022)

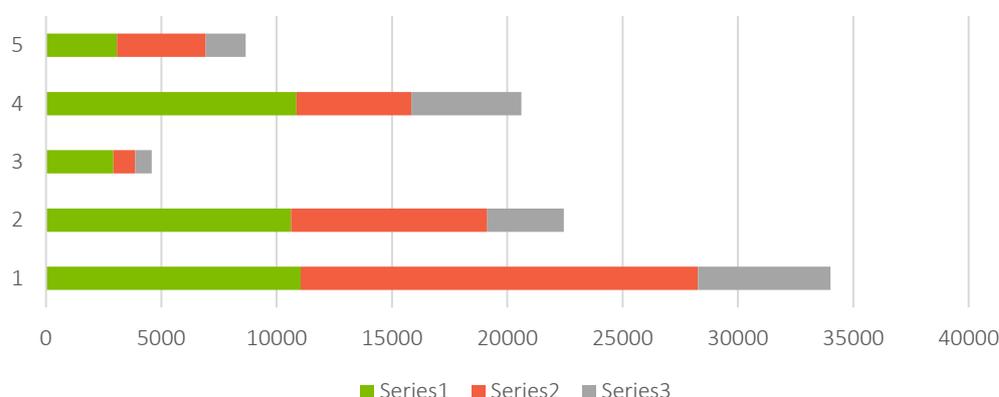
2.7 Housing typology and demographic changes

This profile indicates, to an extent, desired household types. The Parramatta LGA more broadly has a diverse set of housing typologies, where Sydney Olympic Park currently has only high-density residential housing which has all been recently built. Figure 11 illustrates the housing typology and household types of the Parramatta LGA at the 2021 census. It shows that couples with children are more likely to live in detached houses, and couples without children – which includes both young adults and empty-nesters – are slightly more likely to live in houses or in a semi-detached typology.

While overall, the split of housing within the Parramatta LGA in 2021 was 42% flats, 39% detached housing, and 18% semi-detached housing, there was a distinct split of household types with children being more likely to live in detached houses. Data further indicated that there was a distinct size split between flats and houses, with 86% of all flats being two bedrooms or fewer, and 92% of all houses having three bedrooms or more. This suggests a high correlation of families with children requiring more bedrooms than the stock of flats allows for, and further indicates that the average number of people per dwelling would need to be considered in greater detail in order to provide appropriate housing for the target demographics. This is discussed further below.

Particularly as detached housing is not proposed within Sydney Olympic Park, there is likely to be a higher need for three- and four-bedroom units if the 2050 Vision is to be achieved. This is to enable growing families and multigenerational households to locate in the area in line with the vision for Sydney Olympic Park as a thriving suburb within the Parramatta LGA.

FIGURE 11: PARRAMATTA TYPOLOGY BY HOUSEHOLD TYPE - 2021



Source: ABS Census, 2021

Population per dwelling and proposed apartment mix

Population per dwelling is also key variable in considering total number of dwellings which will need to be provided under Master Plan 2050.

A single population number will give different total dwelling numbers depending on the assumptions used around people per dwelling. Currently, the DPE 2022 NSW Population, Housing and Implied Dwelling Projections which were used to inform the SOP Infrastructure Contributions Framework assume 2.36 people per dwelling. However, 2021 census data indicates that there is currently an average of 2 people living in each occupied dwelling within Sydney Olympic Park.

Building on both the Vision’s aspiration for a diverse and thriving community, and the analysis above, which seeks to increase the number of children and older people living in Sydney Olympic Park, it is worth considering how household size and the proposed unit typologies in the Master Plan 2050 are suitable.

To understand the relationship between household size and the relative proportion of bedrooms in the dwelling stock, 2021 Census data were used to consider the average number of people living in a dwelling with a certain number of bedrooms in the Parramatta LGA, shown in Table 10 below. Note that within this analysis, only occupied dwellings are considered.

TABLE 10: PARRAMATTA LGA AVERAGE HOUSEHOLD SIZE BY BEDROOM

Average people per occupied dwelling	Parramatta LGA
Studio	1.28
One bedroom	1.53
Two bedrooms	2.29
Three bedrooms	2.82
Four bedrooms	3.33
Five bedrooms	3.79
Six bedrooms or more	4.55
All	2.64

Source: SGS via ABS Census 2021

In Table 10, the 'all' category indicates the average number of people per dwelling overall in the LGA (as it represents entire occupied dwelling stock divided by overall population).

To understand how this interacts with unit size and bedroom splits, the Parramatta LGA can be considered more closely. Table 11 below shows the percentages of dwellings of different sizes, multiplied by the identified average number people per dwelling of that size. These are then added up to give an approximation of the total number of people per occupied dwelling:

TABLE 11: PEOPLE PER DWELLING IN THE PARRAMATTA LGA

	Parramatta LGA (ppl/dwelling)	Parramatta LGA %age of all dwelling stock)	Total people per dwelling
Studio	1.28	1%	0.01
One bedroom	1.53	10%	0.15
Two bedrooms	2.29	37%	0.85
Three bedrooms	2.82	28%	0.79
Four bedrooms +	3.33	24%	0.80
Average people per occupied dwelling			2.61

Source: SGS via ABS Census 2021

Note that this number differs slightly from the figure of 2.64 people per occupied dwelling in Table 10 due to the consolidation of 4, 5 and 6 bed dwellings into one category.

This analysis, using the average number of people per occupied dwelling by bedroom type for the Parramatta LGA, can then be applied to consider the current average number of people per dwelling for Sydney Olympic Park, as in Table 12:

TABLE 12: PEOPLE PER DWELLING IN SYDNEY OLYMPIC PARK (2021)

	Parramatta LGA (ppl/dwelling)	Sydney Olympic Park current unit size split	Total people per dwelling
Studio	1.28	1%	0.01
One bedroom	1.53	39%	0.60
Two bedrooms	2.29	48%	1.10
Three bedrooms	2.82	10%	0.28
Four bedrooms +	3.33	2%	0.07
Average people per occupied dwelling			2.06

Source: SGS via ABS Census 2021

This provides validation for considering the proposed Master Plan 2050 unit splits using the LGA-wide analysis of people per dwelling.

The proposed unit split within the Master Plan 2050 is compared to Zetland (where the bulk of development associated with Green Square has taken place, being a substantial high-density urban renewal precinct), units in the Parramatta LGA, and Sydney Olympic Park's current unit splits. Utilising the technique above, the theoretical total people per dwelling was also derived in Table 13 overleaf.

TABLE 13: BEDROOM SPLITS AND PEOPLE PER DWELLING FOR COMPARABLE AREAS

	SOP Master Plan 2050 proposed split	Parramatta units	SOP (2021)	Zetland units
Studio	2%	1%	1%	1%
One bedroom	20%	19%	39%	31%
Two bedrooms	55%	66%	48%	58%
Three bedrooms	20%	13%	10%	9%
Four bedrooms +	3%	1%	2%	0%
	2.25	2.21	2.06	2.09

Source: SGS via ABS Census 2021

This indicates that the proposed unit split for the Master Plan 2050 would provide for more larger apartments than the current split exhibited by all unit development in Parramatta, and the existing development within Sydney Olympic Park, with an associated increase in the number of people per dwelling.

Particularly considering that the stock of all Parramatta units includes many older developments, which are likely to exhibit larger dwelling types, the proposed outcome would contribute to achieving the objectives of the 2050 Vision in terms of a greater variety of housing typologies – including dwelling sizes.

A target of 2.25 people per dwelling, based on the bedroom mix outlined in the Master Plan 2050 is more ambitious in its household size and diversity than the current Sydney Olympic Park community profile. It is, however, not dissimilar to the wider Parramatta LGA unit household size profile and within the bounds of the LGA’s overall household profile. It therefore seems to be an appropriate repositioning of Sydney Olympic Park towards a place of greater housing diversity.

Further, if the full population of 2.25 people per dwelling were realised on the capacity of 13,000 dwellings, the population would be 29,285 people, which is higher than the upper population target.

2.8 Proposed population levels and rationale

The lower population bound selected is the 2030 Master Plan (2018 review) Aspirational Growth case of **25,000**.

The more aspirational target identified is the TZP19 2051 projection of **28,650**.

The proposed Master Plan 2050 has identified dwelling capacities of up to 13,000 units. Applying the potential household size of 2.25 across these dwellings would create a population of approximately 29,285 people by 2050 – well in excess of the lower bound identified and slightly higher than that TZP19 projection for Sydney Olympic Park.

The lower bound can be considered as the *minimum* that Master Plan 2050 should accommodate, while the upper target could reflect an aspiration.

This range has been identified because:

- It is highly unlikely that the 2030 Master Plan full build out will be delivered by 2030 for several reasons:
 - The 2021 population was only around 3,800.
 - Growth to 25,000 in only 7 years would require significant development to occur in a short timeframe.
 - Most of the residential development that will occur will be driven by the delivery of the Sydney Metro West station, which is not anticipated to be complete until 2030.
 - As such, it is anticipated that the majority of residential development will be delivered from 2030 onwards.
- The 2050 Vision has a strong focus on housing. This suggests that the baseline population number should be as reasonably high as possible.
- A minimum (lower bound) of 25,000 people reflects this ambition, and factors in the anticipated delays to population growth as a result of COVID, i.e. it is both ambitious and reflective of circumstances, including the reduced expectations of the TZP22 resident numbers.
- The more aspirational population number, derived from TZP19 forecasts (28,650 by 2050) reflects more ambitious growth and the aspirations for a thriving suburb in the 2050 Vision.

Population growth cross-referencing and validation

To understand what growth would need to be achieved at Sydney Olympic Park for the full population growth to 28,650 to be realised by 2050, analysis needed to be undertaken which did not just compare growth to that achieved within Sydney Olympic Park in the past, but what comparable or similar precincts had seen with major infrastructure investment and master planning efforts.

The increase in population from 2016 to 2021 in Sydney Olympic Park represented an increase of 413 people per annum.

The Master Plan 2050 provides for 11,500 to 13,000 dwellings, based on the population target of 25,000 to 28,650. Assuming the upper target of 28,650 and the 2021 baseline population of 3,854 people, this would require the following growth rates up to 2051:

- Consistent growth of 855 people per annum
- Alternatively, if the current growth rate of 413 people per annum were assumed to continue until the Metro opens in 2031, with the remainder of growth achieved between then and 2050:
 - The population at 2031 would be 7,984
 - The required rate of population increase between 2031 and 2050 would be an additional 1,033 people per annum

This is referred to as the ‘stepped growth scenario’

In considering if this growth rate is achievable and logical in the Sydney context, the two centres of North Ryde and Green Square were investigated. Both of these areas have exhibited high density residential growth due to large-scale infrastructure investments.

North Ryde

The Chatswood to Epping rail link opened in 2009 and the areas directly adjacent to the North Ryde train station were rezoned in 2013, prior to Sydney Metro services commencing in 2019. The area exhibits a historic development pattern of campus-style commercial buildings. Following the residential rezoning, several major redevelopments took place in North Ryde in the period of 2013 to 2019, with an overall growth rate of approximately **350 dwellings per annum**. At an assumption of 2.05 people per dwelling, this can be considered **720 residents per annum**.

Green Square

Green Square is an inner-city industrial precinct which had various challenges of contamination and flooding, requiring extensive remediation and infrastructure upgrades respectively. The Green Square train station opened in 2000 and residential development began in 2003. The overall urban renewal precinct covers over 250 hectares and has been enabled through infrastructure upgrades and a significant master planning process. Green Square has exhibited an overall growth to 30,000 people to 2022, which is a rate of **1,580 residents per annum**.

Comparing with Sydney Olympic Park

These growth rates have been considered and graphed in Figure 12 overleaf to understand – at an aggregate level – how they compare, from 2021 to 2051, when applied to Sydney Olympic Park. 2021 is considered the ‘baseline’ as it is the most recent census data.

FIGURE 12: POPULATION GROWTH COMPARISON PROJECTED FROM 2021 - 2051



Source: SGS 2023 via TfNSW and ABS

Figure 12, Figure 13, and Table 14 illustrate:

- Growth rates for Green Square and North Ryde, applied to the baseline 2021 Sydney Olympic Park Census, projected to 2051
- TZP19 projections for Sydney Olympic Park to 2051
- Sydney Olympic Park’s growth rate between 2016 and 2021, per census, projected to 2051
- The growth rate which Sydney Olympic Park would need to achieve in order to meet the target of 28,650
- The ‘stepped growth’ scenario, where the 2016-2021 growth rate continues until the Metro opens around 2031, whereafter the growth rate accelerates to meet the 2051 target of 28,650.

The ‘stepped growth’ scenario is considered the most likely. Sydney Olympic Park is anticipated to have the capacity to grow faster than North Ryde, as it transitions into a thriving centre. However, it is unlikely to exhibit sustained growth rates higher than those which were seen at Green Square.

Future real growth rates will also be driven by market factors as well as construction timelines, particularly in the case of residential leasing. The case study of Mirvac’s LIV Indigo build-to-rent development of 315 apartments, completed in Sydney Olympic Park in 2020, shows that it took 12 months to reach 80% occupancy¹¹, with 98% occupancy achieved in 20 months¹². This indicates overall uptake of approximately 185 dwellings per annum, which may partly be a result of strong demand for a novel typology.

¹¹ The Weekly Source 2021, via <https://www.theweeklysource.com.au/build-to-rent-a-growing-thorn-for-retirement-villages/>

¹² The Weekly Source 2022, via <https://www.theweeklysource.com.au/mirvac-first-build-to-rent-is-expensive-and-at-98-occupancy-in-just-20-months-vs-retirement-villages-at-90/>

Notwithstanding any supply-side challenges, this growth rate comparison highlights that a sustained level of growth towards full build-out of Sydney Olympic Park by 2050 (up to 13,000 dwellings) is not unrealistic when compared with similar centres.

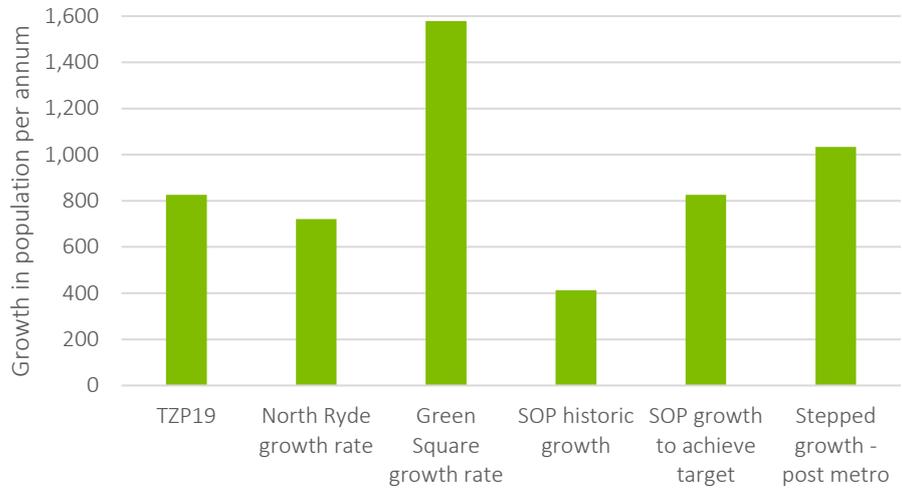
Table 14 applies the different growth rates to the Sydney Olympic Park context to understand the potential cumulative population growth and assumed annual growth under each scenario. With the Sydney Olympic Park Stepped Growth Rate scenario considered most logical, it presents the annual population growth in two time periods – before and after Metro opening (2030), with annual population growth increasing post-Metro opening.

TABLE 14: POPULATION GROWTH RATE SCENARIOS

Year	TZP19	Increase p.a.	North Ryde past growth	Green Square past growth	SOP growth 2016-21	SOP linear growth to achieve target	SOP stepped growth scenario	Increase p.a.
Annual Increase (if linear)			721	1,579	413	827		
2021	3,854		3,854	3,854	3,854	3,854	3,854	
2026	10,032	1,236	7,459	11,749	5,919	7,987	5,919	413
2031	14,393	872	11,063	19,643	7,984	12,119	7,984	413
2036	18,398	801	14,668	27,538	10,049	16,252	13,151	1,033
2041	20,788	478	18,272	35,433	12,114	20,385	18,317	1,033
2046	22,824	407	21,877	43,328	14,179	24,517	23,484	1,033
2051	28,650	1,165	25,482	51,222	16,244	28,650	28,650	1,033

Source: SGS via TfNSW and ABS

FIGURE 13: POPULATION GROWTH RATES COMPARISON



Source: SGS via TfNSW and ABS

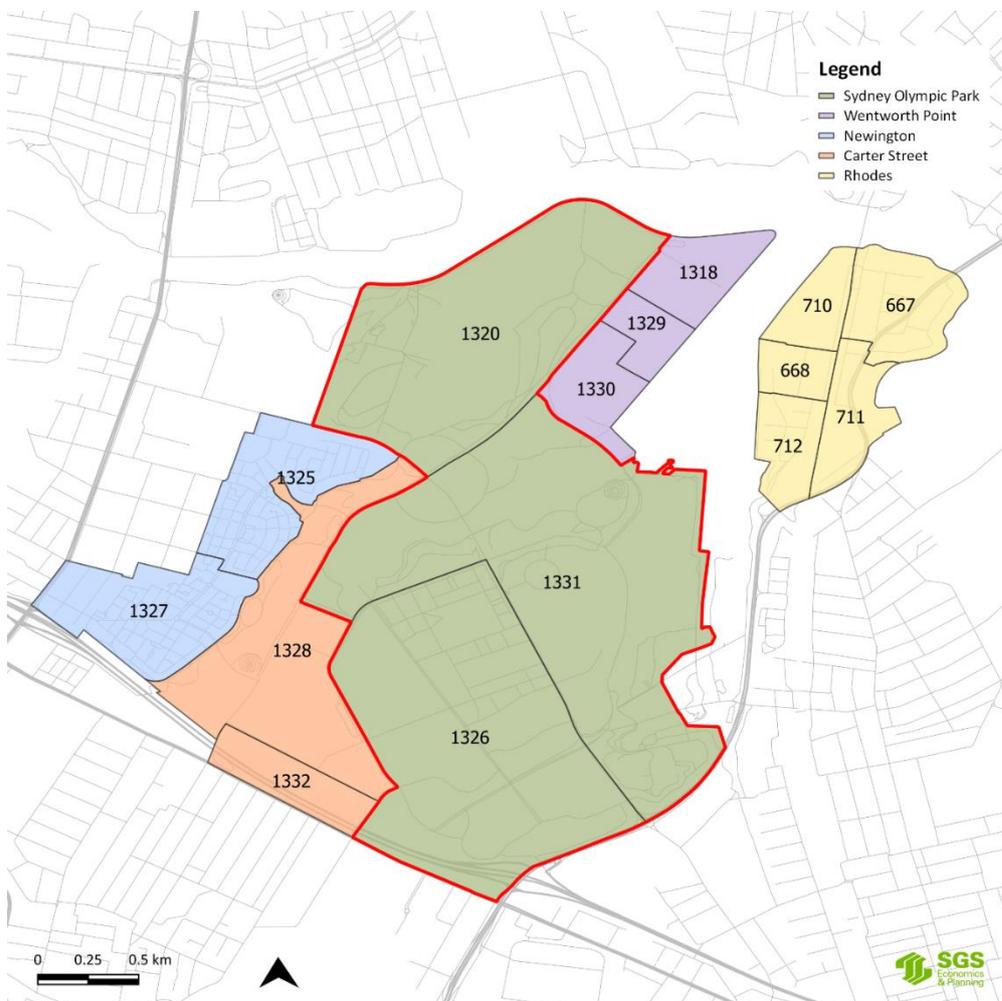
3. Future employment profile

This chapter profiles the possible future quantum and drivers of employment in Sydney Olympic Park in 2050.

3.1 Current employment profile of Sydney Olympic Park

The 2021 census data indicates that there were 9,519 people working at Sydney Olympic Park in the area identified in green within Figure 14, and 13,056 in the combined areas of Sydney Olympic Park, Wentworth Point, and Carter Street.

FIGURE 14: EMPLOYMENT ANALYSIS GEOGRAPHY



Source: SGS Economics and Planning, 2021, TZP19 small area land use forecasts

For the purposes of this analysis, all three Sydney Olympic Park travel zones have been considered, including zone 1320, which includes some development in the north-east corner linked to Wentworth Point. However, jobs in this area, such as groundskeeping and tourism jobs for the Newington Nature Reserve, are considered relevant and have been included. This is illustrated Figure 14 above.

Existing organisations and entities

Sydney Olympic Park accommodates a range of businesses across several industries. The strong sporting legacy of the Olympics and the critical mass of elite and specialised sporting infrastructure has meant that it is home to a number of sporting organisations. Aligned with this, and Sydney Olympic Park’s wider events role, is the presence of a number of hospitality venues. Sydney Olympic Park’s gradual development as a campus-style corporate park has attracted both the headquarters and the supporting functions of several corporate entities. The Park is increasingly accommodating a range of government departments also. Table 15 outlines some examples of tenants of Sydney Olympic Park.

TABLE 15: EXAMPLES OF ORGANISATIONS AND AGENCIES CURRENTLY LOCATED IN SYDNEY OLYMPIC PARK

CORPORATE ENTITIES	SPORT ORGANISATIONS	EVENTS/HOSPITALITY ORGANISATIONS	GOVERNMENT/ INSTITUTIONS
Lion Group	Greater Western Sydney (AFL, WAFL and Netball)	Ibis	SOPA
Samsung	Cricket NSW	Novotel	NSW Reconstruction Authority
NRMA	NSW Institute of Sport	Sydney Superdome	Ambulance NSW
QBE	Netball NSW	Royal Agricultural Society	Western Sydney University (English Campus)
Thales	NRL	Stadium Australia	Office of Sport
AIA Australia	Australian College of Physical Education	Pullman	Rural Fire Service NSW
	Sydney Kings		

Current floorspace provision

The Commercial demand and feasibility assessment for Master Plan 2030 (Interim Metro Review) indicated that there was approximately 224,773 sqm of commercial space in Sydney Olympic Park (at the time of writing, August 2021).

3.2 Insights from the Vision

The Vision considers the balance between Sydney Olympic Park as a place to work, a place to visit and a place to live. While it does not specify total number of residents or jobs, it recognises that Sydney Olympic Park's potential future connectivity (Sydney Metro West, Parramatta Light Rail, Fast Rail, active transport connections), coupled with its centrality and clear functional specialisations, means it will play an important role as a place of work in 2050.

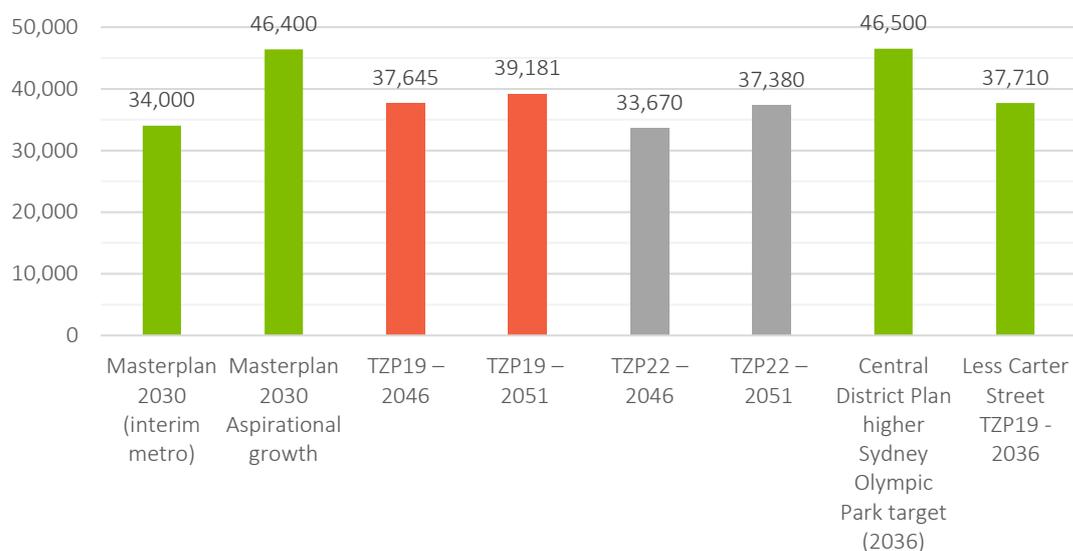
The development of the Vision did also reflect, however, that Sydney Olympic Park was not aspiring toward becoming a commercial business park. Its focus on residential, civic, cultural and recreation aspirations reflects this. The industries and activities (and by extension, jobs) that it does seek to attract include events, sports (including professional athletes), tourism, education, retail and entertainment and arts and culture, in addition to those office-based jobs that will be attracted to Sydney Olympic Park's high levels of amenity and future connectivity. Providing the capacity to accommodate these jobs is a key objective for Master Plan 2050.

3.3 Projected employment profile of Sydney Olympic Park (2051)

All projections, including the TZP land use projections (2019 and 2022), and the 2030 Master Plan (2018 review) target anticipate a significant growth in jobs at Sydney Olympic Park over the coming decades, above current levels. The 2030 Master Plan (2018 review) Aspirational Growth scenario is highest. The Central District Plan (2018) higher job target for Sydney Olympic Park is also considered. This target, however, included Carter Street in its geographic remit. As such, the Carter Street TZP job number has been subtracted from this figure to provide further context. These are illustrated within Figure 15.

In contrast with the residential projections considered previously, the TZP numbers consider a smaller growth between 2046 and 2051, indicating that growth is anticipated earlier in the development phase than later. The TZP22 employment quantum for 2051 is slightly lower than the TZP19 quantum, in line with considerations around the impact of COVID. The TZP22 2051 employment projection is also broadly in line with the 2030 Master Plan (2018 Review) target and the Central District Plan target. This indicates high confidence in Sydney Olympic Park as a future employment generator.

FIGURE 15: SOP JOB SCENARIOS



Source: SGS (2022) via TfNSW (2019, 2022) and Sydney Olympic Park Authority (2018)

What these varying job projections indicate is that there is no fixed position on the number of jobs that Sydney Olympic Park should account for over the coming decades. Unlike housing, accounting for and accommodating employment is more challenging, for several reasons including:

- **Impact of COVID-19 on how and where we work.** COVID-19 and the subsequent lockdowns has profoundly impacted how and where many people work. In knowledge-intensive industries that often locate in offices and commercial centres, there have been seismic changes observed in office vacancy levels as more people choose to continue working from home. While this pattern is established and has remained fixed in the year since the pandemic’s effects were most fully felt, it is not clear how ways of working will change in the years and decades to come. Therefore, planning for job location, industry, and profession., out to 2050 is challenging.
- **Sydney Olympic Park is not a typical commercial centre.** Unlike Parramatta, the Sydney CBD or centres such as Macquarie Park, Sydney Olympic Park is a very different place. Rather than simply being a place for commercial buildings, it has a strong focus on sport and continued focus on events and visitation, coupled with the environmental assets that employ a large number of people. Accounting for jobs, therefore, is not as straightforward as working out how many people and how much commercial floorspace is required. Jobs in Sydney Olympic Park will be in stadia, on sports fields, in environmental zones and in retail, as well as in commercial developments. This makes a precise accounting for future job numbers more challenging than in a typical commercial centre.

3.4 Proposed Master Plan 2050 employment profile and floorspace provision

The Master Plan 2050 considers an overall provision of approximately 1,150,000 square metres of non-residential Gross Floor Area (GFA), including social infrastructure such as civic spaces, schools, and child care centres. Analysis indicated that a minimum of approximately 850,000 sqm of GFA would be required for employment purposes, schools and child care, to provide for an indicative 30,760 jobs. This was based on the application of standard job to floor area ratio assumptions for a range of job types which are anticipated to be located within Sydney Olympic Park in future. Of course, as commercial metropolitan market dynamics continue to evolve over the coming years, this number should continue to be evaluated for its appropriateness.

This gross floorspace number was identified as being able to be delivered within the overall Master Plan 2050 process considering land use needs, and alongside the identified residential requirements (discussed above). The following sections will accordingly consider how this GFA provides for employment within Sydney Olympic Park in 2051, and how this relates to past planning assumptions and projections.

Accordingly, Table 16 below considers what quantum of employment would be considered a reasonable minimum to be delivered within Sydney Olympic Park, and how that relates to the GFA which would be required.

TABLE 16: MASTER PLAN 2050 MINIMUM JOBS AND FLOORSPACE PROVISION

Job Type	Jobs	% of jobs	m ² / Job	GFA	% of GFA
Commercial	18,500	60%	15	277,500	33%
Population serving	2,600	8%		90,000	11%
Retail	2,600	8%	35	90,000	11%
Health and education	2,300	7%		178,730	21%
Medical / health care	500	2%	30	15,000	2%
Child care	300	1%	30	6,230	1%
Primary School	200	1%	100	20,000	2%
Secondary School	150	1%	150	22,500	3%
Tertiary 1	550	2%	100	55,000	6%
Tertiary 2	250	1%	100	25,000	3%
Existing tertiary jobs	350	1%	100	35,000	4%
Sports, Events and Tourism	6,360	21%		248,000	29%
Sports (existing)	4,500	15%	50	100,000	12%
Events and Tourism	1,310	4%	50	65,500	8%
Accommodation (Hotels / Student)	550	2%	150	82,500	10%
Creative arts and industry	1,000	3%		56,250	7%
Arts	250	1%	30	7,500	1%
Industry	750	2%	65	48,750	6%
Total	30,760			850,480	

Source: SJB, 2023

This split of floorspace takes the form of various distinct employment typologies. A significant proportion of employment will be able to be housed within flexible floorspace, including commercial, arts, and medical uses. As such, the jobs which are provided within that floorspace are subject to changing market demand profiles for floorspace: the identified number of jobs are simply the anticipated employment levels of a qualitative and quantitative analysis. They are highly likely to change over time as the precinct grows and matures.

To accommodate this, proactive planning can require new floorspace to be able to be converted to accommodation or industrial floorspace in future, or vice versa. The strategic imperative of a circular economy for Sydney Olympic Park means that buildings should be suited to adaptive reuse in future.

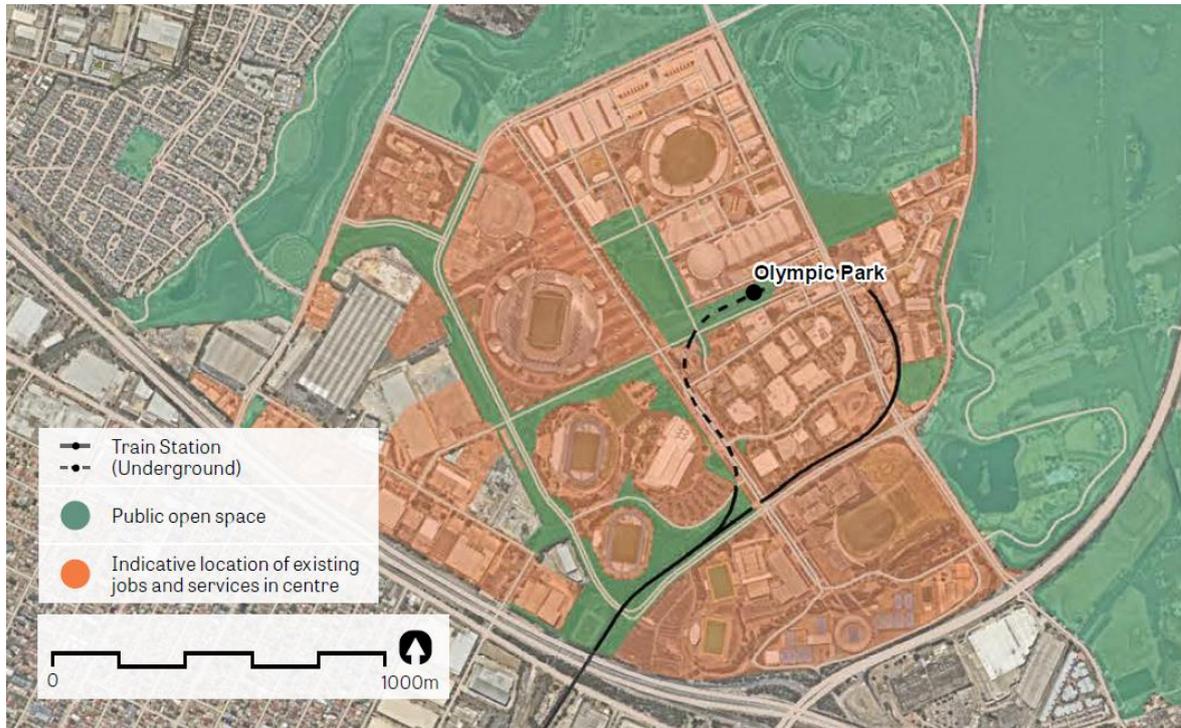
Despite being lower than the above projections, the adopted Master Plan 2050 job minimum of approximately 30,760 is considered reasonable for several reasons:

1. It is aligned with the 2050 Place Vision and Strategy that sees Sydney Olympic Park transform into a thriving suburb; the balance of residents to workers would be too worker-heavy if the status quos of previous strategies, and that of the current TZP forecasts were maintained (as illustrated in Figure 5).
2. The 2030 Master Plan (2018 review) Aspirational Growth quantum of 46,400 jobs is considered overly ambitious. While it is aligned with the Central District Plan prepared by the then-Greater Sydney Commission in 2018, it is not considered likely to be realised by 2030. This report identified a 2036 'baseline target' of 45,000 jobs and a 'higher target' of 46,500 jobs, however the report included the Carter Street precinct within Sydney Olympic Park, as shown in Figure 16 overleaf. Considering that the Carter Street precinct, per the TZP19 employment figures, was expected to provide 8,790 jobs in 2036, this indicates that Sydney Olympic Park was anticipated to provide between 36,210 and 37,710 jobs under the regional strategic planning framework. The TZP22 employment projection for Sydney Olympic Park at 2036 is 25,434, which is also substantially below that target.
3. Long-term changes to working trends as a result of Covid-19 are not yet fully understood. This may result in changes to commercial office occupation and demand. Knowledge intensive, theoretically office-based jobs represent a significant proportion of anticipated jobs in Sydney Olympic Park in future. Considering that at March 2023, around 25% of all working hours were being worked from home¹³, there is likely to be a smaller workforce present in Sydney Olympic Park on any given day, with a proportionate increase in employed people who live there working from home. These trends, along with Sydney Olympic Park's historic strength in commercial demand¹⁴, reinforce the need for flexible commercial floorspace supply. The proposed job quantum and profile, and associated floorspace provision (discussed further within section 3) are indicative of current understandings of Sydney Olympic Park and its regional role. Regardless, there is scope for these to shift, with flexibility of floorspace a vital component of Sydney Olympic Park's success in future.

¹³ University of Sydney Institute of Transport and Logistics Studies 2023, via <https://www.sydney.edu.au/business/our-research/institute-of-transport-and-logistics-studies/transport-opinion-survey.html>

¹⁴ Sydney Olympic Park Business Association and JLL 2022, via <https://sopba.com.au/low-vacancy-rates-at-olympic-park>

FIGURE 16: SYDNEY OLYMPIC PARK AS SHOWN IN THE CENTRAL CITY DISTRICT PLAN



Source: Greater Sydney Commission (2018)

Detailed analysis into the likelihood of the job splits across the proposed Master Plan 2050 GFA have been undertaken in Appendix A. These stress test the logical shares of key job types to ensure that their share of jobs in the context of either Sydney Olympic Park's employment projections, or their share of jobs drawn from across Metropolitan Sydney, are logical.

3.5 Proposed employment level and rationale

For the purposes of considering the future employment quantum and profile of Sydney Olympic Park, **at least 30,760 jobs** are assumed to be accommodated in the Master Plan 2050.

For this level of employment, a minimum of **850,480 square metres of gross floor area** are required in the master plan. This also reflects the needs of the Master Plan 2050 to balance out the various other land uses that the Sydney Olympic Park 2050 Vision outlines.

This employment level has been selected because it responds to land use requirements identified during the master planning process, and reflects a potential desire to increase population at the expense of jobs in the 2050 Vision. Further:

- The 2030 Master Plan (2018 review) Aspirational Growth number (46,000) is well in excess of any 2051 TZ projections for jobs.
- The 2050 Vision has a strong focus on housing and creating a thriving suburb. The current 2030 Master Plan (2018 review) Aspirational Growth case has a strong bias towards jobs over population, which this recommendation seeks to redress in partnership with a higher population recommendation.
- It also reflects a perspective that there will be a proportion of people working from home.
- The analysis has sought to identify specific job types likely to grow at Sydney Olympic Park. The 'Knowledge Intensive' jobs are considered as the residual from those jobs.
- It is anticipated that some jobs will be captured in a range of specialised facilities (stadia, venues, schools, etc). Other jobs will be located within relatively generic or adaptable floorspace which provides for flexibility.

It is noted that the employment number will ultimately vary, based on market demand for floorspace across Sydney Olympic Park from different employment generators. This minimum identified number of 30,760 is intended to reflect the balance of objectives sought at Sydney Olympic Park over the coming decades, as identified in the 2050 Vision and the process undertaken for the Master Plan 2050.

4. Land ownership considerations

4.1 Introduction

This section is intended to provide a broader context to the Sydney Olympic Park Authority's options for the use and disposition of its land holdings. The following section discusses alternatives to the conventional practice of a freehold land sale, specifically variations on the ground lease model. It discusses a leasehold model's comparative advantages, disadvantages, other considerations, and a high-level illustration of how the residual land value (RLV) in a land sale might compare under current market conditions to the present value (PV) of ground lease payments. Finally, this section also provides a context for understanding the opportunity that application of a leasehold model plays in the public sector's procurement and integration of affordable housing in development.

4.2 Context and definitions

The discussion of a ground lease model emerges from consideration of a few circumstances.

- Broadly, whether a reasonable alternative exists for the disposition of SOPA's land holdings that a) does not relinquish long-term ownership of the land, and b) generates some form of revenue.
- SOPA already engages in ground leases in the disposition of land for commercial development.
- The emergence of build-to-rent (BtR) residential in NSW has precipitated general conversations about financial feasibility and, specifically, whether there exist opportunities for the procurement and incorporation of affordable (rental) housing in development. Because the most substantial financial hurdle in development, especially in affordable housing projects, is the cost of land, the ground lease model offers an alternative that eliminates the upfront acquisition cost.
- Whether, with BtR as an income-producing property like commercial or retail, the ground lease model as applied by SOPA in commercial development, or as applied abroad might provide reasonable grounding for further exploration and development of a ground lease model as applied to future BtR opportunities for SOPA.

The discussion of ground lease model opportunities also emerges from a consideration of the conventional approach to developing various land uses. For example, whether land is held in private or public ownership, the development of land for build-to-sell (BtS) residential necessitates a sale in nearly all circumstances.¹⁵ However, as noted above, the emergence of the BtR model opens up the possibility of applying a leasehold model. Before looking into the variations in leasehold models that exist in

¹⁵ In the US, the Community Land Trust (CLT) is a not-for-profit organisational model that leverages public sector land-banking for the provision of affordable housing (BtS or BtR). The activities of most CLTs, of which there are more than 250 across the country, are characterised by the acquisition, development and the management of affordable *ownership* (i.e., BtS) housing. From the beneficiaries' perspective, the CLT succeeds in making ownership housing affordable to household in that they purchase title to the house at a below-market price but do not buy the land. The land is held "in trust" in perpetuity or even for a long-term lease of 99 years. This model gives ultimate control over publicly-owned land to accommodate the goal of providing affordable ownership or rental housing.

practice, the following brief definitions clarify the major aspects of the freehold sale and the leasehold model.

- A **freehold sale** is the conventional practice in land use development whereby a purchaser (e.g., developer) pays a property owner for its title an amount commensurate with the revenues achievable through the site's development potential less the costs associated with its development.
- In a **leasehold model**, the property owner functions as a landlord and the developer functions as a tenant. The landlord retains ownership of the land and, with the tenant, enters into an agreement for a fixed term (between 40 and 99 years) in which the terms of development and use are defined, such as specific development outcomes (e.g., affordable housing, community infrastructure, etc.), delineation of obligations of the landlord and tenant, and stipulation of financial terms (performance targets, profit splits, whether or not the property owner's fee interest in the land is used as security for the tenant's financing, or whether the ground lease is subordinate or not to construction financing, for example) and conditions, etc.

4.3 Ground lease model alternatives

There are a variety of forms of ground lease models in common practice in Australia and abroad. As summarised below, the difference in models in practice illustrate three general types: 1) a ground lease model in which the tenant makes ongoing payments to the landlord, 2) a ground lease in which a tenant makes a one-time payment upfront, and 3) a ground lease in which there are landlord-provided subsidies.

- **Homes Victoria** - Homes Victoria, the state's social housing owner and manager, have developed and implemented what it calls a Ground Lease Model on a 40-year term¹⁶. This was within the context of the Public Housing Renewal Program (commenced 2017), with Homes Victoria seeking redevelopment of ageing sites to provide further social housing. The development of this model emerged from the National Guidelines for Infrastructure Project Delivery, which provides for PPP infrastructure provision¹⁷ as well as the Partnerships Victoria Requirements for PPPs¹⁸. Homes Victoria engaged in an extensive process which involved the following general steps: inviting applicants with innovative funding models, a Request For Proposal (RFP) phase, and negotiation and contract development.

Under the model, Homes Victoria provides the land (the 'ground lease' aspect of the model), an initial \$50 million capital contribution, followed by a present value of \$285 million in annual service payments. The consortium of partners Homes Victoria selected through an extensive procurement process builds, operates, receives rents, and maintains the property, for 40 years. At the end of the term, the property reverts to Homes Victoria ownership. In the case of the initial Ground Lease

¹⁶ Homes Victoria 2021 accessed via https://www.dtf.vic.gov.au/sites/default/files/document/Ground%20Lease%20Model%20-%20Project%20Summary_1.pdf

¹⁷ Australian Government Department of Infrastructure, Transport, Regional Development, Communications and the Arts 2008, accessed via <https://www.infrastructure.gov.au/infrastructure-transport-vehicles/infrastructure-investment-project-delivery/national-guidelines-infrastructure-project-delivery> and <https://www.infrastructure.gov.au/sites/default/files/migrated/infrastructure/ngpd/files/Overview-Dec-2008-FA.pdf>

¹⁸ Victoria State Government Treasury and Finance 2016, accessed via <https://www.dtf.vic.gov.au/sites/default/files/2018-05/Partnerships-Victoria-Requirements-November-2016.pdf> and <https://www.dtf.vic.gov.au/public-private-partnerships/policy-guidelines-and-templates>

sites, the development comprised 619 social homes, 126 affordable ones, and 365 market rate dwellings, all of which revert to social housing at the end of the term.

Table 17 below illustrates the extent to which desired development, amenity, and infrastructure outcomes for land use development via a PPP structure can be prescribed upfront by the public sector landowner. This is an example high-level summary of the preconditions of development for one of Homes Victoria’s sites in which the number of homes, built form limitations, car parking requirements, environmental ratings and amenity characteristics have been defined.

TABLE 17: HOMES VICTORIA GROUND LEASE DEVELOPMENT REQUIREMENTS

Brighton	
Homes	<ul style="list-style-type: none"> • 299 dwellings (151 social, 148 private including 15 SDA) • 5 buildings • Varying heights scaling from 3 storeys at the residential interface to a maximum of 6 storeys towards the Elster Canal edge
Car parking	<ul style="list-style-type: none"> • Concealed basement car parking with entries off Rusden and Brickwood Streets
ESD	<ul style="list-style-type: none"> • Solar panels, 5 Star Green Star and 7 Star NatHERS rating
Urban realm & community	<ul style="list-style-type: none"> • 2000m² central open space centred around the existing trees • Community garden plots and facilities • Community pavilion and Café • Shared pedestrian spine connecting New St/Rusden St and Brickwood St • Northern Pocket Park including seating areas nestled in gardens with planting and nature play area • Southern Pocket Park with play area and Creekside Pocket Park • Native gardens incorporating water sensitive urban design and communal courtyards

Source: Homes Victoria 2021

One challenge in the development of real estate, particularly for governmental or institutional sector property owners, who generally are taking the longer-term view, is the propensity for investors and the development industry to view real estate development from a ‘property’ point of view, as opposed to an ‘infrastructure’ perspective. The major point of difference is that infrastructure investment has the expectation of financial returns over a much longer period of time, and a lower appetite for risk.

Risk in the Ground Lease Model adopted by Homes Victoria is mitigated through Homes Victoria going through planning processes to amend underlying development controls before a tender was launched. This ensured that built form outcomes were understood by all stakeholders, and what cash flows would be over the 40 year lease term. The initial capital contribution and service payments from Homes Victoria serve to bridge the ‘gap’ between returns from the completed asset (rent), and the required return on investment needed for finance to be secured by the development partner. This is a key differentiator from speculative property investment (particularly for build to sell product), in which greater planning and cash flow risks exist.

- **Basic Leasehold Model** – Ground leases are widely used by public sector, governmental or institutional property owners to a) ensure long-term control over assets, b) generation of revenue streams, and c) ensure that development outcomes are achieved in line with governmental (public) or institutional objectives. It is common for large urban / regional transit agencies (e.g., in San Francisco, Los Angeles, Seattle, Portland, Denver, Washington DC, etc.) to develop land holdings via this platform. It is also common for public housing authorities (quasi-governmental entities

associated with cities and regions that are structured to acquire property, develop, own and operate large inventories of (federally- and locally-funded) affordable housing. Most ground leases across the US are entered into via competitive bid processes in a public-private partnership structure, range between 50 to 99 years, where ground lease payments typically range between five (5) and ten (10) per cent of land value for the length of the leasehold term. It is important to note that ground lease payments across many US agencies are structured so that the PV of the annual lease payments at the agency's preferred rate of return is equivalent to the value of land today. It should also be noted that such an appropriate rate of return is calibrated by consideration of multiple factors, including the type of development, risks, location, developer interest, etc. These and other leasehold model characteristics are calibrated to the participating entities' financial objectives, balancing the objectives of appropriate private sector business returns with public sector community (broadly speaking) infrastructure provision.

- **ACT Crown Lease Model** – The ACT Crown Lease Model is predicated on the federal government retaining ownership of all land within the ACT. Upon initial release by the government, the leases are purchased at a market rate (effectively like a land title). While the lease terms extend 99 years, they can be renewed at a 'nominal' rate with little to no expectation that the land will return to the control of the government at the end of the term. However, to ensure control over development outcomes, crown leases include clauses that govern the use of the land. Where these are sought to be changed, the owner is required to vary the lease in conjunction with a development application. If this occurs, the Crown lease system requires that a proponent pay a Lease Variation Charge (LVC), which captures a portion of the uplift (if any) generated by the development application and new rights conferred by the lease¹⁹.
- **Singapore – 99-year Leases** – Singapore's government owns approximately 75% of all land on the highly constrained island and 'sells' 99-year leases at market rates (including for its vast subsidised housing schemes). At the end of the lease, the land reverts to government ownership. This allows the government to make strategic planning decisions and prevents land monopolies. Leases can be sold on the private market and depreciate in line with the time remaining to lease expiry. Singapore also requires a 'Land Betterment Charge' similar to the ACT's LVC²⁰ when a development application is approved. This means that the value of any planning uplift is captured throughout the lease, not just at the end of the lease.

4.4 Considerations

At the centre of SOPA's consideration of a freehold land sale or ground lease model is whether SOPA would like to maintain control of the land and its uses over the long-term or not. Simultaneously, would SOPA's (and the governments) interests be served best by the infusion of one-time land sale proceeds or by the ongoing lease payment revenue? To these core questions are the following key considerations:

¹⁹ ACT Government Environment, Planning and Sustainable Development Directorate – Planning, Lease Variation Charge, accessed via <https://www.planning.act.gov.au/leasing-and-titles/varying-crown-leases/lease-variation-charge> and <https://www.planning.act.gov.au/leasing-and-titles/crown-leases>

²⁰ Singapore Land Authority, 2022, accessed via <https://www.sla.gov.sg/state-land-n-property/land-sales-and-lease-management/lease-management>

- **Retention.** In a ground lease structure, SOPA would retain ownership of the property, ensuring that over the long-term, land is put not only to economically productive uses, but to uses that are beneficial more broadly to the community or its interests (e.g., provision of affordable housing or community facilities).
- **Certainty.** The terms and conditions of a ground lease model enable SOPA to maintain a degree of certainty over permitted uses and operations over time. While the outright sale of land through a similar procurement process might yield certainty of a desired development outcome in the near term, in a freehold sale, the original landowner relinquishes any certainty over how the land would be used in a subsequent redevelopment. Terms of a ground lease can define how a site is developed, operated and maintained. For public sector ground leases, this is important because as large sites or master-planned areas, particularly those with major intersections of public transit, build out and evolve, ground lease terms provide certainty for the landowner that its uses will meet public needs.
- **Revenue vs. Upfront Capital.** A key consideration and question for SOPA is whether it and the public interest would be better served by the generation of a steady revenue stream over the long-term or the generation of a significant upfront payment. Even if SOPA decides to engage in a ground lease structure, models exist in which a ‘tenant’ often pays upfront for use of the land for the ground lease term. As such, SOPA must decide whether it has immediate plans and/or needs to put such one-time capital to immediate use (e.g., for infrastructure, ongoing maintenance, infusion of subsidy for affordable housing on another site, or for any other community or resource needs, etc.) or whether it could leverage an ongoing revenue stream more effectively to meet evolving needs over time. The total (present value) revenues from a 99-year ground lease are generally equivalent to a freehold sale, which is discussed further overleaf.
- **Taxation.** In the exploration of a BtR ground lease model, a few of the headwinds at the federal level include 1) the lack of availability of negative gearing or the capital gains tax discount, and 2) the absence of GST inputs credit for BtR projects. At a state and local level, land taxes and council rates, if applicable, also impact on BtR operational structures. While 50% land tax relief has been offered to BtR projects until 2040 (by both Victoria and NSW) to reduce the operational cost structure burden for owners and operators, such land tax relief also implies that government has simultaneously given away a large portion of the single most important incentive to achieving affordability in a BtR context.²¹

²¹ In the US context, the abatement or reduction of ongoing ‘property taxes’, similar to but far more substantial than Australian land taxes, is one of the most common forms of incentive tools in the subsidisation of affordable rental housing. This technique is commonly used in inclusionary zoning policies for rental housing, particularly in cities with high property taxes. In effect, cities (whose authority it is to levy local property taxes) choose to forgo an amount of property tax revenue that is roughly equivalent to the difference between market and low-income rental rates for a portion of dwellings in a project.

Illustrated in Table 18 is a comparison of the disposition of a site in a freehold sale versus a ground lease model across a 99-year term. The hypothetical example portrays the sale of a site for \$10 million versus an ongoing revenue stream of \$500,000 per year. Reflective of longer-term yields with residential rental housing, a discount rate of five (5) per cent is applied, resulting in a present value of all ground lease payments at approximately \$10.4 million in today's dollars. This example would align with the application of a traditional ground lease model.

TABLE 18: FREEHOLD SALE VS. GROUND LEASE MODEL

Year	Freehold Sale	Ground Lease Payments (Nominal \$)	Ground Lease Payments (PV at 5% discount)
Year 0	\$10,000,000	\$500,000.00	\$500,000.00
Year 1		\$500,000.00	\$476,190.48
Year 2		\$500,000.00	\$453,514.74
Year 3		\$500,000.00	\$431,918.80
Year 4		\$500,000.00	\$411,351.24
Year 5		\$500,000.00	\$391,763.08
...
Year 10		\$500,000.00	\$306,956.63
...
Year 20		\$500,000.00	\$188,444.74
...
Year 99		\$500,000.00	\$3,992.36
Totals (99 years)	\$10,000,000.00	\$50,000,000.00	\$10,420,152.86

Further Considerations

Further, qualitative considerations which will need to be explored in order for a strategy on land ownership to be developed include:

- Provision of infrastructure – where outright land sales are a reflection of a developer’s willingness to pay for a plot of land, generally comprising gross realisable value less development costs – a land lease model is more reflective of a long-term proposition of development and cash flows.
- How will land values have changed in 50 or more years that a lease term could be? Will there be a need for redevelopment of assets? Any profit from redevelopment will flow through to landowner at that point. Alternatively, there may be a need to prevent further redevelopment, for instance in a scenario where parts of the suburb are at risk from climate change and may not be strategically desirable for further occupation. A public owner is more likely to be able to write off this loss than a private one, who might require compensation.
- Opportunity cost of sale proceeds – what else could be done with the money, not only within Sydney Olympic Park but for other precincts around Greater Sydney and the Six Cities Region?

4.5 Summary

Based on the preceding review of variations in the ground lease model and the direction provided in the 2050 Place Strategy, there is strong grounds to consider among the negotiables and non-negotiable aspects of a ground lease model for further exploration:

- Ownership and control of land and its land uses are maintained long-term
- The terms of engagement create an ongoing and reliable source of revenue
- Opportunities for cross-subsidisation of market-rate and affordable uses on a site, but not necessarily within a single structure.
- Balance of financial terms and performance requirements for the tenant (developer)

5. Affordable Housing

Under the current Master Plan 2030, there is a requirement for a minimum of 5% of dwellings to be provided as affordable housing in new development.

This chapter discusses what approaches Master Plan 2050 can take to build on this existing paradigm to realise the benefits of additional affordable housing delivery, considering the 2050 Vision and Strategy's priorities and directions. The draft Sydney Olympic Park Affordable Housing Policy is considered in relation to these issues.

5.1 Affordable housing demand

Affordable housing is an important part of the housing mix in Sydney Olympic Park's future. This chapter explores the rationale for this and provides an overview of potential ways of meeting expectations as the Master Plan 2050 is delivered. The report does not include a precinct-specific affordable housing demand analysis. Rather, it draws on state and local government policy positions, supply-demand imbalances and the strategic rationale for Sydney Olympic Park's role in delivering significant levels of affordable housing.

Relevant local and state government strategies, as well as affordable housing delivery options under the existing NSW State Government policies, are summarised within Appendix B.

Reflection of current housing affordability issues

Much has been written on the issue of affordable housing demand and the broader discussion of housing affordability (the two being distinct) in recent times. This report is not delving into the drivers of the housing affordability issues facing Australia cities and regions. It is, however, important to contextualise the need for increased affordable housing through locally-relevant evidence.

Per the NSW Department of Communities and Justice rental statistics, median weekly rent for a unit in the Parramatta LGA have changed as follows from 2019:

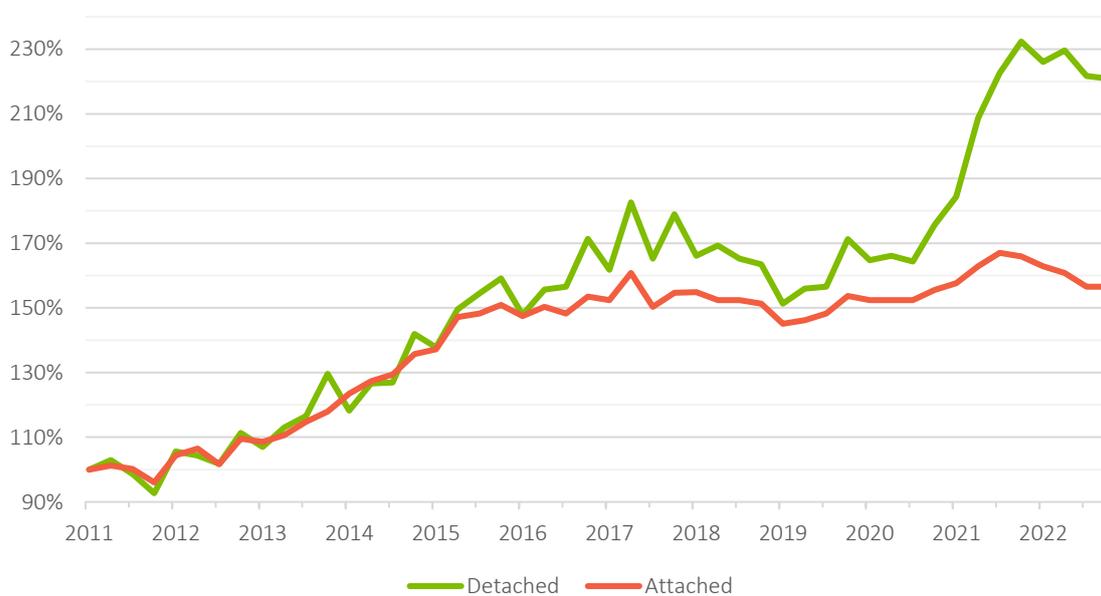
Table 19: Median Parramatta 2 bedroom Unit rentals, 2019-2022

Quarter	Rent
September 2019	\$480
December 2019	\$485
March 2020	\$480
June 2020	\$450
September 2020	\$450
December 2020	\$440
March 2021	\$435
June 2021	\$430
September 2021	\$440
December 2021	\$450
March 2022	\$460
June 2022	\$500
September 2022	\$520
December 2022	\$550

Source: NSW Department of Communities and Justice 2023

The increase from December 2021 to December 2022 is over 20%, while the change from March 2020, where the effects of the COVID-19 pandemic began to be felt in the property market, is approximately 14%.

FIGURE 17: SYDNEY MEDIAN DWELLING PRICES – MARCH 2011 AS BASELINE 100%

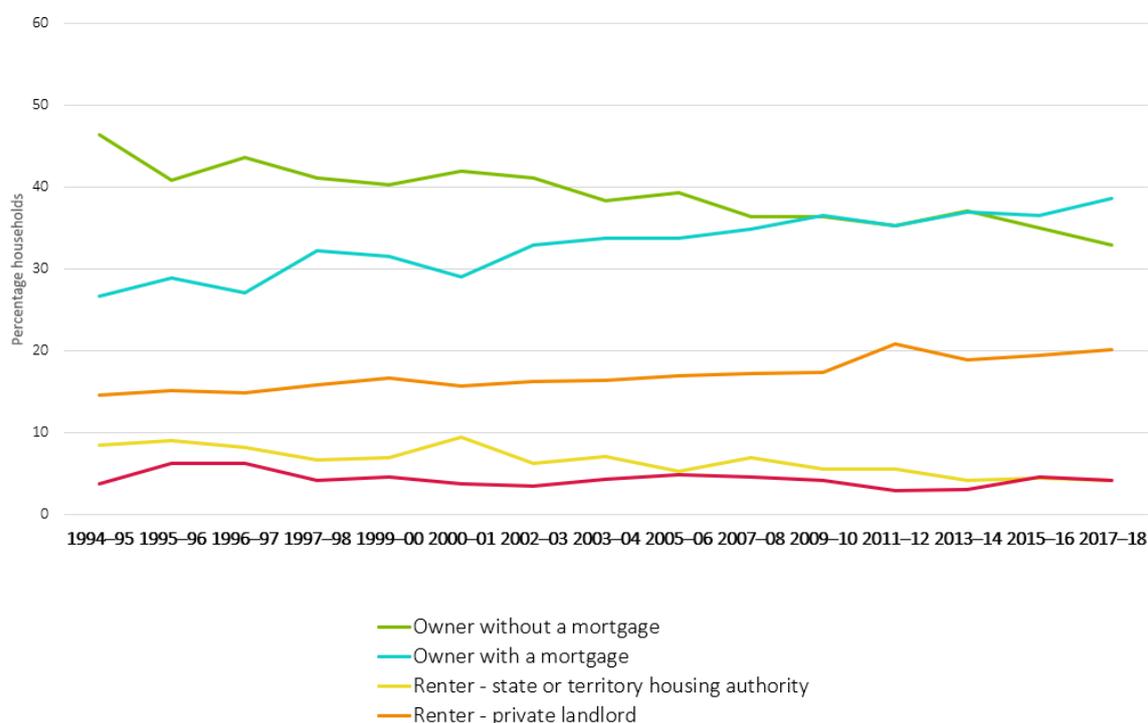


Source: SGS via ABS 2023

Figure 17 illustrates attached and detached median property prices for Sydney since 2011. The growth seen, particularly where there is a decoupling of the increases in prices for attached and detached dwellings around mid-2020, is indicative of the pandemic-era increases in asset prices, partly driven by economic stimulus and monetary policy.

Further issues include the decline in social and affordable housing stock, relative to population, at the national level. While the data within Figure 18 is for all Australia, to 2018, this chart illustrates an historic underprovision of social and affordable housing. This specifically increases housing stress on households in the lower income brackets, as they are less likely to be able to afford market housing.

FIGURE 18: HOUSEHOLD TENURE TRENDS, AUSTRALIA



Source: SGS via ABS 2021

None of these charts fully encompass the complexities of the housing affordability challenges facing Sydney. For Sydney-based context, more detailed appraisals of the challenges can be found in reports by the [Committee for Sydney](#)²², [The Conversation](#)²³, and current (May 2023) media channels.

²² Committee for Sydney 'Bringing Affordable Housing to Scale, December 2022 (<https://sydney.org.au/wp-content/uploads/2022/12/Committee-for-Sydney-Bringing-affordable-housing-to-scale-December-2022.pdf>)

²³ Hal Pawson, The housing and homelessness crisis in NSW explained in 9 charts, March 2023 (<https://theconversation.com/the-housing-and-homelessness-crisis-in-nsw-explained-in-9-charts-200523>)

5.2 Benefits of social and affordable housing provision

SGS has undertaken extensive work on the benefits of investing in social and affordable housing. A report authored by SGS in 2022 with Housing All Australians identified that the estimated benefits of providing for adequate housing across Australia would reach almost \$110 billion by 2051, and for every \$1 invested in affordable housing would achieve \$2 in benefits²⁴.

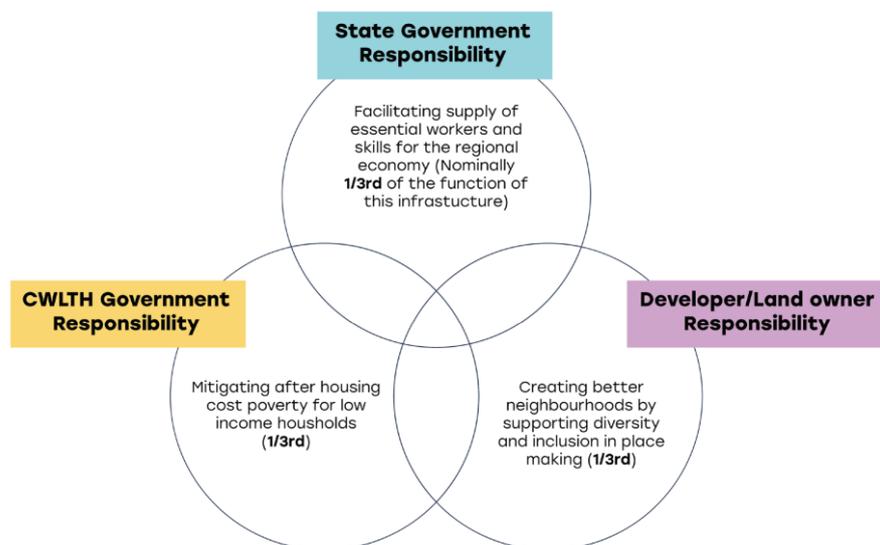
The positive externalities associated with the investment in affordable housing are three-fold. These are:

- Avoidance of poverty – mitigating ‘after housing cost’ poverty for low income households
- Supporting better labour markets – facilitating supply of essential workers and skills for the economy
- Creating better local places – creating better neighbourhoods by supporting diversity and inclusion in place making²⁵.

These three key benefits align with the Strategic Directions of the Sydney Olympic Park 2050 Place Vision and Strategy, and specifically the following Strategic Directions:

- SD 1 – A place to call home
- SD2 – A liveable and complete community

FIGURE 19: MAPPING EXTERNALITIES ASSOCIATED WITH SOCIAL AND AFFORDABLE HOUSING TO FUNDING SOURCES



Source: SGS Economics and Planning

²⁴ SGS Economics and Planning, 2022 'Give me Shelter' https://sgsep.com.au/assets/main/SGS-Economics-and-Planning_Give-Me-Shelter.pdf

²⁵ SGS Economics and Planning, 2022 'National Housing Assistance Policy: Trends and Prospects' https://sgsep.com.au/assets/main/SGS-Economics-and-Planning_Commonwealth-housing-policy_occasional-paper.pdf

5.3 Role of Government-owned land

NSW Government affordable housing position

In September 2022, the Greater Cities Commission published a discussion paper entitled ‘The Six Cities Region: Delivering global competitiveness and local liveability’. This discussion paper reflected a six-themed vision for the Multi City Region, including one on housing supply, diversity and affordability (Region Shaper 3).

This theme articulates the need for housing diversity across each of the six cities and emphasises the need to “enable choices while maximising affordability, including for our most vulnerable community members has committed to 30% on government-owned land”²⁶.

Action 3.7 of the discussion paper explicitly emphasises the role of the NSW Government in delivering affordable housing:

“The City Plans will set a target of up to 30 per cent for the proportion of social and affordable housing in residential developments on government land” (Action 3.7)

This direction sets clear expectations on Sydney Olympic Park, with the vast majority of the site under public ownership, to maximise the delivery of affordable housing within these target parameters.

As a point of comparison, it is instructive to look at the recently completed Central Station Precinct planning proposal application in the Eastern Harbour City.

The current State Significant Precinct planning proposal for Central Station, submitted to the NSW Department of Planning and Environment in late 2022 proposes a minimum affordable housing requirement of 15% of residential floorspace, and a further 15% of new residential floorspace as ‘diverse housing’ (for example seniors housing, key worker housing or build-to-rent)²⁷.

As a government-owned asset (much of the site is owned by Transport Asset Holding Entity of NSW – a state owned corporation), the site expects to deliver at a minimum, 15% affordable housing. While the site’s scale, connectivity and ownership mirror many of Sydney Olympic Park’s characteristics, what Central Station must contend with that Sydney Olympic Park does not, is the engineering complexity of building over a functioning major train interchange. This adds significant cost to development and so feasibility plays a significant role in defining land use and scale. This complexity is far less onerous in Sydney Olympic Park, meaning that the delivery of affordable housing can be more ambitious.

Examples of government ownership and control of affordable housing

In a recently published Churchill Fellowship paper, Jennifer Kulas examined innovative housing models for women in Helsinki, Zurich, Basel, Paris, Amsterdam, and London. As a part of this study, Kulas visited a number of projects and interviewed over 30 stakeholders, as well as attending several conferences.

While the paper focused ostensibly on housing women, several of the paper’s findings have strong elements of relevance to Sydney Olympic Park, particularly the following two concluding points:

²⁶ Greater cities Commission, 2022 ‘The six Cities Region: Delivering global competitiveness and local liveability’ p40

²⁷ TfNSW, Central State Significant Precinct planning proposal application, 2022 p64

2. Every city has slowed or completely ceased selling public land to private actors, instead choosing to retain public ownership and utilise land assets, such as via long-term ground leases for nonprofit housing.

5. Every city has mandatory inclusionary zoning requirements as part of the planning scheme which commits private multi-residential developments to include a percentage of submarket housing²⁸

This valuable, and current, primary research exploring how other countries are approaching the delivery of affordable housing indicates that governments are taking a more active role in the delivery of affordable housing and that they are increasingly recognising the strategic value in retaining ownership of public land and deploying it strategically to achieve stated aspirations such as increasing the supply of affordable housing.

5.4 Strategic rationale for Affordable Housing in Sydney Olympic Park

Sydney Olympic Park is in a strong position, owing to the large tracts of government-owned land under its control, to influence the supply of affordable housing in Greater Sydney in a way that few precincts are.

Sydney Olympic Park 2050 Place Vision and Strategy

The 2022 Sydney Olympic Park 2050 Place Vision and Strategy has a strong focus on housing diversity and inclusivity as part of its ambitions vision for its transformation from an events precinct to a thriving suburb. Early in the Strategy a problem definition is articulated. Paraphrased, this posits:

The delivery of Sydney Metro West by 2030 will transform Sydney Olympic Park, and connect it directly to Greater Sydney's expanding metro and heavy rail network. This investment creates an opportunity for Sydney Olympic Park to move from an events precinct to a thriving suburb.

The question for Sydney Olympic Park is how does it leverage transport investment to address Sydney's intractable problems, maximise public good and give its community a great place to be proud of?

²⁸ Kulas, Jennifer, Churchill Fellow '2020 Churchill Fellowship to investigate innovative housing models for women and women-headed households' published December 2022 (<https://www.churchilltrust.com.au/vic/project/to-investigate-innovative-housing-models-for-women/>)

The Strategy’s case for change chapter reflects on the importance that a place of such significant location and scale - and in public ownership – plays in addressing some of Sydney’s most intractable challenges, particularly the onus on it to ‘realise its public good potential’ as a publicly-owned site.

Sydney Olympic Park is in its early stages of development, with approximately one third of the development capacity potential identified in the Master Plan 2030 delivered. The remaining development potential can be reshaped and expanded to ensure Sydney Olympic Park maximises its public good – particularly with respect to diverse housing supply and affordability”. (p52)

Two of the Vision’s ten Strategic Directions have an explicit focus on affordable and inclusive communities. The vision described in Strategic Direction One sees Sydney Olympic Park as an affordable and diverse place to live.

“In 2050, Sydney Olympic Park will be a suburb known for its innovative approach to new models of housing, with housing affordability and diversity front and centre. It will leverage its central location and connection to Greater Sydney’s key employment centres to deliver high levels of affordable and key worker housing as part of its high-density, mixed-use neighbourhoods” p70



1
A place to call home



2
A liveable and complete community

Government ownership

At 640 hectares, Sydney Olympic Park is larger than the CBD of Sydney. Its scale reflects its transformative capacity with respect to a range of infrastructure, but particularly with affordable housing. This is possible because of Sydney Olympic Park’s public ownership, meaning it can deliver outcomes with a focus on public good and strive to achieve outcomes that smaller sites, or private markets, would not.

Primarily, this is because, as the landowner, SOPA is able to directly influence what is delivered on each site, regardless of whether this is through freehold sale or ground lease arrangements. Strategic Direction Ten of the Vision has an action explicitly focused on the retention of freehold land (Action 10.02, p. 126). However, notwithstanding this, as the landowner, SOPA is able to dictate land uses even in freehold sale. As price setters, they are also able to determine appropriate land values that reflect the expectation of development. That is, as land owners they are able to accept a lower than market valuation of land if it means that developments deliver higher levels of affordable housing.

Government ownership also retains a higher degree of dynamism in the delivery of the Master Plan 2050 over the 30-year time horizon. The sequencing of development, the balancing of whole-of-suburb infrastructure and land use needs and the ability to provide functions that the private market would not, all reinforce the importance of government ownership. This reflects international examples (as discussed previously) and, importantly, still retains income generation capacity through ground lease models (as articulated in Chapter 4).

Sydney Metro West investment

The investment in the Sydney Metro West line is considered to be the single biggest catalyst for the development of the 2050 Vision and Strategy and Master Plan 2050. From the perspective of affordable housing delivery, the Metro significantly increase the metropolitan connectivity of Sydney Olympic Park – putting it truly in the centre of Greater Sydney.

The Sydney Metro West will put Sydney Olympic Park within two stops of Westmead and significantly lessen the commute times to key centres in the Eastern Harbour City. It will also connect Sydney Olympic Park to other metro and heavy rail lines connecting the rest of Sydney. The ability, therefore, to deliver significant amounts of affordable housing means that strategic centres such as Westmead will be better connected to essential workers such as nurses who are vital to the operational efficiency of the hospital.

A Living laboratory for urban experimentation

Beyond a focus on affordability, the 2050 Place Vision and Strategy also envisages Sydney Olympic Park as a laboratory for urban experimentation (Strategic Direction 6).

“In 2050, Sydney Olympic Park will be a place known for driving innovation in urban development and placemaking. It will be known for its experimental mindset and be home to educational institutions that reflect its competitive advantages. Public institutions and private businesses alike will be attracted to Sydney Olympic Park because it is known globally as a place that incubates and accelerates innovations in urban development.” Sydney Olympic Park 2050 Place Vision and Strategy, p98

One of the Place Vision and Strategy’s measure for success is that “Sydney Olympic Park is constantly accommodating research, prototyping, testing or supporting other experimental processes” (p99).

This strategic aspiration has a direct link to affordable and diverse housing as it is envisaged that Sydney Olympic Park is a place where the exploration and testing of new ways to delivering affordable housing of all sorts is undertaken. The retention of the site under government ownership is core to the full realisation of this aspiration.

Illustrative example: Novel approaches to delivering affordable housing in the UK

Community Land Trusts are a method of land tenure where housing is held by a trust and the dwellings upon it are leased or sold at rates permanently tied to local incomes. This ties the price of that housing to the price of labour, not to the wider property market²⁹. The affordability of units is keyed towards those who don’t need social housing, but who also do not have the means to purchase property at market rates.

The development process is run by locals through a codesign process and is funded by grants from various levels of government, including land, community share issues, and debt from ethical banks and social lenders at preferential rates³⁰.

²⁹ London CLT, about, via <https://www.londonclt.org/about>

³⁰ London CLT, CLT Financing – understanding the diversity of models in Europe, via https://www.londonclt.org/_files/ugd/9b1760_2a006b6743614ac5b4fd9908e60c5e52.pdf

While not advocating for this particular approach to affordable and community housing provision, this example provides an illustration of how Sydney Olympic Park – as a living laboratory for urban experimentation – can be at the forefront of the NSW Government’s approaches to solving complex urban issues such as housing affordability.

5.5 Principles of Affordable Housing at Sydney Olympic Park

The 2050 Place Vision and Strategy has at its heart several principles core to the delivery of affordable and diverse housing provision at Sydney Olympic Park.

Integration

Action 1.03 of the Place vision and Strategy is to ‘Ensure housing is integrated seamlessly with other uses and reflects the character, scale and diversity of the neighbourhood’. Core to this action is the requirement for Sydney Olympic Park’s future development to ensure that private market housing is integrated within the town centre along with affordable housing and other non-residential uses, rather than creating gated communities (p72).

Mix of tenures

Action 1.01 of the Vision is to ‘Deliver diverse housing options, including affordable, essential worker, student, inter-generational, accessible and social housing’. This action states that Sydney Olympic Park is to ensure that a high level of Social and Affordable and essential worker housing is provided as part of the mix of dwellings, but also that housing across all tenure types supports different ages, abilities, needs and household profiles.

Flexibility, adaptability, and resilience

Underpinning the whole 2050 Place Vision and Strategy is an emphasis on flexibility, adaptability, and resilience. This principle is reflected in one of the three Place Pillars of the Vision – that Olympic Park is a dynamic place that adapts to changing needs. With structural issues of housing affordability embedded in the Greater Sydney economy, the role of Sydney Olympic Park to provide scaled solutions to this will continue to influence the type of housing and associated community infrastructure that Greater Sydney needs over the coming decades.

5.6 Application

Influencing factors to the delivery of affordable housing

With a suburb the size of Sydney Olympic Park, and its distinct land ownership and legislative structure, the application of affordable housing policy will not be a one-size-fits-all approach. Affordable housing delivery at Sydney Olympic Park will depend on several factors. These include:

- **An overarching objective to provide approximately 30% of total residential dwellings as affordable.** As a (largely) state-owned land holding, in line with current NSW Government policy position it is expected that Sydney Olympic Park will deliver up to 30% Affordable Housing.
- **Current land ownership.** Certain sites across Sydney Olympic Park have already been sold freehold or had detailed discussions held. Land values may have already been defined or at the very least, expectations set. Imposing new obligations on sites like this may create legal and/or feasibility issues.
- **Future land ownership.** Some sites may currently remain in State Government ownership, but may have been flagged for freehold sale in the future, but are not yet subject to negotiations on the market.
- **Onsite Infrastructure requirements.** Some sites, be they publicly or privately owned, may have specific on-site infrastructure requirements such as the delivery of community facilities. They may also have complex delivery requirements such as over-station development considerations, that may limit how much subsidised floorspace they can deliver
- **Whole-of-suburb affordable housing balance.** Sydney Olympic Park will develop over decades. It will inevitably see different cycles of development occur. How it performs against a 30% target will likely vary over these development cycles. There will need to be an ongoing balance of the delivery of private market housing, affordable housing and a wide range of social and community infrastructure that the suburb must deliver that is dynamically planned for over the coming decades

Within this context, and the overall expectation for Sydney Olympic Park to live up to the potential it has to play a significant role in addressing the housing affordability crisis in Sydney, the following approach is proposed.

Proposed approach

The draft Sydney Olympic Park Affordable Housing Policy (n.d.) provides a framework for the future provision of affordable housing contributions in new development, as follows:

- 10% of dwellings (monetary contribution) on land subject to an existing long-term ground lease or freehold land, or
- 30% of dwellings (monetary contribution) in Sydney Olympic Park land that is owned by the NSW Government and not subject to a long-term ground lease to a party outside of Government.

This approach is generally consistent with the 2050 Place Vision and Strategy in achieving a diverse and affordable place for residents. However, there is a possibility that land which is currently owned by the NSW Government may be sold, and subject to the lower, 10% contribution requirement, which would reduce the overall quantum of affordable housing produced. This possibility should be managed within the draft Affordable Housing Policy.

It is important to recognise that affordable housing does not require State government retention of land ownership to deliver affordable housing. If SOPA chooses to dispense with land through freehold sale, as the vendor they are able to place a value on the land. In private market conditions, this would be based on residual land value, previous acquisition costs etc. However, as the government has a more holistic role in balancing financial needs with economic, social, and environmental outcomes, they are in the position to value land with these wider expectations priced in. Any future freehold sales should seek to not simply prioritise financial gain, but broader expectations on Government.

The decision to retain land, sell ground leases, or sell freehold (as discussed in Chapter 4) should be based on strategic decisions regarding the organisational need for operational versus capital expenditure, rather than simply that it is the prevailing approach to state government land holdings.

Considering Sydney Olympic Park's unique land ownership structure, there is ample opportunity for a 30% affordable housing target to be achieved.

6. Benefits of Master Plan 2050

This chapter outlines a range of benefits that the delivery of the Sydney Olympic Park Master Plan 2050 can achieve. It is not a cost-benefit analysis, but rather a description of the value that Sydney Olympic Park plays in the Greater Sydney context, as well as the benefits of alternative approaches to delivery of Master Plan 2050, from a social, economic, environmental and governance perspective.

6.1 Social benefits

Affordable Housing benefits

The benefits of investment in Social and Affordable Housing have previously been documented by SGS Economics and Planning in the 2021 Paper 'Give Me Shelter'³¹. As discussed in Section 5.2 of this report, the estimated benefits of providing for adequate housing across Australia would reach almost \$110 billion by 2051, and for every \$1 invested in affordable housing would achieve \$2 in benefits³².

This Cost Benefit Analysis assessed the costs associated with affordable housing delivery with the range of benefits that such investment delivers. In summary, costs were identified as Government subsidy and support service costs. Benefits were more extensive and included:

- Improved health outcomes
- Reduced costs of crime
- Enhanced human capital
- Educational benefits
- Enhanced labour market productivity
- Improved community diversity, inclusion, and equity.

As chapter 5 briefly outlines, Greater Sydney is increasingly challenged by issues associated with housing (un)affordability. Delivery of both social and affordable housing at the scale that Sydney Olympic Park allows for means that it has the opportunity to make a meaningful contribution to affordable housing delivery and drive the benefits that accrue to the wider economy as a result.

Social cohesion

The 2050 Place Vision and Strategy has a strong focus on building social cohesion throughout current and future communities of Sydney Olympic Park. Strategic Direction 2, and its supporting actions, focus on providing the right social infrastructure, using the public domain to foster informal community

³¹ SGS Economics and Planning, 2021 'https://sgsep.com.au/assets/main/SGS-Economics-and-Planning_Give-Me-Shelter.pdf'

³² SGS Economics and Planning, 2022 'Give me Shelter' https://sgsep.com.au/assets/main/SGS-Economics-and-Planning_Give-Me-Shelter.pdf

interactions, and developing space and places that reflect the culturally diverse needs of the future community.

The 2018 Resilient Sydney Strategy, for which both the NSW Government and the City of Parramatta were stakeholders, highlights the importance of social cohesion as a key plank of building resilient communities and cities. The Resilient Sydney strategy notes that “close knit, cohesive communities are better prepared for shocks and respond and recover faster than those where there is tension”³³. Resilience and adaptability form core components of the Sydney Olympic Park 2050 Vision.

The Resilient Sydney strategy also identifies that social cohesion within Sydney has been declining and social isolation is increasing. This strategy preceded the COVID-19 Pandemic where lockdowns highlighted the high value that individuals and communities placed on social and community bonds.

In 2020 almost 1.2 million people (14.6% of the population) across New South Wales reported feeling lonely³⁴. This impacts people across the age spectrum, especially younger and older people, and people living alone. The Bankwest Curtin Economics Centre estimated that social isolation and loneliness is costing Australia \$2.7 billion each year³⁵.

Good quality urban design and the designing for communities from the outset (including the provision of social infrastructure and services, and a diverse range of housing types and unit sizes) is fundamental to the development of social cohesion. Both the Vision and Master Plan 2050 focus heavily on this, resulting in benefits associated with increased social cohesion.

6.2 Economic benefits

Strategic support of other specialised centres

The Sydney Metro West will connect Sydney Olympic Park to two of Greater Sydney’s largest employment centres – the Sydney and Parramatta CBDs. It will also connect Sydney Olympic Park to the rest of Greater Sydney through connections to other rail and metro lines. This provides an opportunity to increase the pool of labour that can be efficiently drawn on to support future jobs in these employment centres.

Of particular relevance to Sydney Olympic Park is the opportunity to provide substantial levels of affordable and key worker housing as part of the overall 30% affordable housing target identified by the NSW Government for government-owned land.

Sydney Metro West puts Sydney Olympic Park within two stops of the Westmead Health and Innovation Precinct. Westmead is a major employer of essential workers in the health sector and the hospital operates 24-hours a day. This means that essential workers are constantly needing to travel to Westmead and often of a night before or after shifts.

The benefits of providing higher levels of essential worker housing with such direct access to Westmead include:

³³ Resilient Sydney, a Strategy got City Resilience, 2018

³⁴ <https://www.aihw.gov.au/reports/australias-welfare/social-isolation-and-loneliness-covid-pandemic>

³⁵ <https://www.theguardian.com/society/2021/nov/19/ill-health-due-to-loneliness-costs-australia-27bn-each-year-report-suggests>

- Greater efficiency of health service provision through closer proximity of workforce. Recent analysis by SGS highlighted that many essential workers live in the western part of Sydney, away from major hospitals such as Royal Prince Alfred and that require their services.
- The large distances and often non-standard work travel patterns of hospital shift workers means that access to public transport to place of work is limited or non-existent. Travelling at night for long distances also has personal safety implications. Accommodating a higher number of essential workers along a major transport line with the capacity to operate 24 hours a day is a significant benefit in terms of hospital operability, efficiency, and personal safety.

The COVID-19 pandemic highlighted the challenges of essential workers travelling to and from places of work, with large numbers living some distance from they worked. This creates significant social and economic disbenefits. Providing housing to meet the needs of workers in key precincts should be considered essential infrastructure for the efficient and equitable functioning of the city. A site of this scale with this level of future connectivity is uniquely placed to play an economic and social role well beyond the confines of the suburb's boundaries.

A study on the economic impact of investment in essential worker housing in the US City of Vail³⁶ also attributed benefits such as decreased commute time (a community benefit), associated reduction in vehicular emissions associated with commuting, economic benefits increased filled employment positions and the downstream impact on increased expenditure.

Maximising the investment in Sydney Metro West

The NSW Government is committing approximately \$25 billion in delivering the Sydney Metro West. It is important that this investment maximises the social and economic benefits that it creates. A recent report by the Committee for Sydney, of which SGS was a key author, identified that the marginal benefits, per dwelling, of replacing a greenfield development with infill dwelling in station precincts amounted to \$100,000 in benefits³⁷. While the need to accommodate a range of different land use function and activities, not just residential development maximisation, is a central part of the Master Plan 2050, the benefits of transitioning Sydney Olympic Park to a thriving suburb are reflected in the opportunity to put as many people close to public transport infrastructure as is suitable for the precinct.

There are also benefits in increasing the destinational role of Sydney Olympic Park. The 2050 Place Vision and Strategy cites pre-COVID analysis of visitation levels of over 10 million visitors to Sydney Olympic Park, across over 5,000 events³⁸. The 2017 SOPA business case for Sydney Metro West identified potential expenditure associated with additional visitation of \$2.48 billion, or \$807 million in Net Present Value.³⁹

³⁶ Vail Local Housing Authority, 2019 (<https://files.vailvalleypartnership.com/sites/2/2019/09/VLHA-Economic-Impact-infographic-8-14-2019.pdf>)

³⁷ Committee for Sydney, 2022 'Rethinking Station Precincts' (<https://sydney.org.au/wp-content/uploads/2022/05/Committee-for-Sydney-Rethinking-Station-Precincts-May-2022.pdf>)

³⁸ SOPA, 2022 'Draft Sydney Olympic Park 2050 Place Vision and Strategy'

³⁹ Sydney Olympic Park authority 'Sydney Metro West Final Submission'

Master Plan 2050's explicit focus on supporting an increased diversity of visitor experiences, as articulated in the 2050 Place Vision and Strategy, is an important part of realising the economic benefits that the business case identified.

Urban renewal benefits

There are several urban renewal benefits associated with the delivery of Master Plan 2050 and the Vision. Firstly, the intensification of development leads to increased land values. This is a standard metric in cost-benefit analysis and is realised both in freehold and leasehold circumstances.

Secondly, the development of a coherent Master Plan 2050 that outlines a spatial land use vision over thirty years makes the considered delivery of requisite infrastructure more efficient as future development parcels are clearly articulated. Compared with a non-master planned scenario, the master planning process provides clearer guidance with respect to enabling infrastructure delivery (roads, utilities etc).

Thirdly, and associated with the benefit above, the clear sequencing and efficient parcelling of land has the benefit of enabling housing or other development to be delivered sooner, as planning is more coordinated than in a non-master planned scenario.

Living laboratory

The 2050 Place Vision and Strategy has a strategic direction to foster a 'living laboratory' vision for Sydney Olympic Park. The vision paints a picture of Sydney Olympic Park in 2050 being *"a place known for driving innovation in urban development and placemaking. It will be known and highly regarded for its experimental mindset and be home to educational institutions that reflect its competitive advantages. Public institutions and private businesses alike will be attracted to Sydney Olympic Park because it is known globally as a place that incubates and accelerates innovations in urban development."*⁴⁰

The living lab model that the Master Plan 2050 builds on has the potential to create a number of wider benefits for Sydney Olympic Park, Greater Sydney, and NSW as a whole. These include:

- Being a place to test and validate new technologies, policies or processes associated with sustainable future urban development. Having a place where these can be experimented with to ensure their suitability for wider application becomes a strategic advantage for NSW. This may include, for instance, the deployment of autonomous vehicles, Internet of Things (IoT) technology prototyping and deployment or even the testing of new building processes. While each experimentation will have its own costs and benefits, the benefits to NSW of having a place that acts as an urban laboratory could be significant.
- Building on the above benefit, developing a national and even global reputation for urban experimentation as a living laboratory has the potential to attract international investment,

⁴⁰ SOPA, 2022 'Draft Sydney Olympic Park 2050 Place Vision and Strategy

conferences and visitation, particularly if the NSW Government and university or research institution partners play a proactive role in the development of the Living Lab.

The Atelier Ten report explores the benefits and opportunities of the Living Lab concept in further detail.

6.3 Environmental benefits

Efficient utilities

The supporting report by Atelier Ten articulates a series of infrastructure interventions to underpin the Master Plan 2050 that focus on increasing the environmental efficiency and performance of Sydney Olympic Park. These include the establishment of a renewable energy-driven micro grid and a district thermal energy system. The benefits of these include:

- Increasing the resilience of Sydney Olympic Park in the event of major power failures across the grid. This is of particular importance as Sydney Olympic Park hosts the emergency services crisis centre and has recently been used for critical emergency functions such as mass vaccination centres and flood evacuation centres, both of which require certainty of power supply.
- Carbon reduction benefits through the increased use of renewable energy and provision of thermal energy to provide heating and cooling systems to buildings in Sydney Olympic Park, thereby reducing their energy consumption needs.
- Increased efficiency of land use by centralising utilities at a district level, rather than have them provided on every site. This creates the opportunity to free up more space for other uses both in buildings and within the suburb more broadly.

The Atelier Ten report outlines these initiatives and their rationale and opportunities in greater detail.

Trees

The additional tree canopy, as well as additional and enhanced parks envisaged within the Master Plan 2050 are key aspects of the quality of Sydney Olympic Park as a place for people to live and work. The NSW Interim Framework for Valuing Green Infrastructure and Public Spaces, prepared by DPE⁴¹ identify a range of benefits related to increased tree canopy coverage. With Master Plan 2050 increasing the amount of open space and planted areas, these benefits will include:

- Air quality improvements, contributing to better public health. This has been quantified within the Interim Framework as amounting to \$0.104 of value per square metre of tree canopy per annum. This value increases as canopy increases as the tree grows.
- Reduction of the urban heat island effect, reducing energy use in the summer and reducing the impact of heat on public health. As urban heat disproportionately impacts the very young and very

⁴¹ NSW Department of Planning and Environment, March 2022
(https://www.dpie.nsw.gov.au/__data/assets/pdf_file/0005/502772/interim-framework-for-valuing-green-infrastructure-and-public-spaces-2022-03.pdf)

old, and the proportions of these demographics are anticipated to grow under Master Plan 2050, this is a key benefit for improving the quality of life of the anticipated future populace.

- Reduced stormwater runoff and an associated improvement in water quality of the Parramatta River, potentially improving the swimmability of the river in future.
- Reduced greenhouse gas emissions as the trees absorb CO₂ during photosynthesis, and store it as biomass.

The specific benefits from the additional trees will also depend on their species and their location throughout Sydney Olympic Park.

6.4 Governance benefits

Alternative revenue streams

The application of a leasehold versus freehold model (or a mix of both) creates financial benefits to SOPA through the establishment of an additional revenue stream. Both the vision and Master Plan 2050 seek to achieve a car lite suburb by 2050. At the same time, a significant proportion of SOPA's operational revenue is generated from car parking, which will reduce as Master Plan 2050 delivers on its car lite future.

A strategic focus on deploying leasehold land ownership models creates an opportunity to reduce reliance on parking revenue and instead use ground lease models to develop regular income streams to fund operating expenses for SOPA.

Value capture and retention

The retention of land ownership through a ground lease model also has the benefit of retaining development and land use options over the long term. With this comes the benefit of the NSW Government reaping the financial and economic benefits of land value uplifts and land use changes over the duration of Master Plan 2050 and beyond.

For instance, a site designated and developed as commercial under a ground lease model which subsequently re-develops as residential in the future will have an uplift in the value of that land. Once the land is sold under a freehold arrangement, the value uplift will accrue to the future landholder, whereas under a leasehold model, any future value uplift is retained by the government and can be realised in increase leasehold arrangements. In the meantime, the current use's ground lease model delivers a revenue stream for operational expenditure to SOPA.

Building in resilience: long term flexibility and adaptive capacity for change

Beyond the financial benefits there is also strategic benefit in retaining land ownership from the perspective of being able to respond to future need. Retaining ownership gives the NSW Government far greater influence in ensuring that Sydney Olympic Park continues to most effectively provide for the needs of the future metropolitan Sydney community. Changes may be social – such as the changing needs for housing provision and community infrastructure. They could be economic – with a shift in the economic geography across Sydney re-prioritising the role of centres and the location of jobs of the future. They could also be environmental – with rising sea levels or extreme heat necessitating a different approach to urban development in the coming decades. The retention of ownership under state control maximises the adaptive capacity for change at Sydney Olympic Park.

Appendix A – Demand-side employment profile testing

In considering the employment profile for Sydney Olympic Park in 2050, the typical method that would be applied is similar to that used above for the population profile, which used age/ sex split and using proportions. If we were consider the overall Master Plan 2030 job number of 30,760, this would likely be done as proportion of each individual ANZSIC job category.

However, for the purpose of this analysis, a different approach has been taken. This is leveraging the 2050 Place Vision and Strategy work which has been completed, and which seeks to consider the future character of Sydney Olympic Park. We have considered future employment types and numbers via a different method.

To come to a conclusion regarding the profile of employment in Sydney Olympic Park in 2050, broad types of jobs were considered to make up the precinct, in line with strategic aspirations and forecasts from various sources. The concept was that these jobs – outlined below – would make up the jobs of the precinct outside of the knowledge intensive jobs. The latter of which would need to be accommodated within typical office floorplates.

These key industries are:

- Retail
- Health and Education
- Sports
- Events and tourism
- Accommodation
- Arts
- Industry (this is current number of manufacturing jobs from the 2021 census)

Estimations of key industries

Retail

Retail jobs were understood through the lens of the forecast demand for retail space, including non-retail shopfront (that is, population-serving uses in retail space). This was taken from the Master Plan Central Precinct Commercial Demand and Feasibility Assessment (2021 Review) prepared by HillPDA. This has been reduced due to assumptions regarding the future role of online commerce, with a provision of 90,000 sqm of retail floorspace within Master Plan 2050. This was then compared with the NSW common planning assumptions, which indicate one job per 35 square metres of retail space.

This results in a quantum of 2,600 jobs.

Health

Health care is not anticipated to grow at the same rate as other industries in Sydney Olympic Park: the major cluster of the Westmead Health and Innovation District is anticipated to be the main provider of major healthcare in the area, with public hospitals also located in Concord, Auburn, and Ryde. Health services within Sydney Olympic Park are thus anticipated to be related to the day to day needs of residents, and health services related to the sports cluster.

The adopted health employment at 2051 has been assumed at 500 jobs.

Education

Childcare, as well as primary, secondary, and tertiary education are all anticipated to be located within Sydney Olympic Park in future.

Childcare needs were taken from the social infrastructure assessment and provided an assumption of 300 employees.

The primary schools were assumed to employ 200 people.

The secondary school was assumed to employ 150 people.

For tertiary institutions:

- The existing 350 jobs included in the TZP19 forecasts are assumed to remain
- The proposed 55,000 square metre tertiary campus referred to within the Commercial Demand and Feasibility Assessment was taken as employing one person per 100 square metres
- A new, additional tertiary education facility of half the size of the above was also anticipated to locate within Sydney Olympic Park, in line with the strategic aspirations of the area

This gives a quantum of 1,800 jobs.

Sports

Sydney Olympic Park's role as a pre-eminent sporting precinct has been considered by assuming it will be the location of 30%⁴² of all additional sports jobs within Greater Sydney in the period 2016-2051.

This was considered by firstly ascertaining the number of sports jobs within the TZP19 projections. These projections are only completed at the 1-digit ANZSIC level of statistical detail (with 4-digit levels

⁴² 30% was chosen to reflect the likely pull of sporting jobs from across Sydney into Sydney Olympic Park, but also recognising that these jobs will continue to be distributed across Greater Sydney. It is designed to reflect a potential future share of sports jobs rather than an absolute number.

being the most detailed). Sports and Recreation is a 2-digit industry category beneath the Arts and Recreation umbrella. The 2021 census data was used to determine that Sports and Recreation jobs made up 43% of all Arts and Recreation jobs in Greater Sydney.

Between 2016 and 2051, Arts and recreation services jobs were forecast to increase by 24,696 in Greater Sydney. 48% of these, representing the assumed Sports and recreation jobs, were 10,854. 30% of this, representing this is the proportion which will be captured within Sydney Olympic Park was 3,256.

These additional jobs, with the inclusion of the existing Sports and Recreation jobs within Sydney Olympic Park, resulted in a quantum of 4,500 jobs.

Events and tourism

Research conducted by the federal Trade and Investment Commission in 2020 indicated that 4.3% of all jobs in NSW were directly linked to tourism⁴³. While this might be considered a conservative number, this was taken as a percentage of the total jobs number at Sydney Olympic Park and could potentially be higher.

For the adopted Master Plan 2050 total job quantum of 30,760, this was 1,310.

Accommodation

Accommodation jobs – which, within Sydney Olympic Park, would likely be jobs associated with hotels and student accommodation – are also not accounted for at a granular level within the TZIP19 projections. This was accordingly considered through the lens of ratios given by 2016 census jobs (as 2021 data is skewed by COVID-19).

Within Sydney Olympic Park at the 2016 census, 31% of all Accommodation and Food services jobs were within the Accommodation sector. At a NSW-wide level, this was 14%.

Sydney Olympic Park currently has a relatively large proportion of hotels relative to its size and projected size – as such, for the 2051 TZIP19 forecasts, 25% of Accommodation and Food Services jobs were assumed to be within Accommodation only.

This gave a quantum of 550 jobs.

⁴³ <https://www.tra.gov.au/data-and-research/reports/state-tourism-satellite-account-2019-20/new-south-wales-tourism-summary>

Arts

Following the analysis for Sports and Recreation jobs, 10% of all Arts and Recreation Services jobs in Greater Sydney were found to be directly employed within the Arts sector. This number has been applied to the TZP 2051 employment quantum for Sydney Olympic Park.

At 2051, this equates to 250 jobs.

Industry

The vision of Sydney Olympic Park as a living lab and circular economy leader, calls for a significant quantum of 'Industry' jobs. These are considered to be jobs which require a larger format floorspace typology. Further industrial jobs are likely to be able to be accommodated within other types of floorspace, and this is discussed further below.

Not only typical industrial jobs are expected to be located within Sydney Olympic Park. These jobs were also anticipated to include:

- Micro-factories and workshops including scale-up operations
- Cultural production and multimedia production (for instance, prop manufacturing)
- Recycling and water treatment

A conservative assumption of 750 jobs has been adopted, as this is approximate to the existing manufacturing sector within Sydney Olympic Park (as taken from the 2021 census).

Knowledge intensive

Knowledge intensive jobs are considered to be 'generic' commercial jobs that would typically seek commercial office floorspace. They are best reflected in businesses such as NRMA, Samsung, and Lion, who are current tenants in commercial developments in Sydney Olympic Park.

Amongst others, these jobs might be found within:

- Commercial focused businesses linked to existing specialisations such as events management
- Government agencies as are currently present within the precinct
- Health science and sports medicine
- Businesses attracted to SOP because of its offer of 'Sustainability as a Service' (SAAS)
- Businesses aligned with Olympic legacy and future Olympic games

Knowledge intensive jobs are considered to make up the 'gap' between the above job types and the gross jobs figure.

Validation and cross-referencing

In order to validate this method, the percentages of Knowledge intensive jobs in comparison to the overall jobs number were considered. Under the TZP22 base forecast as-is for 2051, 56% of jobs are Knowledge intensive. Under the adopted Master Plan 2050, 60% of jobs within Sydney Olympic Park are anticipated to be Knowledge Intensive commercial jobs. This is not a marked variation from the TZP22 expectations, and still allows for flexibility in the types of jobs in future, in line with the living laboratory vision for Sydney Olympic Park.

Estimating future industrial floorspace demand

Typically, a job to floorspace ratio of approximately 65 square metres would be applied to manufacturing and light industrial jobs. In this case, 750 'industrial' jobs are considered for the precinct, requiring 48,650 square metres of floorspace.

However, the sorts of space which will fulfil the roles required for the uses anticipated in Sydney Olympic Park in future are likely to be diverse. Spaces such as basements, existing warehouses, and industrial facilities are able to accommodate these uses in aggregate, to varying degrees of specialisation.

For the purposes of the Master Plan 2050 development process, it would be suitable to consider how sites might deliver flexible productive floorspace in innovative ways, rather than in separate industrial facilities. The characteristics and services required might include:

- High clearance ceilings and access
- Sound attenuation
- Commercial-grade power supplies
- Ventilation and grease traps
- Loading bay access for small trucks

Appendix B – Affordable Housing

Relevant housing policies

In the recent past, various strategic and statutory planning documents have contributed to the advancement of affordable housing policy around Sydney Olympic Park:

- **Parramatta Road Corridor Urban Transformation Strategy (2016)** – the development of this strategic planning document provided a cross-jurisdictional framework for local governments to target five (5) per cent affordable housing contribution through zoning uplift along the transportation corridor.
- **Greater Sydney Commission Central City District Plan (2018)** – framed strategic planning objectives for Parramatta and three other councils around delivery of housing, dwelling diversity, affordability, and means by which affordability could be achieved. While this has been a guiding document for the past five years, the Greater Cities Commission (GCC) are in the process of updating the Region and District Plans to align with an evolving set of conditions.
- **City of Parramatta Affordable Rental Housing Policy (2019)** – identified a set of actions for the City of Parramatta to facilitate the delivery of affordable rental housing through use of Planning Agreements and inclusionary zoning. It also nominated that 10% of land value uplift in areas outside the CBD be captured as affordable rental housing.
- **City of Parramatta Local Housing Strategy (2020)** – documented a strong evidence base for affordable housing need (DPE’s letter of approval in 2021 indicated the LHS’s evidence base was sufficient for the preparation of an affordable housing contribution scheme) and delivery of robust housing targets over the mid-term with an evaluation of how such supply could be delivered through greater housing diversity, existing capacity, planning precincts and planning proposals.
- **City of Parramatta Local Strategic Planning Statement (2020)** – established a 20-year vision for balancing housing and economic growth while protecting and enhancing housing diversity, heritage and local character, as well as liveability aspects such as the provision of affordable rental housing. The LSPS also provides strategic alignment to the LHS.
- **Greater Cities Commission Six Cities Region Discussion Paper (2022)** – established an elevated target of 10% affordable housing for new rezonings in areas of proposed uplift, as well as targets of 30% social/affordable housing for residential developments on government land.

City of Parramatta Local Housing Strategy (2020)⁴⁴

The City of Parramatta Local Housing Strategy (LHS) does not explicitly plan for Sydney Olympic Park, because it comes under state government jurisdiction via the SOPA Act. However, Sydney Olympic Park is covered in several of Council's strategic planning documents.

⁴⁴ City of Parramatta 2020, Local Housing Strategy, via <https://www.cityofparramatta.nsw.gov.au/sites/council/files/2021-08/LHS%20-%20DPIE%20Approval.PDF>

The LHS identifies Sydney Olympic Park as providing an additional 8,190 dwellings by 2036, with an unknown quantum of affordable housing. Council seeks to apply a 5-10% affordable housing requirement (depending on viability) for rezonings under a SEPP 70 (now the Housing SEPP) pathway. As Sydney Olympic Park is outside the purview of Council’s LEP, they have not identified Sydney Olympic Park’s potential contribution to affordable housing in the LGA under the Housing SEPP pathway.

The City of Parramatta does, however, assume that within its development, Sydney Olympic Park will provide a ‘minimum of 5-15%, or 535-1,605 affordable dwellings’, in line with Master Plan 2030 (City of Parramatta 2020, p.167). This indicates that Sydney Olympic Park has a strategic imperative to play a significant role in providing the Parramatta LGA’s needed affordable rental housing into the future.

The strategy sums up the identified rezonings across the LGA and their anticipated affordable housing contributions, as shown within **Error! Reference source not found.** below. It considers that the proposed 5-10% contribution across the LGA would yield a range of 1,555-2,735 affordable dwellings. ‘This leaves a potential gap of between 6,065 – 7,245 Affordable Dwellings’ (City of Parramatta 2020, p55).

TABLE 20: CITY OF PARRAMATTA AFFORDABLE HOUSING PROVISION FORECAST

Growth area yet to be rezoned	Approximate Planning Forecast (rounded figures)	Expected range of delivery of affordable housing under SEPP 70 (rounded figures)
Camellia ³⁵	3,500 dwellings	175 – 350 dwellings (5-10%)
Melrose Park	6,330 dwellings	325 – 630 dwellings (5-10%)
Parramatta CBD	7,180 dwellings	Nil ³⁶
Granville (North & South)	5,830 dwellings	290 – 585 dwellings (5-10%)
Sydney Olympic Park	8,190 dwellings	Unknown
Westmead	4,470 dwellings	225– 450 dwellings (5-10% assumed for government owned land but higher if viable)
Telopea <i>Note: already rezoned</i>	4,890 dwellings	360 additional affordable or social dwellings (based on planning documentation for the precinct)
Parramatta North ³⁷	800 dwellings	-
Parramatta East (ADHC / WSU sites)	3,610 dwellings	180 – 360 dwellings (5-10% assumed for government owned land but higher if viable)
Wentworth Point	8,980 dwellings	Nil – as rezoning / planning already in-place
Carter Street	5,860 dwellings	Nil – as rezoning / planning already in-place
Carlingford	4,470 dwellings	Nil – as rezoning / planning already in-place
Epping	8,910 dwellings	Nil – as rezoning / planning already in-place
TOTAL FORECASTS	73,020 dwellings	<u>1,555 – 2,735 Affordable Dwellings</u>

Source: City of Parramatta, 2021

Providing increased affordable housing in Sydney Olympic Park specifically is in line with key priorities, objectives, and goals under the Policy:

- **Liveability Planning Priority C5** - Providing housing supply, choice and affordability, with access to jobs, services and public transport
- **Liveability Objective 2** - Housing delivery is aligned and sequenced with existing transport and capacity improvements
- **Liveability Objective 4** - Growth precincts innovate excellence in placed-based outcomes with diverse and affordable housing to suit residents' needs
- **Liveability Goal 1** - Deliver 90% of new housing within the walking catchments of existing or committed public transport and deliver active transport networks, promoting modal shift, throughout the LGA
- **Productivity Objective 5** - Housing supports the key essential services in the City of Parramatta through striving for housing affordability
- **Productivity Goal 3** - Deliver 8,800 Affordable Housing dwellings in the LGA by 2036

City of Parramatta Affordable Rental Housing Policy (2019)⁴⁵

The Strategy sets a target of a total of 9,500 affordable rental dwellings by 2036 across the LGA, which equates to 6.3% of total predicted stock. The City understood that there were 697 affordable dwellings in the LGA when the analysis was completed in 2016, which provided the target of 8,800 additional affordable rental dwellings.

Affordable housing mechanisms

The following section outlines standard approaches to facilitating affordable housing delivery, where private market activity needs to be leveraged. While certain sites, as discussed in Section 5.6, may require these mechanisms if they are in private ownership, public ownership of land means that the requirement for delivery of affordable housing can be built into development decision-making in the initial freehold or leasehold land disposition. This may mean that these mechanisms may be unnecessary but can serve as the tools for government to provide affordable housing on site.

The statutory requirements for affordable housing contributions (AHCs) are established in the *Environmental Planning and Assessment Act 1979* (EP&A Act) and *State Environmental Planning Policy (Housing) 2021* (Housing SEPP).

⁴⁵ City of Parramatta 2019, Affordable Rental Housing Policy via <https://www.cityofparramatta.nsw.gov.au/sites/council/files/inline-files/Affordable%20Rental%20%20Housing%20Policy.pdf>

Affordable Housing Contributions are envisaged to be applied to areas via Local Environmental Plans – this may present a challenge for Sydney Olympic Park, as it is not subject to the *Parramatta Local Environmental Plan 2023*. However, the mechanism for applying an AHC scheme is outlined below. These AHC schemes are also required to be applied to areas undergoing zoning uplift, which is applicable to Sydney Olympic Park.

The relevant provisions for imposing conditions for affordable housing contributions are provided in Division 7.2 of the EP&A Act. Section 7.32 of the EP&A Act relates to conditions for affordable housing and Section 7.33 of the Act relates to the provision of affordable housing.

The provisions are supported by the *Guideline for Developing an Affordable Housing Contribution Scheme 2019* (the Guideline) prepared by the Department of Planning and Environment (DPE).

A further potential mechanism for requiring contributions which can be used for affordable housing is through **Special Infrastructure Contributions (SICs)**, including for affordable housing, are authorised under Subdivision 4 of the EP&A Act.

Affordable Housing Contributions

EP&A Act 1979

Affordable housing contributions are authorised under Division 7.2 of the EP&A Act. The Division falls under Part 7, which covers infrastructure contributions and financing. The EP&A Act provides that these contributions can be included as a condition of consent of a development and can be either monetary contributions, or a direct dedication of land or dwellings. They must further be authorised under a clause within a Local Environmental Plan (LEP), which means that to implement or amend an AHCS, councils need to go through the process of altering their LEP (which is a process requiring approval by DPE).

Section 7.32 (1) establishes the general requirements for affordable housing contributions – this includes that a **SEPP has identified the need for affordable housing**, and:

- a) the consent authority is satisfied that the **proposed development will or is likely to reduce the availability of affordable housing within the area**, or
- b) the consent authority is satisfied that the **proposed development will create a need for affordable housing** within the area, or
- c) the proposed development is allowed only because of the **initial zoning of a site, or the rezoning of a site**, or
- d) the regulations provide for this section to apply to the application.

Section 7.32(3) of the EP&A Act also provides that an affordable housing contribution can be levied if it 1) complies with relevant SEPPs, 2) is authorised by the relevant LEP, and 3) requires a “reasonable” dedication, defined as scaled against need, scale of development, and other contributions.

This suggests that as well as complying with the SEPP (see below) and being notified in the relevant LEP the contribution needs to be justified by evidence.

Housing SEPP

The Housing SEPP establishes the need for affordable housing in all LGAs (satisfying the above-mentioned requirement of the EP&A Act). It further provides requirements that need to be met to

allow a condition to be imposed, which guides councils in their management of contributions raised under an AHC scheme.

Guideline for Developing an Affordable Housing Contribution Scheme (2019)

The Guideline for Developing an Affordable Housing Contribution Scheme⁴⁶ is the policy which outlines existing requirements for the development of an AHCS under 7.32(1)(c) (that is, linked to a rezoning of land).

FIGURE 20: PROCESS FOR PREPARING AN AFFORDABLE HOUSING CONTRIBUTIONS SCHEME



Source: Planning NSW, 2019.

The Guideline requires that councils complete the following process:

1. Gather an evidence base for affordable housing need in their LGA (similar to the evidence base used for councils' Local Housing Strategies)
2. Identify the areas of uplift to which an affordable housing contribution scheme will apply
3. Determine a viable affordable housing contribution rate using a residual land value (RLV) method
4. Produce an AHCS using the Department template
5. Submit a Planning Proposal to amend their LEP to reference the AHCS

The AHCS is then assessed by the Department, exhibited, and implemented if the Department is satisfied.

The Guideline requires that AHCS be levied from upzoning, which “ensures contributions are drawn from the increase in land value generated by the rezoning and are consistent with the affordable housing targets established in the Greater Sydney Commission’s District Plans”.

Special Infrastructure Contributions

Special Infrastructure Contributions (SICs) are authorised under Subdivision 4 of the EP&A Act, which provides that:

- The Minister may apply SICs to Special Contributions Areas (SCAs).
- Contributions may be required for the provision or funding of recurrent expenditure for ‘public amenities or public services, **affordable housing** and transport or other infrastructure’.
- Contributions are to be ‘reasonable, having regard to the cost of provision of infrastructure in relation to the development’.

⁴⁶ Department of Planning, Industry and Environment 2019, accessed via <https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/guideline-sepp70-developing-affordable-housing-contribution-scheme-2019-02-28.pdf?la=en>

- Contributions can be required for the provision of infrastructure outside the SCA, where the need for that infrastructure is created by the development.
- There are various consultation and exhibition requirements where a SIC is proposed.
- SICs are in addition to local infrastructure contributions considered under Section 7.11 and 7.12 of the EP&A Act.

There are currently ten implemented or proposed Special Contributions Areas (SCAs), which are characterised by being areas of significant rezoning and uplift, benefitting from public infrastructure investment, or greenfield development. However, there are not currently any affordable housing contributions included in any of these SCAs.

There is no specific method of determining rates set out in the Act, however rates have been implemented as either a percentage of development cost, and as a rate per additional dwelling. For the Greater Macarthur SIC, this was up to \$43,985 per additional dwelling. Per the Special Infrastructure Contributions User Guidelines (December 2022)⁴⁷, SICs must be paid before a subdivision or construction certificate can be issued on the development.

The Draft Special Infrastructure Contributions Guidelines (April 2020)⁴⁸ also highlighted the principles underlying the SIC process, including that they are applied to areas of new growth and urban renewal, where the SIC will apply only to land rezoned after the Contribution takes effect. The SIC acts to provide infrastructure to support the population growth of the area in question.

Feasibility or viability testing is also conducted as a method of calibrating a proposed contribution, to ensure that a SIC does not impede or constrain development.

⁴⁷ Department of Planning and Environment 2022, accessed via <https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/Plans-for-your-area/Special-Infrastructure-Contributions-User-Guidelines-Dec-2022.pdf>

⁴⁸ Department of Planning, Industry and Environment 2020, accessed via https://shared-drupal-s3fs.s3-ap-southeast-2.amazonaws.com/master-test/fapub_pdf/Planning+Reforms+Exhibition/Special+Infrastructure+Contributions+Guidelines+-+April+2020.pdf

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Retail Floorspace Analysis

Sydney Olympic Park Authority

29 | 08 | 2025





Independent
insight.



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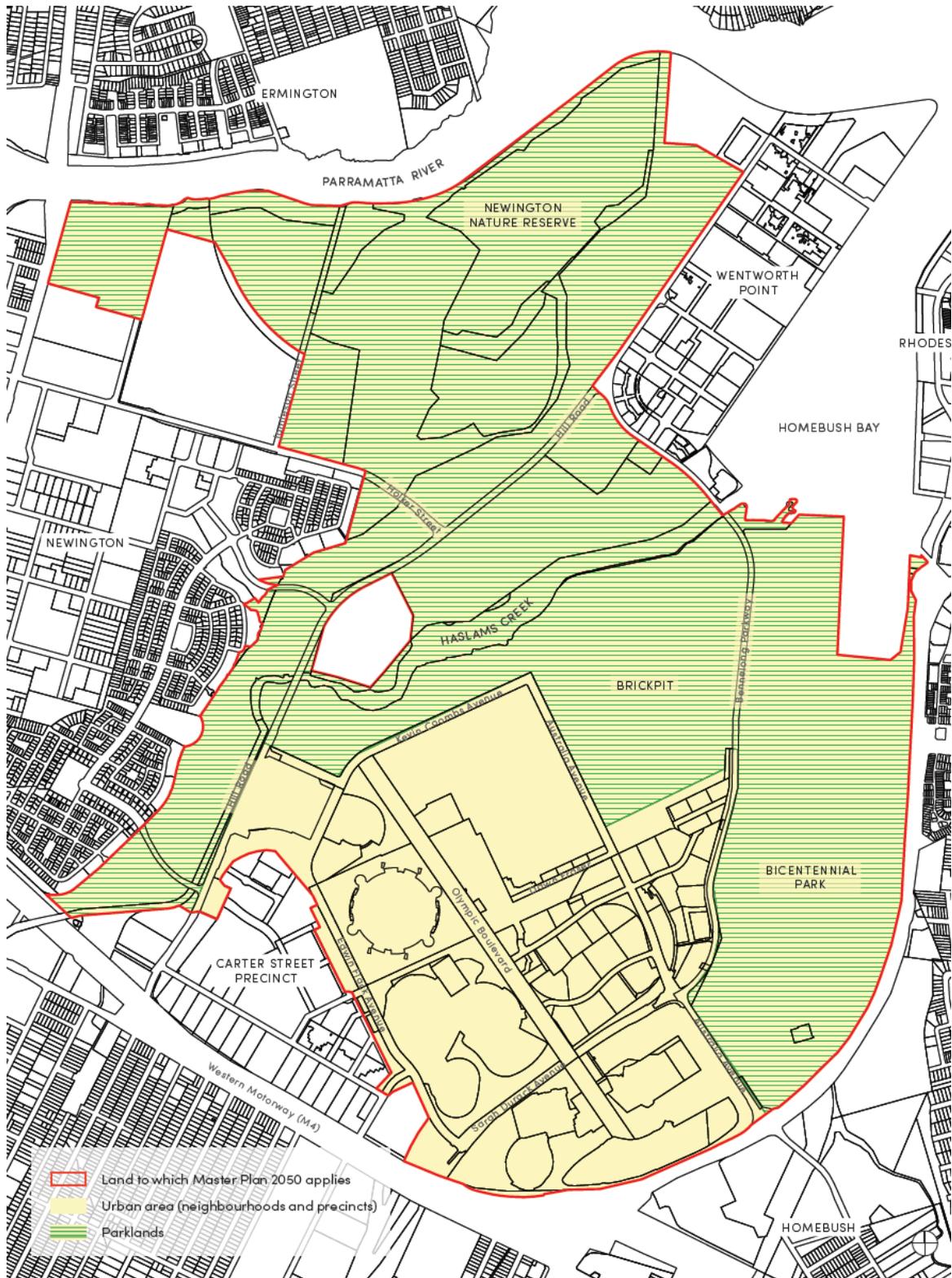
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1. Introduction

This report has been prepared to provide additional research and analysis for the Sydney Olympic Park Master Plan 2050. This has stemmed from the public exhibition period submissions received by the Sydney Olympic Park Authority on the Sydney Olympic Park Master Plan 2050. A map of the Sydney Olympic Park (SOP) boundary is overleaf.

This report provides an assessment of supportable retail floorspace in SOP to 2051. The assessment considers data and assumptions relating to three different retail spend cohorts in SOP, including future residents, job holders and visitors to the precinct. The analysis aims to strengthen and justify potential modifications to Master Plan 2050.

Figure 1: Sydney Olympic Park boundary



Source: Sydney Olympic Park 2050 Draft Masterplan, 2024

2. Key assumptions and data sources

This section details the key assumptions and data sources that have been used in the analysis.

2.1 Data sources and method

The key data and underlying assumptions that have been used in the analysis are detailed in **Table 1** below.

Table 1: Key assumptions and sources

Data	Description/ data used	Source
Annual spending by retail category	Spend by retail category of residents and visitors. For residents, the data represents instore, online, credit/debit card, direct debit and BPAY transactions. For visitors, the data represents instore only credit and debit card transactions (not online). The SOP boundary used to derive CommBank IQ data is in Appendix A . For workers, a proxy for City of Parramatta (LGA) residents as future worker spending profile was used.	CommBank IQ, 2025
Retail Turnover Densities	The amount of money/turnover a centre is expected to make by commodity per square metre.	Urbis, 2018 ¹
Current and future population SOP	<ul style="list-style-type: none"> - 2021: 3,854 residents - 2051: 32,949 residents 	Prior SOP reports/ analysis
Current and future jobs SOP	<ul style="list-style-type: none"> - 2021: 13,056 - 2051: 23,327 (excludes retail jobs)² 	Prior SOP reports/ analysis
Visitors SOP	11,900,000 (2023-2024); this report assumes visitor numbers held constant to 2051.	SOPA 2023- 2024 Annual Report
Immediate surrounding precinct populations (2051)	Geographies used are in Appendix B . <ul style="list-style-type: none"> - Carter Street: 10,627 - Wentworth Point: 15,814 - Newington: 6,940 - Wider population within 5km: 367,074 	Transport for NSW, TZP2024

Source: SGS Economics & Planning, 2025

¹ Escalated by CPI from March 2018 to June 2025, which averaged 3.16% per annum (using ABS data).

² Retail jobs are excluded from the 2051 jobs profile in order to identify the number of future job-holders generating retail demand at SOP (that is, the number of retail jobs will be determined by the amount of retail floorspace which is the output of this analysis).

Method

SGS has taken a stepped approach to converting demand for floorspace:

1. Divide the current spend per retail category (CommBank IQ data) by current population/ jobs/ visitors. This determines current per capita spend for residents, workers, visitors.
2. Multiply current spend per capita by future population/ jobs/ visitors in 2051. This determines total future spending capacity per retail category
3. Apply a capture rate to the future spend per retail category to account for leakage to other areas outside of SOP. Capture rates are determined using best practice and vary by retail type and customer base. Capture rates utilised are in **Appendix C**
4. Align CommBank IQ spending categories with Retail Turnover Densities (RTDs) categories. The concordance between Retail Turnover Density categories and CommBank IQ data categories are in **Appendix D**
5. Divide Retail Turnover Densities by spend per retail category (taking into account capture rate) to determine a future floorspace requirement by category.

The rest of this section provides some more specific information regarding the approach for residents (2.2), workers (2.3) and visitors (2.4).

2.2 Residents

Resident spend is the customer count based on those who have a residential postcode address located within the study area. Two retail assessments were undertaken for residents based on different population data, including:

1. **Base scenario:** based on population projections to 2051 for the geographies of SOP, Carter Street, Wentworth Point, and Newington
2. **High scenario:** based on population projections to 2051 for the geographies of SOP, Carter Street, Wentworth Point, Newington, and 2% of the population within a wider 5km radius. The capture rates for some retail categories were also increased in this scenario. Capture rates used can be found in **Appendix C**.

The following table outlines the spend data and retail categories utilised for both assessments. The categories with the highest annual spend were Department Stores, Clothing & Accessories, Supermarkets and Other Discretionary Retail.

Table 2: CommBank IQ data, resident spending

	Annual spend up to July 2025 (\$)
CommBank IQ spend categories	Sydney Olympic Park
Other Discretionary Retail	\$16,825,000
Department Stores, Clothing & Accessories	\$18,351,000
Print Media and Books	\$305,000
Children and Baby Stores	\$355,000
Personal Services	\$3,630,000
Pet Care	\$1,015,000
Restaurants	\$11,913,000
Takeaway and Fast Food Outlets	\$6,186,000
Cafes	\$3,328,000
Pubs, Taverns and Bars	\$1,812,000
Breweries and Wineries	\$106,000
Supermarkets	\$17,726,000
Groceries and Other Food Retailing	\$9,282,000

Source: CommBank IQ, 2025

2.3 Job holders

Job-holder spend relates to the customers who work within the study area. It has been assumed that the spending profile for job holders in SOP is similar to Parramatta LGA residents. The following table outlines the spend data and retail categories utilised. The categories with the highest annual spend were Department Stores, Clothing & Accessories, Supermarkets and Other Discretionary Retail.

Table 3: CommBank IQ data, job holders spending

	Annual spend up to July 2025 (\$)
CommBank IQ spend categories	Parramatta LGA
Other Discretionary Retail	\$676,325,000
Department Stores, Clothing & Accessories	\$607,280,000
Print Media and Books	\$16,580,000
Children and Baby Stores	\$8,783,000
Personal Services	\$128,781,000
Pet Care	\$41,165,000
Restaurants	\$336,852,000
Takeaway and Fast Food Outlets	\$235,422,000
Cafes	\$98,636,000
Pubs, Taverns and Bars	\$71,998,000
Breweries and Wineries	\$3,748,000
Supermarkets	\$794,044,000
Groceries and Other Food Retailing	\$348,519,000

Source: CommBank IQ, 2025

2.4 Visitors

Visitor spend is the customer count based on those who have a residential postal code address located outside of the study area. The following table outlines the spend data and retail categories utilised. It has been assumed that visitor numbers to SOP will remain stable to 2051 at 11,900,000 visitors.

For visitors to SOP, the categories with the highest annual spend were Other Discretionary Retail and Restaurants.

Table 4: CommBank IQ data, visitor spending³

CommBank IQ spend categories	Annual spend up to July 2025 (\$)
Other Discretionary Retail	\$13,017,000
Department Stores, Clothing & Accessories	\$4,950,000
Restaurants	\$13,140,000
Cafes	\$9,012,000
Pubs, Taverns and Bars	\$762,000
Food retailing ⁴	\$4,198,000

Source: CommBank IQ, 2025

The retail floorspace demanded in SOP from residents, job holders and visitors is detailed in **Section 3 Results** below.

³ Other spend categories are Print Media and Books, Personal and Recreational Goods and Personal Services. The CommBank IQ data shows no spending by visitors at SOP precinct currently.

⁴ This category was available for only the visitor CommBank IQ dataset.

3. Results

The following table shows the retail floorspace demand in SOP by 2051 based on key retail categories. The total columns display the total retail floorspace demand generated from residents, job holders and visitors combined.⁵

Demand for retail floorspace is primarily driven by residents, followed by job holders and then visitors. When considering the residents base scenario there is demand for around 75,100 sqm of retail floorspace to 2051. When considering the high scenario, there is demand for around 92,700 sqm of retail floorspace to 2051. Floorspace supported by visitors is effectively zero given that there is no projected increase in visitors assumed.

Retail floorspace in Master Plan 2050 is primarily located in the Urban Centre (approximately 70% of total retail floorspace), with minor portions throughout each neighbourhood to support those communities.

Table 5: Retail demand summary, 2051 (sqm)⁶

Retail category	Source of demand				Total Floorspace Demand	
	Residents		Job holders	Visitors ⁷	Base	High
	Base	High			Base	High
	A	B	C	D	A+C+D	B+C+D
Food & Groceries	4,900	9,400	8,000	70	13,000	17,500
Personal and recreational goods	19,000	21,100	2,400	0	21,500	23,600
Clothing and shoes	13,400	22,100	2,800	30	16,300	24,900
Restaurants & Cafes & Take-away	18,200	20,200	1,600	10	19,800	21,800
Personal services	3,400	3,800	1,000	0	4,500	4,800
Print Media and Books	80	90	100	0	160	170
Total	59,100	76,700	15,900	100	75,100	92,700

Source: SGS Economics & Planning, 2025

⁵ The total low scenario is based on the residents base demand. The total high scenario is based on the residents high demand.

⁶ Numbers have been rounded to the nearest 100. The Print, Media and Books category has been rounded to the nearest 10. Numbers in totals column, therefore, may not add up exactly.

⁷ Floorspace supported by visitors is effectively zero given that there is no projected increase in visitors assumed.

Key points for each retail category

Food & Groceries: represents a large amount of future retail floorspace of 13,000- 17,500sqm. This category can include traditional supermarkets (Coles, Woolworths), as well as Liquor Stores, Bakeries, Butchers, Convenience Stores, Fruit and Vegetable Stores, Health Food Stores, Seafood Stores. Within the last 12 months, residents of the Parramatta LGA had high affinity with smaller speciality businesses including Tong Li (Asian grocery chain), Trims Fresh (fruit and vegetable store), Panetta Fruits and Miracle Supermarket (Asian supermarket)⁸



Personal and recreational goods: represents a moderate amount of future retail floorspace of 21,500- 23,600sqm. This category can include speciality stores like children and baby stores, pet care such as vets and pet stores, and other discretionary retail like Electronics Stores, Hardware, Motor Vehicles & Accessories, Personal Goods Retailing, Pharmacies, Gardening Stores & Nurseries. It should be noted that SOP could support large format retail (under the high scenario), such as hardware and electronics or furniture stores, but ceiling height assumptions would need to accommodate needs of these retailers. Within the last 12 months, residents of the Parramatta LGA had high affinity with larger businesses including Victorias Basement, Bing Lee, Ikea, Howards Storage World and Bed Bath N Table.



⁸ Affinity: A measure of how much more likely a group of customers are to transact with an industry or brand than a wider population (base customers) during the past 12 months.

Clothing and shoes: represents a moderate amount of future retail floorspace of 16,300-24,900sqm. This category can include Department Stores, Discount Department Stores, Men & Women Clothing Stores, Shoe Stores, Online Variety Stores, Luxury Boutiques. Within the last 12 months, residents of the Parramatta LGA had high affinity with larger businesses including Colette By Colette Haymam, Ralph Lauren, Zara, Uniqlo Australia and Swarovski



Restaurants & Cafes & Take-away: represents a moderate amount of future retail floorspace of 19,800-21,800sqm. This category can include traditional cafes, restaurants and takeaway food, as well as larger fast food outlet chains. Within the last 12 months, residents of the Parramatta LGA had high affinity with small to mid-size businesses including 1919 Lanzhou Beef Noodle, Three Beans, Coco Fresh Tea And Juice, Top Juice and Xs Espresso



Personal services: represents a modest amount of future retail floorspace of 4,500-4,800sqm. This category can include Barbers and Hairdressers, Beauty Salons, Cosmetic and Beauty Stores, Massage Services, Tattoo Shops. Within the last 12 months, residents of the Parramatta LGA have high affinity with medium- larger businesses including W Cosmetics, Bath and Body Works, L'Occitane and Looksmart Alterations



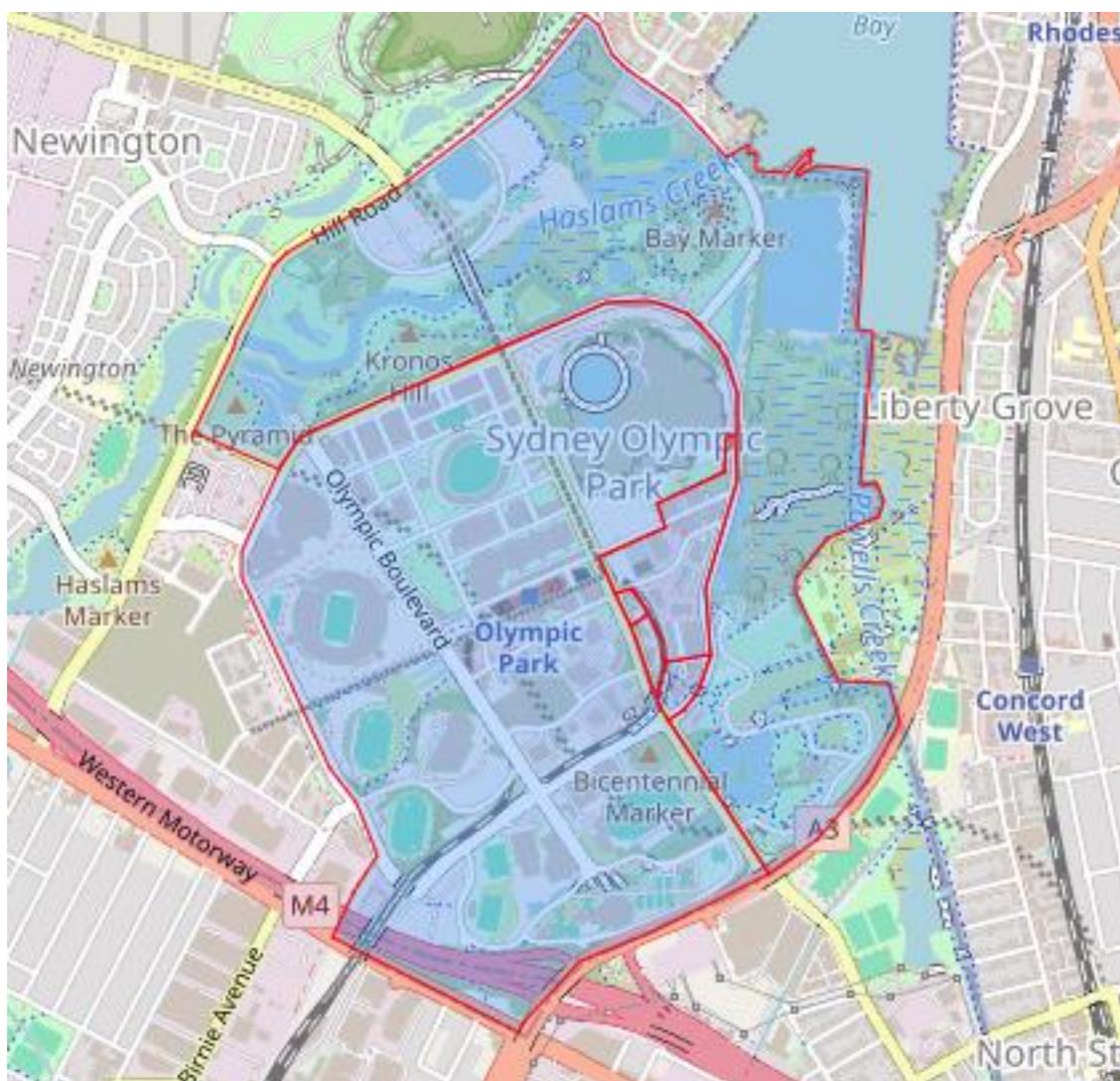
Print Media and Books: represents a low amount of future retail floorspace of 160-170sqm. This category can include Other Print Media and Book Stores.



Appendix A: Commbank IQ Statistical Boundary

The following is the statistical boundary used by CommBank IQ to derive spend data for Sydney Olympic Park. This broadly aligns with the Sydney Olympic Park town centre.

Figure 2: Sydney Olympic Park Statistical Boundary, CommBank IQ



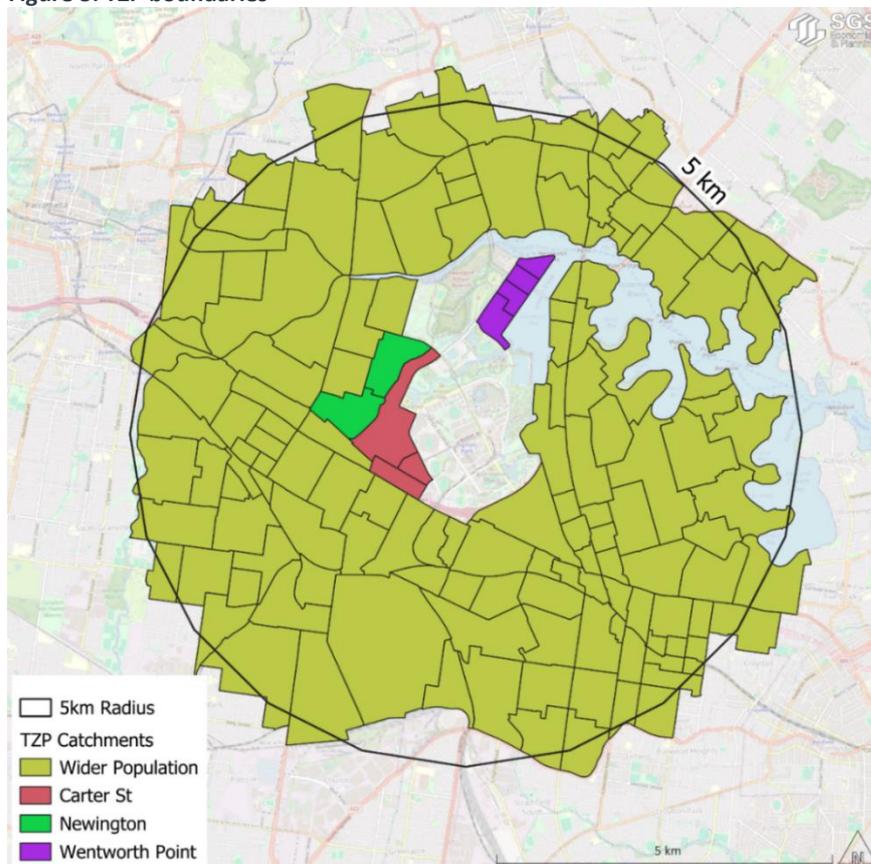
Source: CommBank IQ, 2025

Appendix B: Broader Travel Zone Projections boundaries

The figure below displays the Travel Zone Projection (TZP) 2024 boundaries utilised to determine future population.

- Sydney Olympic Park (blue statistical boundary from Appendix A) (2051): population of 32,949 persons
- Carter Street (2051): population of 10,600 persons
- Wentworth Point (2051): population of 15,800 persons
- Newington (2051): population of 6,940 persons
- Wider population (5km radius from Sydney Olympic Park) (2051): 2% of population (7,300 persons) is included

Figure 3: TZP boundaries



Source: SGS Economics & Planning, 2025

Appendix C: Capture rates

Table 6: Capture rates

CommBank IQ spend categories	Residents base	Capture rate applied		
		Residents high	Job holders	Visitors
Other Discretionary Retail	20%	30%	1%	1%
Department Stores, Clothing & Accessories	40%	40%	1%	1%
Print Media and Books	10%	10%	2%	-
Children and Baby Stores	30%	30%	2%	-
Personal Services	60%	60%	5%	-
Pet Care	50%	50%	2%	-
Restaurants	20%	35%	10%	5%
Takeaway and Fast Food Outlets	20%	35%	10%	-
Cafes	20%	35%	10%	5%
Pubs, Taverns and Bars	20%	30%	10%	5%
Breweries and Wineries	20%	30%	10%	-
Supermarkets	70%	70%	2%	-
Groceries and Other Food Retailing	70%	70%	2%	-
Food retailing	-	-	-	1%

Source: SGS Economics & Planning, 2025

Appendix D: Concordance

The following displays the concordance between CommBank IQ spend categories and Urbis Retail Turnover Density categories. A final SGS category was created for the final floorspace output.

Table 7: Data concordance

CommBank IQ spend categories	Retail Turnover Densities Categories (Urbis)	SGS category
Other Discretionary Retail	Furniture / Hardware - Other Regional Shopping Centres	Personal and recreational goods
Pet Care	Florists / Pets / Toys / Miscellaneous	Personal and recreational goods
Children and Baby Stores	Children's apparel	Personal and recreational goods
Restaurants	Cafe / Restaurant (> 150 sqm)	Restaurants & Cafes & Take-away
Takeaway and Fast Food Outlets	Total Takeaway Food	Restaurants & Cafes & Take-away
Cafes	Cafe / Restaurant (<= 150 sqm)	Restaurants & Cafes & Take-away
Pubs, Taverns and Bars	Cafe / Restaurant (> 150 sqm)	Restaurants & Cafes & Take-away
Breweries and Wineries	Cafe / Restaurant (> 150 sqm)	Restaurants & Cafes & Take-away
Supermarkets	Supermarket- other regional shopping centres	Food & Groceries
Groceries and Other Food Retailing	Total Food Retail	Food & Groceries
Food retailing	Total Food Retail, Supermarket- other regional shopping centres	Food & Groceries
Department Stores, Clothing & Accessories	Average of Jeaneries & Unisex, Department Store, Discount Department store categories	Clothing and shoes
Print Media and Books	Books	Print Media and Books
Personal Services	Hairdressing / Beauty	Personal services

Source: SGS Economics & Planning, 2025

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