



Camellia-Rosehill Place Strategy: Economics Report

Department of Planning and Environment

July 2022





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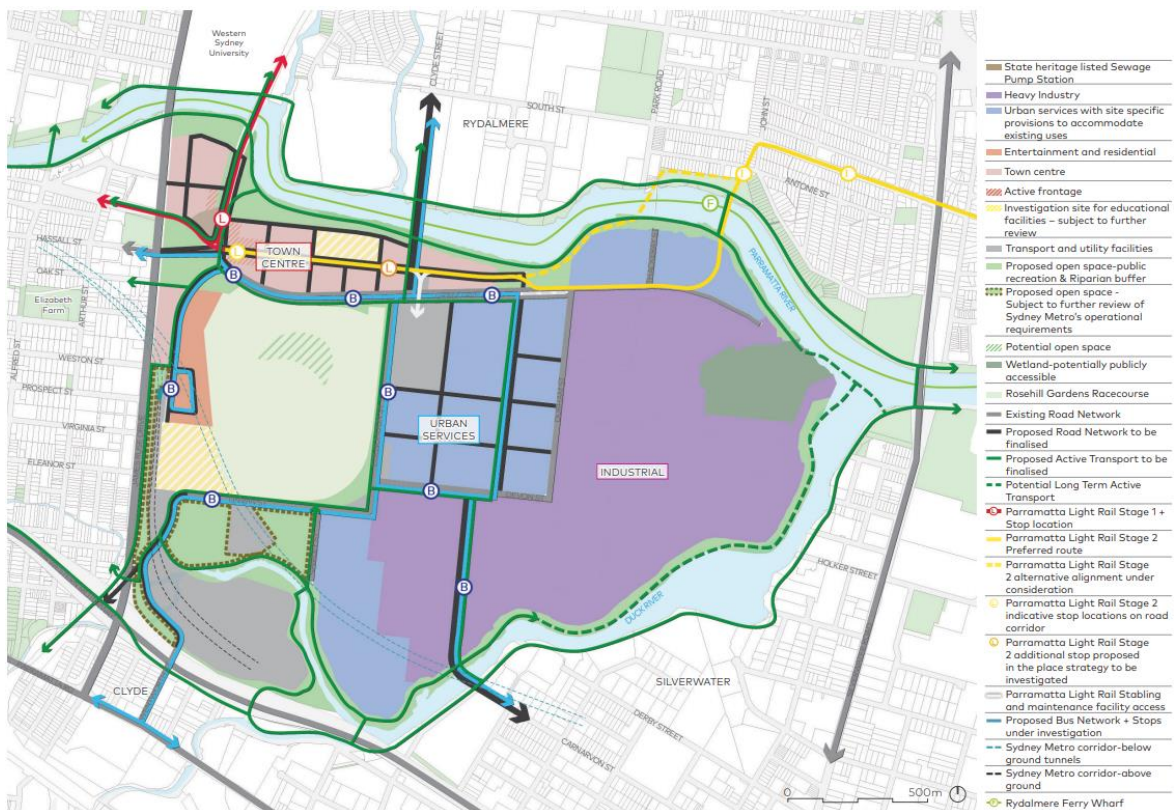
Executive Summary

New South Wales Department of Planning and Environment (DPE), in collaboration with the City of Parramatta Council (Council), industry, the community and State Agencies, has led the development of the Camellia-Rosehill Place Strategy and Master Plan for the Camellia-Rosehill Precinct (the Precinct).

An Enquiry by Design (EbD) process was undertaken to inform the preparation of the Camellia-Rosehill Place Strategy. The EbD was an iterative process which explored a number of master plan options for Camellia-Rosehill which could deliver the vision for the precinct and resulted in a draft master plan which was the subject of consultation as part of the Camellia-Rosehill Directions Paper and further refined following exhibition of the draft place strategy and consideration of submissions received. The draft place strategy was exhibited from 17 December 2021 to 4 March 2022. Refer to the DPE's finalisation report for further information.

As per the vision that accompanies the place strategy, it envisages Camellia-Rosehill enhancing its already important strategic role within the Greater Parramatta and Olympic Park (GPOP) Economic Corridor, as an industry and employment hub. By 2041, the precinct will be enhanced with service and circular economy industries and new recreational and entertainment facilities, all enabled by better transport access via light rail, active transport and road connections.

FIGURE 1 INTEGRATED MASTER PLAN



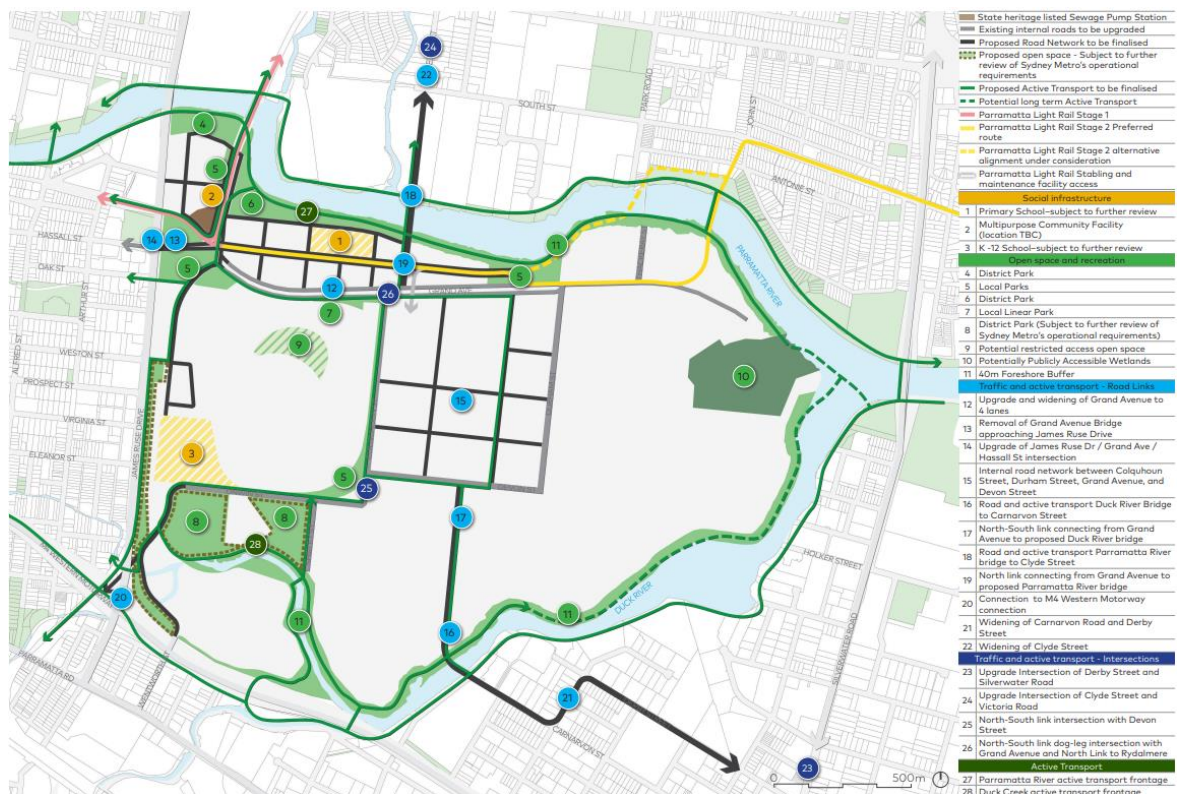
Source: Cox Architects (2022)

The place strategy has a three-fold vision:

- Firstly, it has taken an approach to urban renewal that is led by residential development. A high-density town centre is proposed in close proximity to the proposed Light Rail station, leveraging the connectivity benefits stemming from the provision of this public transport infrastructure.
- Secondly, the place strategy responds to the evolving nature of industrial precincts throughout Sydney and introduces an urban services component to the precinct that is located adjacent to the Parramatta River and Rosehill Racecourse. This highlights the precinct’s central location within the Greater Parramatta and Olympic Peninsula corridor and the need to provide critical services for the burgeoning population in this precinct with a particular focus on the importance of urban services and strategic industrial uses in highly accessible areas.
- Thirdly, much of the existing industrial lands are retained and enhanced in order to encourage and facilitate investment in innovative industries and businesses built around circular economy and recycling that leverage the existing specialisations of key precinct tenants.

This vision places an enhanced focus on the importance of urban services and strategic industrial uses in highly accessible areas, allows for greater amenity along the river foreshore, seeks to facilitate synergies between the racecourse and other entertainment uses and provides for greater amenity for future residents by safeguarding land for schools and open space.

FIGURE 2 INFRASTRUCTURE IMPROVEMENT PLAN



Source: Cox Architects (2022)

The analysis completed as part of this report underscores that without planning intervention, the quantum of jobs in Camellia-Rosehill is likely to stagnate, if not decline slightly by 2036. The Place Strategy provides the capacity for jobs to increase beyond the current carrying capacity of the site under its current land use structure. The investment in new urban services lands with additional floorspace capacity and the increased accessibility of the precinct means it is well-placed to arrest forecast declines in jobs in the long term.

The work undertaken by SGS to inform the development of the place strategy included a series of recommendations, including, but not limited to:

- Separating residential and industrial land uses within the precinct so as to minimise potential land use conflicts. These should be managed so as not to undermine existing or emerging industries. It is acknowledged that the place strategy introduces several measures which assist in managing these conflicts; the urban services zone and open space acting as a buffer between the residential and heavy industrial zones and new access routes into the precinct via the Silverwater industrial area.
- The inclusion of flexible additional permitted uses within the urban services zoned land can ensure a more vibrant and responsive local economy due to the more flexible land use permissibilities.
- Potential urban services that might be appropriate to consider as part of the fabric of the proposed town centre include artisan industries (small scale niche manufacturing), event production, technical services and creative industries, low-intensity food and beverage manufacturing, printing, bulky goods showrooms, etc. These are uses which have relatively small footprints and are often compatible with other uses such as commercial, retail and residential. To facilitate these, it is important that ground (and lower) levels have flexible or varied floor-to-ceiling heights, flexible partitioning and be appropriately separated so as to minimise conflicts with the residential components of the building. These objectives should form part of any precinct-wide development control plan.
- Given the precinct's potential to operate as an innovation and emerging technologies precinct, a better transitional use would be to consider the school (at site 1) as a TAFE, vocation education-focused High School or similar facility that has a 'front door' to the activity of the town centre and a 'back door' to the working part of the precinct. The scale of residential proposed, and the resultant need for multiple schools' risks reducing this opportunity. This study has not examined the depth of program demand for TAFE, rather, it recognises the co-location opportunities of embedding future skills development facilities within a precinct which may attract new industries and who may benefit from co-developing training opportunities. The economic study has determined that the precinct is capable of having industry specialisation building on its current assets and key external drivers. This is particularly relevant in terms of circular economy opportunities which present themselves as an opportunity for partnerships with Universities and TAFE. Opportunities for partnerships with Universities (such as closely located Western Sydney University) and establishing a TAFE facility in the precinct should be explored with further conversations with relevant parties. More generally, government may be able to spur innovation opportunities by fostering public-public and public-private partnerships, investing in critical infrastructure and augmenting the regulatory framework (planning, taxation, etc.) to be accommodating towards circular economy opportunities.

1. Introduction

1.1 Overview of report

This report undertakes a series of quantitative and qualitative economic analyses as part of the Camellia-Rosehill Place Strategy.

This final report brings together and builds on key analytical and strategic thinking elements undertaken as part of this study.

There are several aspects this report covers through an economic and feasibility perspective. The report is structured as follows:

- **Chapter 2: Introduction.** The remainder of this introduction provides key details on the project – namely the description and background.
- **Chapter 3: The Camellia-Rosehill place strategy.** Introduces the vision and the place strategy.
- **Chapter 4: Policy context & previous strategies.** This chapter provides a summary of policies which in some form shape the master planning process of Camellia-Rosehill.
- **Chapter 5: Economic context:** Undertakes analysis of the anticipated employment profile from the Place Strategy and compares it to expected changes and composition in the wider Central City District, as well as against existing employment forecasts in the LU19 small area forecasts.
- **Chapter 6: Market profile.** Summarises key market indicators relevant to the productive uses proposed in the Place Strategy.
- **Chapter 7: Feasibility analysis:** Undertakes high level feasibility modelling of a range of land uses typologies to ascertain the likely feasibility of these, utilising a Residual Land Value model, as well as providing commentary on drivers of feasibility.
- **Chapter 8: Strategic alignment:** Identifies the strategic economic directions from key land use strategies relevant to the precinct.
- **Chapter 9: Summary and insights:** Summarises the analysis and provides the guidance used in the development of the place strategy.

1.2 Project Description

New South Wales Department of Planning and Environment (DPE), in collaboration with City of Parramatta Council (Council), industry, the community and State agencies, is leading the development of the Camellia-Rosehill Place Strategy and Master Plan for the Camellia –Rosehill Precinct (the Precinct). The Precinct is defined by Parramatta River to the north, Duck River to the east, the M4 Motorway to the south and James Ruse Drive to the west, all of which form physical boundaries to the Precinct.

FIGURE 3 PROJECT BOUNDARY



Source: DPE (2022)

The Camellia Rosehill Precinct (the Precinct) is presently dominated by industrial activity, with large amounts of land also allocated to Rosehill Gardens Racecourse and stabling yards for Parramatta Light Rail and Sydney Metro. Its industrial legacy means that soils are heavily contaminated across most of the precinct.

Located in the geographic heart of Sydney, the precinct has an important strategic role in the Greater Parramatta and Olympic Peninsula (GPOP). Previous investigations have identified that the area should be retained for urban service land with a town centre, but that the costs of infrastructure and remediation should be carefully considered when making future land use decisions.

The Place Strategy and Master Plan has been prepared for the whole Precinct and draws on the substantial body of previous investigations, including ongoing collaboration with industry, the community and state agencies.

The overarching objective of the Place Strategy is to provide an integrated 20-year vision, which recognises the strategic attributes of the Precinct, guides future land use and infrastructure investment decisions and which can be delivered with the support of State and local agencies.

DPE has engaged SGS Economics and Planning to deliver technical studies for Package B - Economics, with the following scope of work:

- Economic Development Analysis and Strategy: Inter alia, consider the potential role of the precinct to inform development scenarios, including a potential future employment mix,

including opportunities for economic clustering; emerging sectors; knowledge-intensive jobs and industries; a potential residential role; opportunities for leveraging investment in light rail; and, opportunities arising from proximity to other businesses and economic activities.

- Economic feasibility for master plan implementation.

An Enquiry by Design (EbD) process was undertaken to inform the preparation of the Place Strategy. The EbD was an interactive process which explored a number of master plan options for Camellia-Rosehill which could deliver the vision for the precinct and resulted in a draft master plan which was the subject of public consultation as part of the Camellia-Rosehill Directions Paper. The draft master plan was further refined following exhibition of the Directions Paper and consideration of the submissions received.

The draft place strategy was publicly exhibited on 17 December 2021 until 4 March 2022. The draft master plan was further refined following exhibition of the draft place strategy and consideration of the submissions received. Refer to the DPE's finalisation report for further information.

1.3 Project Background

The Camellia Rosehill Precinct (~321ha) plays a strategic role in the Greater Parramatta and the Olympic Peninsula (GPOP). Camellia was identified by the NSW Government as a priority growth area in 2014, resulting in precinct wide Land Use and Infrastructure Strategy in 2015 and subsequently development of a Town Centre Master Plan in 2018. Work on the Town Centre was paused pending outcomes of Greater Sydney's 2019 Draft Place-based Infrastructure Compact (PIC) Pilot, which aimed to ensure infrastructure delivery was matched with growth across the 26 precincts in the GPOP corridor. The PIC recommended that Camellia be retained for urban service and industrial land, however, should the Government seek to progress a town centre (in the form of the 2018 plan or a modified form), before any rezoning a number of issues had to be resolved. It was determined that a coordinated and strategic approach was required, and a place strategy be prepared for the whole Precinct, drawing on previous work and including ongoing collaboration with industry, the community and state agencies.

The DPE has engaged a range of technical services to determine opportunities and challenges at the site. These technical studies have informed the development of the place strategy and master plan for the precinct. This Economics Implementation Report has been prepared as a part of the Economics package.

2. Camellia-Rosehill Place Strategy

2.1 Camellia-Rosehill Vision

Camellia-Rosehill has an important strategic role as an industry and employment hub within the Greater Parramatta and Olympic Peninsula (GPOP) Economic Corridor. By 2041, the precinct will be enhanced with service and circular economy industries and new recreational and entertainment facilities, all enabled by better transport access via light rail, active transport and road connections.

A well-designed town centre next to the light rail stop will be the focus of community activity.

A new urban services precinct and retention of heavy industrial land will ensure Camellia-Rosehill fulfills its potential to be an employment powerhouse.

New and jobs homes will be close to public transport supported by new quality public spaces including public open spaces, public facilities high quality street infrastructure, and walking and cycling paths.

Key environmental features such as Parramatta River, Duck River and their wetlands will be protected and enhanced. Camellia's rich heritage will be preserved, celebrated and promoted.

Country and culture will be valued and respected with the renewal guided by Aboriginal people.

The precinct will be net zero ready and set a new standard for environmental sustainability with embedded renewable energy networks, integrated remediation and water management strategies, and circular economy industries.

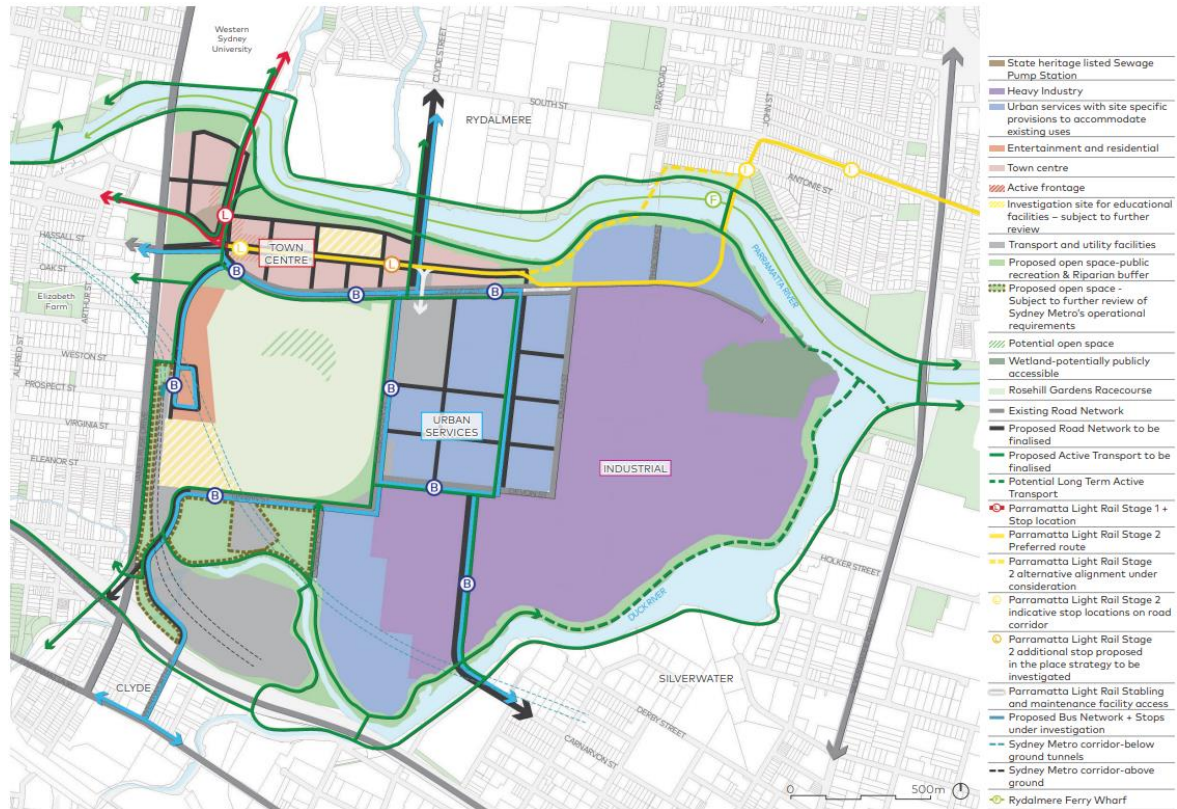
Recycled water will be connected to all residences, businesses and public spaces and will support the integrated network of green infrastructure.

Camellia will be a showcase of recovery and restoration – a place of economic prosperity but also a place where people love to live, work and enjoy.

2.2 The Camellia-Rosehill Master Plan

The master plan is shown in Figure 4 overleaf and forms the basis of the Place Strategy.

FIGURE 4 CAMELLIA-ROSEHILL MASTER PLAN



Source: Cox Architects (2022)

Key features of the master plan include:

- Provision for approximately 10,000 dwellings within a Town Centre serviced by light rail
- Provision for approximately 15,400 jobs
- A new primary school and primary and secondary high school
- District open space facilities
- Introduction of a new entertainment precinct and an urban services area
- Initiatives to Care for Country and continued protection of heritage listed sites
- Retention of the existing state heritage sewerage pumping station (SPS) 067 within the town centre
- Measures to mitigate land use conflicts and risks including buffers and setbacks from existing fuel pipelines and between the existing sewerage pumping station and future surrounding residential uses
- Access to the Parramatta River, Duck River and Duck Creek foreshores and potentially the wetland
- New transport infrastructure including a local road network, potential bus services, additional connections into and out of the precinct, and opportunities to integrate Parramatta Light Rail Stage 2
- An extensive active transport network
- A comprehensive remediation strategy
- A sustainability strategy and integrated water cycle management strategy.

3. Policy Context & Previous Strategies

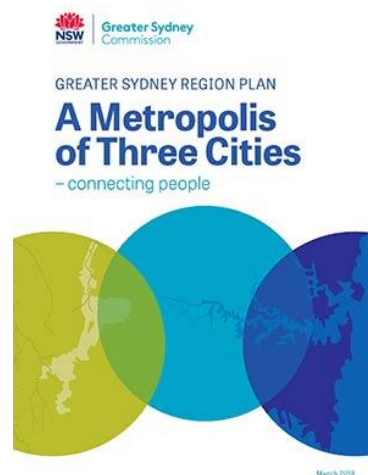
3.1 State-led Policies

Note: The primary purpose of this Economics Report is to analyse the economic environment of Camellia-Rosehill and position the precinct for success. Accordingly, only employment-related policies and their actions have been interrogated in detail.

Greater Sydney Region Plan

Delivered by the Greater Sydney Commission, the Greater Sydney Regional Plan (GSRP) sets out the vision for a 'Metropolis of Three Cities', consisting of an Eastern Harbour City, Central River City and Western Parkland City. These are to be centred on the existing Sydney CBD, Parramatta CBD and the Western Sydney Aerotropolis respectively, with the ultimate goal of ensuring that all Sydney residents have access to one of these centres within 30 minutes of their home.

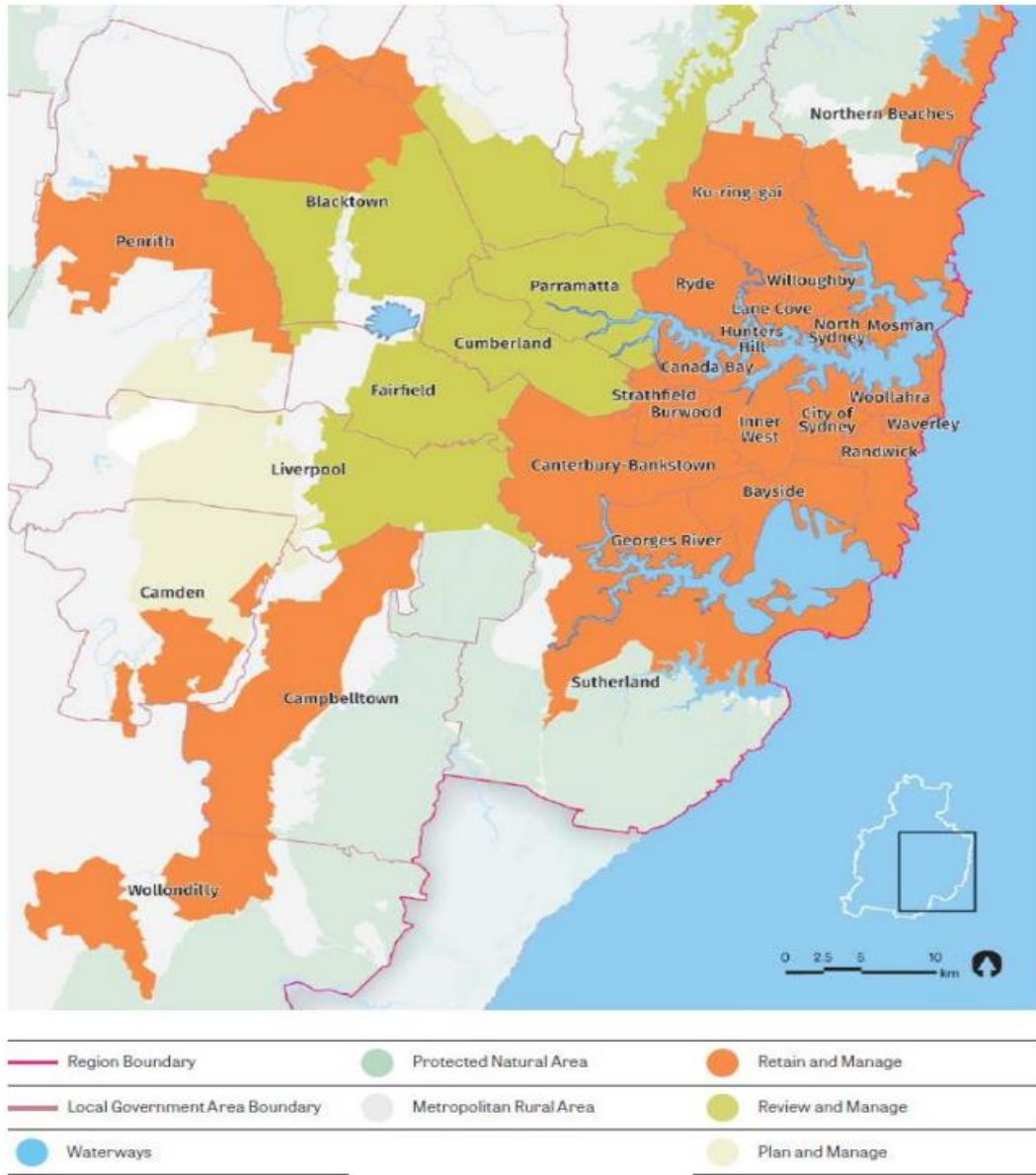
The Strategy is structured around four themes: Infrastructure and Collaboration, Liveability, Productivity and Sustainability.



Implications

- Objective 15: The Eastern, GOP and Western Economic Corridors are better connected and more competitive. This objective is achieved by Strategy 15.2: Prioritise transport investments that enhance access to the economic corridors and between centres within the corridors. This includes to new transport infrastructure, such as Parramatta Light Rail and Sydney Metro West that enhance GOP as a place for new business and engaging with industry and research institutions to assess the potential for a 21st century clean-tech clusters throughout existing industrial hubs throughout GOP.
- Objective 23: Industrial and urban services land is planned, retained and managed. Principles for industrial and urban services land across Greater Sydney include either a 'retain and manage'; 'review and manage'; or 'plan and manage' approach to support the City's productivity and integrated economy (Strategy 23.1).
- As indicated below, industrial and urban services land identified in yellow is to be reviewed and managed. This includes all relevant land parcels in the Camellia-Rosehill Precinct.

FIGURE 5 APPROACH TO MANAGING INDUSTRIAL LANDS



Source: Greater Sydney Region Plan

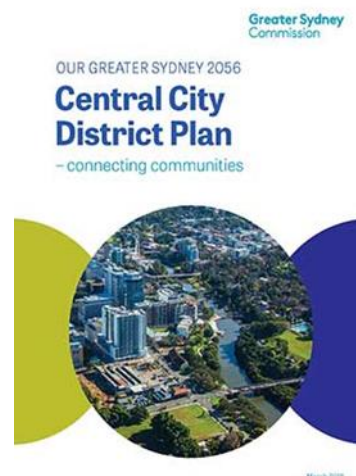
Central City District Plan

The Central City District Plan is a 20-year plan that implements the directions contained in the Greater Sydney Region Plan.

Within the Central City District, Camellia and Rosehill are located within the GPOP economic corridor.

More specifically, the District Plan identifies part of Camellia as one of 12 next-generation housing precincts (Quarter 2) and the remaining area Quarter 3: Essential urban services, advanced technology and knowledge sectors that are to be protected for economic and employment purposes. Refer Figure 6 GPOP in the District Plan.

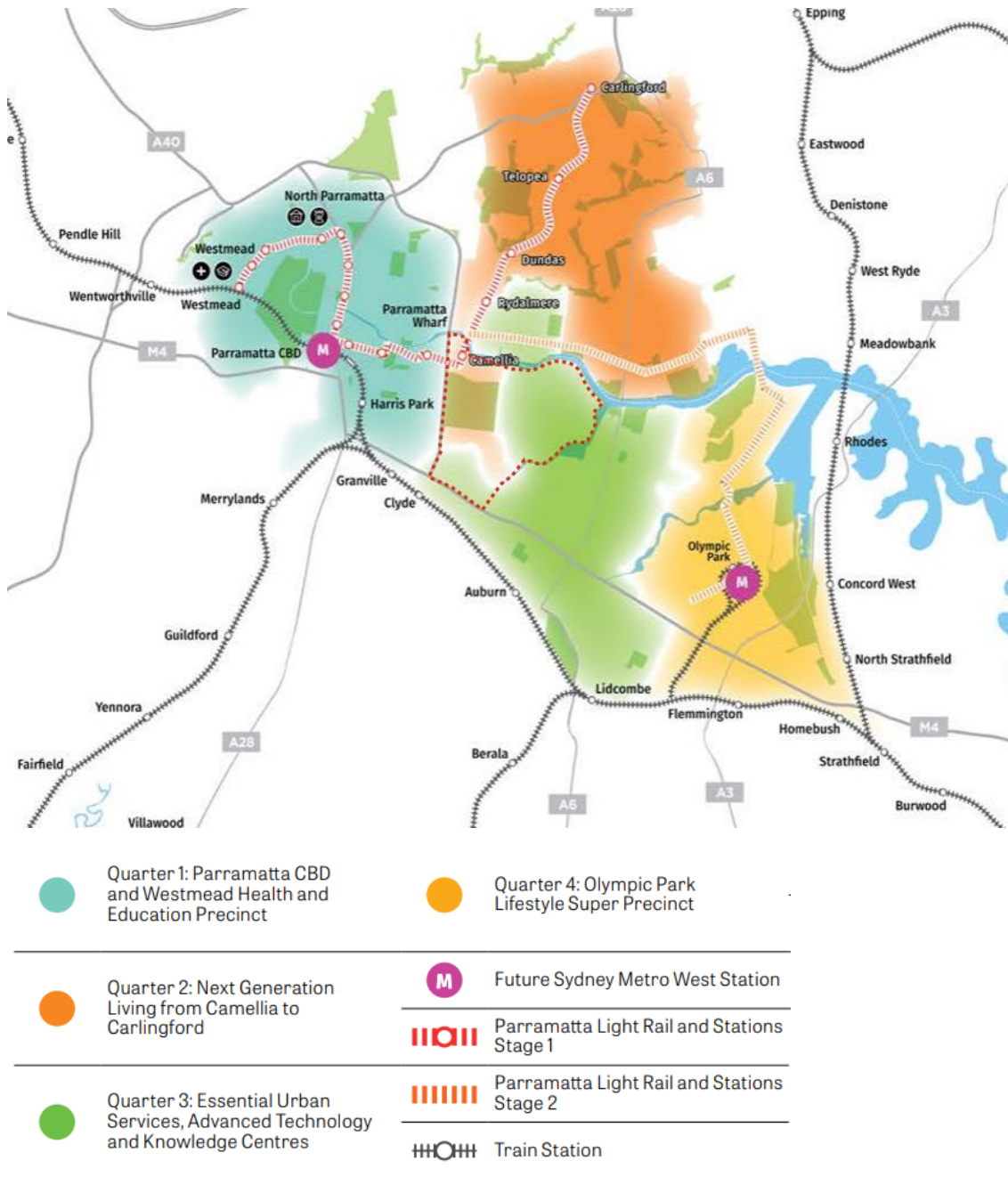
The plan sees Camellia evolving into a highly productive part of the Central River City. This includes a focus on coexisting water, energy and transport uses that generate a range of employment types, including highly skilled jobs.



Implications

- Planning Priority C2: Working through collaboration. Benefits of growth are realised by collaboration of governments, community and business.
- Planning Priority N11: Maximising opportunities to attract advanced manufacturing and innovation in industrial and urban services land. Industrial and urban services land is planned, retained and managed.
- Action 7: Identify, prioritise and deliver collaboration areas. This place-based process includes:
 - Identification and resolution of impediments to deliver
 - Strategy drivers: productivity, liveability and sustainability
 - Coordinated investment and infrastructure alignment
 - Whole-of-government considerations
 - Issue-specific demonstration focus
- Action 49: Review and manage industrial and urban service land. Undertake a review of all industrial lands to confirm their retention or transition to higher order uses (such as business parks) and prepare appropriate controls to maximise business and employment outcomes, considering the changing nature of industries in the area. In some locations, such as GPOP, specifically Camellia, Rydalmere and Silverwater, the safeguarding of industrial activities will be a starting objective.

FIGURE 6 GPOP IN THE DISTRICT PLAN



Source: Central City District Plan (2018)

Greater Parramatta Interim Land Use and Infrastructure Implementation Plan

Following the recent release of the draft vision for Greater Parramatta to Olympic Peninsula (GPOP), Draft West Central District Plan and Towards our Greater Sydney 2056 by the Greater Sydney Commission, the Department of Planning and Environment, in collaboration with City of Parramatta and Greater Sydney Commission, has prepared an Interim Land Use and Infrastructure Implementation Plan (LUIIP) for the Greater Parramatta Priority Growth Area.

The interim Plan identifies how more jobs, homes and essential services will be accommodated in the priority growth area over the next 20 years. It includes a land use framework to guide future redevelopment of the priority growth area, identifies key actions for the short term and allows us and other government agencies to identify and plan for the infrastructure required to unlock its potential.

With respect to Camellia, the LUIIP plans for 10,000 homes and 8,850 jobs by 2036.

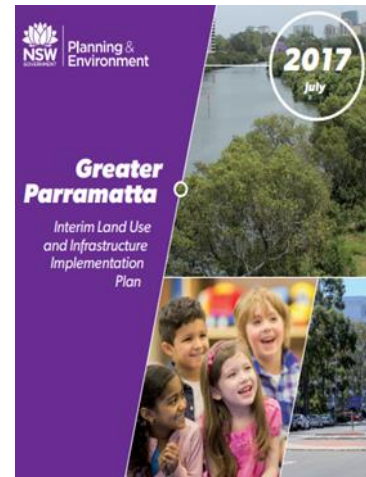
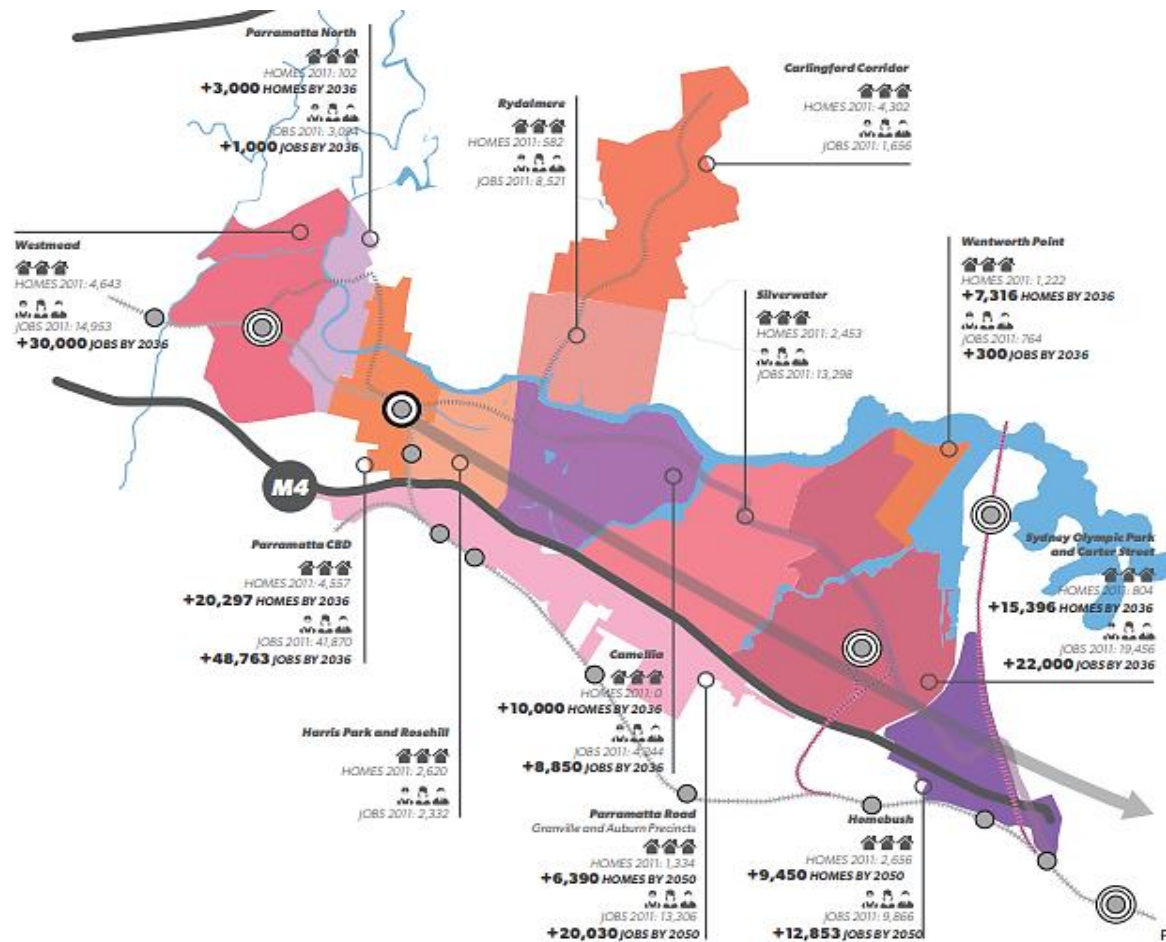


FIGURE 7 DWELLING AND EMPLOYMENT TARGETS PER LUIIP

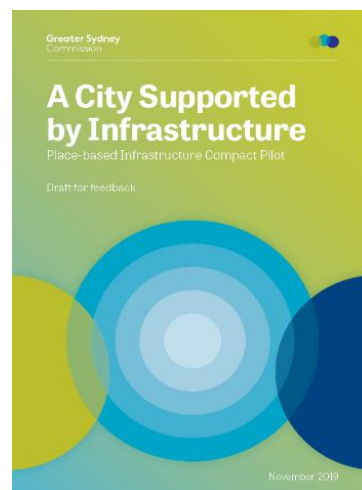


Source: Greater Parramatta Interim Land Use and Infrastructure Implementation Plan (2017)

GPOP Place-Based Infrastructure Compact

In March 2020, the Greater Sydney Commission released its final recommendations on the GPOP Place-Based Infrastructure Compact (GPOP PIC) to the NSW Government. The GPOP PIC recommended three phases of development as follows:

- Phase 1 focuses on precincts where growth can be aligned with already committed infrastructure such as Parramatta Light Rail Stage 1 to support job creation and new development.
- Phase 2 focuses on aligning growth with future city-shaping infrastructure such as Sydney Metro West and Parramatta Light Rail Stage 2 and recognises that these precincts should be subject to more intensive development when new transformative infrastructure is delivered.
- In the remaining precincts, including Rosehill-Camellia, the PIC model recommended that the existing uses be retained, with a potential review as new transformative infrastructure is delivered due to the relatively high cost of delivering these precincts compared to other precincts in GPOP.



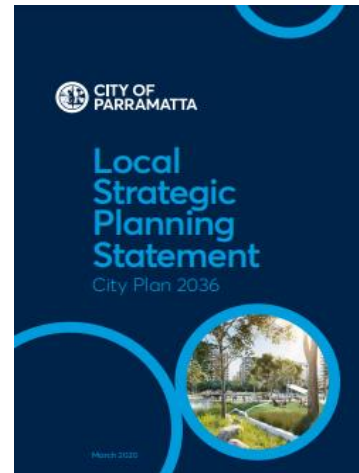
In its final recommendations, the GSC recommended the NSW Government:

- Enhance the important Camellia-Rosehill-Camellia Industrial-Rydalmere-Silverwater cluster of precincts for urban services vital to the success of the GPOP Economic Corridor, the Central City and Greater Sydney.
- Support synergies in water, waste, energy and transport services in Camellia-Rosehill-Camellia Industrial-Rydalmere-Silverwater to continuously evolve, generating a range of employment types, including new highly skilled jobs and industries.
- Safeguard existing and future strategic urban services in the Camellia-Rosehill and Camellia Industrial Precincts from incompatible residential encroachment].
- Should the NSW Government seek to progress a Camellia Town Centre with residential land uses, that:
 - Consideration be given to the Greater Sydney Region Plan and the Central City District Plan
 - A precinct-wide remediation strategy be implemented supported by an independent cost estimate
 - An affordable traffic and transport solution be implemented to support the intensity of trips generated by the town centre
 - An infrastructure funding and delivery plan be devised by which landowners and/or proponents contribute towards state and regional infrastructure

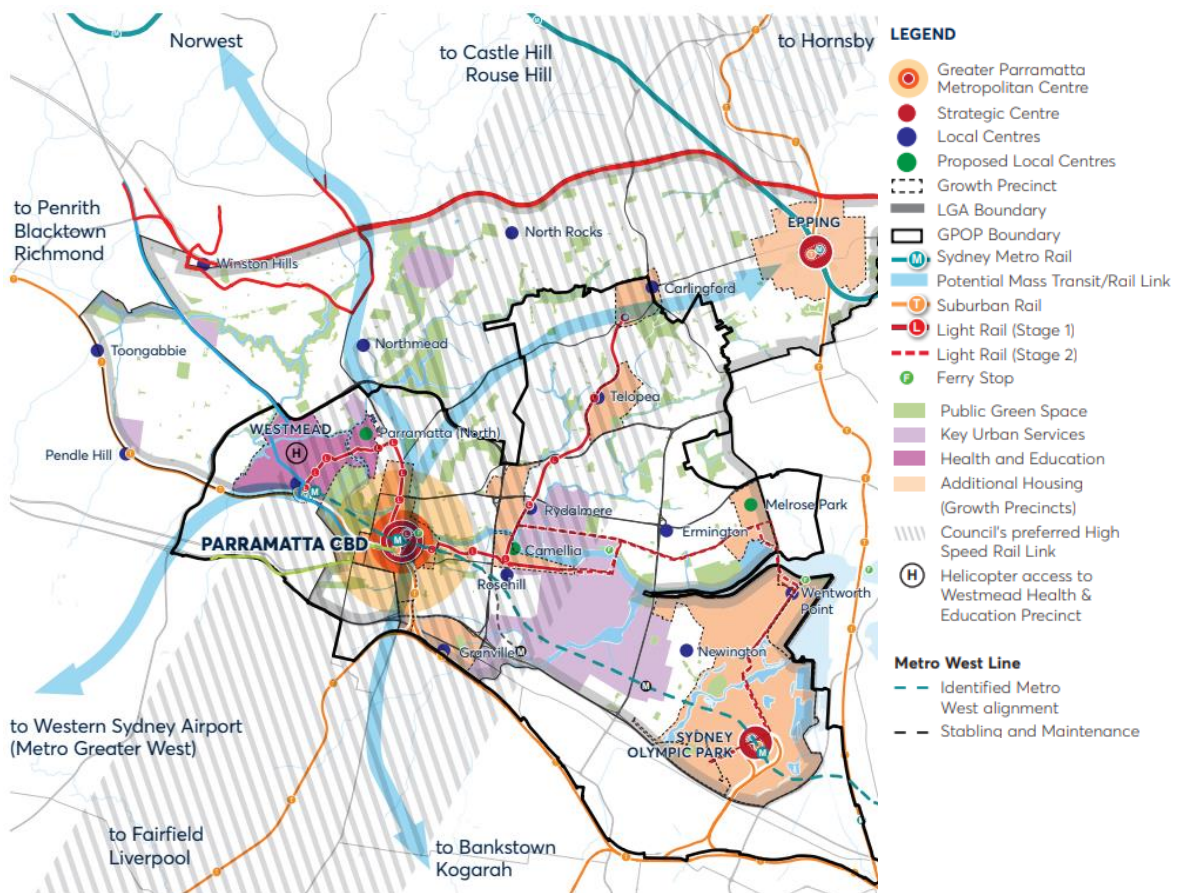
3.2 Council-led Policies

Parramatta Local Strategic Planning Statement

Camellia has been identified by City of Parramatta Council as a precinct which will have an infrastructure and growth focus. Camellia currently has one of the largest concentrations of employment lands in Parramatta LGA, and it is expected that there will be a small increase in General Industrial jobs, focussed in areas such as Camellia East. It was identified that the future City of Parramatta will need to have maintained its Metropolitan Significant Strategic Employment Lands at and transitioned Silverwater-Camellia-Rydalmere for industrial uses that meet contemporary needs and provide jobs and services higher order jobs and increased employment density.



Planning priorities and actions indicate the need to support the intensification of employment lands in Camellia with supporting infrastructure. There will be intensification of dwellings and employment in Camellia, predicted to increase to 3,500 and 5,000 respectively by 2036, with the LSPS acknowledging that the number of dwellings in Camellia will be subject to the NSW Government’s response to the GOPP PIC recommendations.



Source: Parramatta Local Strategic Planning Statement (2020)

Parramatta Employment Lands Strategy (updated)

The Parramatta Employment Lands Strategy (2016) recommended that a structure plan be prepared for the entire precinct. While it allowed for the reduction of existing employment land, it requires that no reduction of employment densities be facilitated as a result of any structure plan.

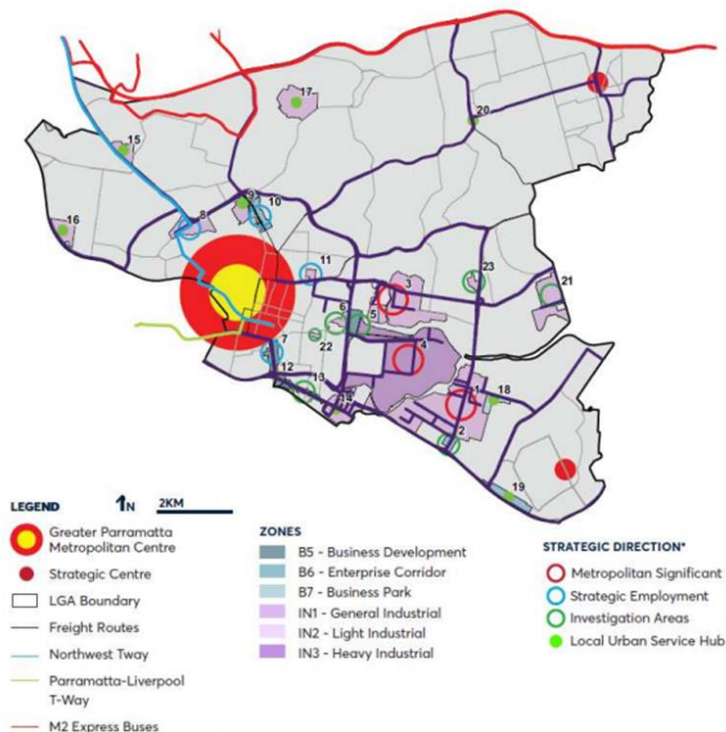
The Parramatta Employment Land Strategy – Review and Update re-examines the status of Council’s Employment Land Precincts that were contained in the 2016 strategy on account of further planning analysis and policies coming into effect. It also revises the strategic actions for each of the employment land precincts addressed in the 2016 strategy.



The strategy introduces two strategic actions as it applies to Camellia-Rosehill:

- **Employment and Industrial Land (South and East – Camellia-Rosehill):** Rezone the land east of the proposed town centre for higher order jobs and increased employment density and retain industrial zoning for the remainder, consistent with the Camellia Precinct Strategy.
- **Town Centre (North-West – Camellia):** Rezone Camellia Town Centre Precinct land for mixed use – commercial/residential.

It is acknowledged that both of these strategic actions are dependent on the NSW Government’s position on the GOPP PIC.



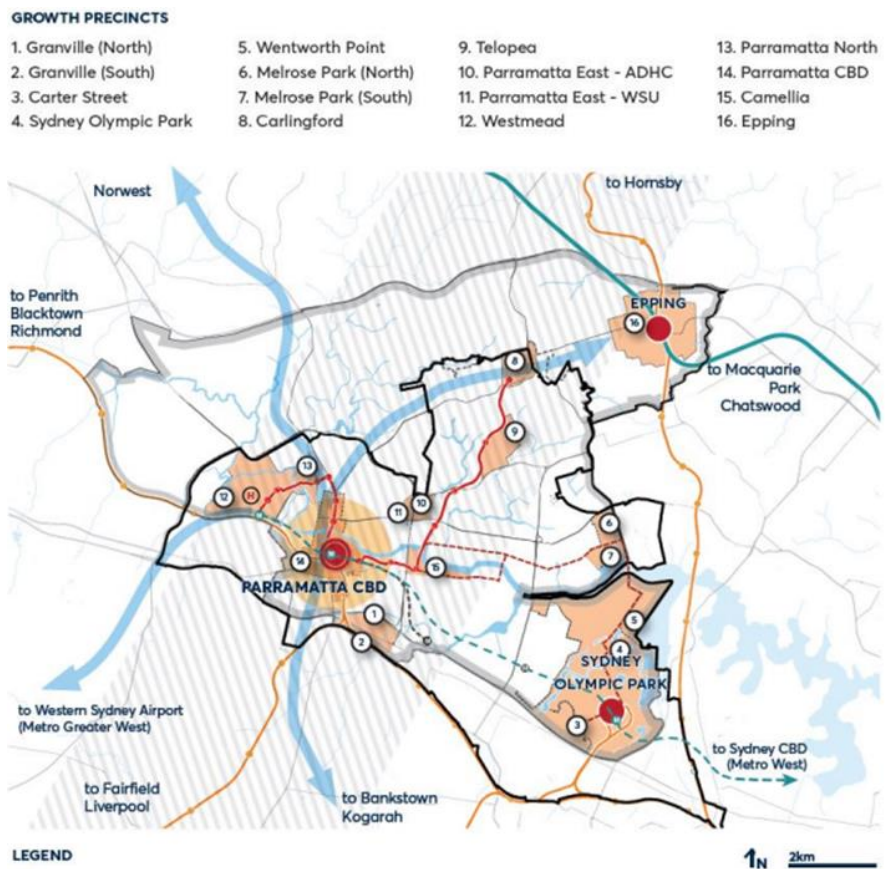
Source: Parramatta Employment Lands Strategy (review and Update)

Parramatta Local Housing Strategy

The Parramatta Local Housing Strategy (LHS) examines Council’s capacity to supply additional dwellings based on both current and proposed planning controls, and whether these align with the housing targets set by the Greater Sydney Commission.

The Strategy is reflective of the draft Camellia Town Centre Master Plan and envisages 3,500 dwellings by 2036, and with a maximum build-out of 10,000 dwellings. However, the strategy is also contingent on the NSW Government’s response to the GPOP PIC.

However, it is important to note that the analysis completed by the LHS shows that Council is set to deliver 87,900 new dwellings by 2036, above the District Plan target of 83,975. This demonstrates that the housing target is being exceeded by 3,925 dwellings (with a further 20,020 dwellings in train to be delivered in growth precincts beyond 2036) and that the full or partial removal of Camellia’s 3,500 dwellings would not impact on Council’s ability to meet its housing target, assuming that all other housing identified is successfully delivered. However, it is also acknowledged that the delivery of housing in Camellia-Rosehill will occur over a longer time horizon than the 2036 housing targets.



Source: Parramatta Housing Strategy (2020)

3.3 Other strategies

Parramatta Economic Development Plan (PEDP)

The PEDP groups the Rydalmere, Camellia, Rosehill and Silverwater Precincts into a single regional district. The Plan envisages that the District will build upon its strong and growing education sector base in Western Sydney University and that Rosehill will continue to attract visitors to horse racing and motor sport events and drive diversified jobs growth through business tourism attracting conferencing and exhibitions.



Parramatta Night City Framework (PNCf)

The Parramatta Night City Framework 2019-2024 considers everything Council and relevant stakeholders need to make night city thrive; from urban design, strategic planning, business investment, marketing, arts and cultural planning and regulation.

The framework recognises planned growth in Camellia-Rosehill and establishes an advocacy and internal policy position on facilitating improved night time economy.



Parramatta Community Infrastructure Strategy (CIS)

The Parramatta Community Infrastructure Strategy identifies Camellia as a high-growth area and plans for local infrastructure to facilitate a population of 20,900 people by 2041. There is currently no community infrastructure in the precinct.

The CIS recommends that, amongst other things:

- Provision of affordable rental housing (5% minimum)
- Community hub (approx. 3,500sqm) in the town centre around transport connections (including 1,700sqm of community space and 1,800sqm of library space)
- Proposed new primary school (with potential shared use of open space as a community resource)
- Child and Youth Hub (approx. 5,000sqm) which includes a minimum of 2 indoor multi use courts ideally co- located with the primary school
- 1-2 Multi use Sportsfields for active use (minimum 1.9 ha)
- Passive open space augmentation along river (8.4ha)



Previous strategy: Camellia: 21st Century Business, Industry & Entertainment Precinct Discussion Paper

In 2014, the then Parramatta City Council released a discussion paper regarding the future planning of the Camellia precinct that identified the potential for urban renewal to take place in the precinct. The paper provided six guiding principles:



- Allow for some mixed use development in the north western part of the precinct
- Facilitate a renewed entertainment precinct at Rosehill Racecourse which will also serve as a buffer between residential and industrial uses
- Retain the majority of the precinct in the southern and eastern parts for industrial development, but facilitate its transition to more contemporary industries
- Provide a dynamic, business-orientated land use transition zone to the east of the new mixed use precinct
- Provide for new traffic access points in the eastern part of the precinct over Duck River and to the south connecting to the M4 to improve access into the precinct and to mitigate land use conflicts
- Improve the viability of existing public transport options in the precinct by focusing any land use intensification around existing and proposed transport infrastructure

In the same year 'A Plan for Growing Sydney' designated Camellia as a 'Priority Growth Area' and committed to developing a Structure Plan to underpin future redevelopment of the area.

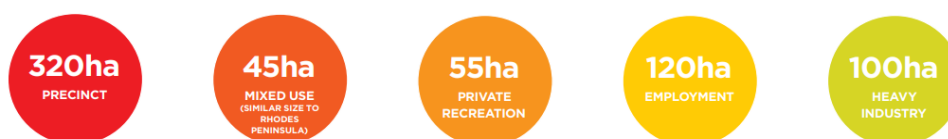
Previous strategy: Camellia Land Use and Infrastructure Strategy

The Department of Planning and Environment and the then Parramatta City Council prepared this strategy to guide the future redevelopment of the precinct, building on Council's 2014 Discussion Paper and reiterating the Discussion Paper's land use vision.

The Strategy proposed retaining the majority of the precinct for industrial uses but proposing to facilitate its transition to more contemporary industries including clean technologies and freight distribution. This strategy also proposed the redevelopment of the precinct to be focused on a new town centre located within the mixed-use part of the precinct.



The proposed area breakdown of the precinct based on land uses is provided below.



Source: Department of Planning and Environment (2016)

Previous strategy: Camellia Town Centre Master Plan

The Camellia Town Centre Master Plan was released for public exhibition in February 2018 and established a 20-30 year vision for the development of the Camellia Town Centre. The stated vision was to create a new town centre on the Parramatta River for the community to enjoy beautiful parks and open spaces, with a revitalised riverfront and an active street life that is connected to Greater Parramatta.

The draft Master Plan built upon the previously released Camellia Land Use and Infrastructure Strategy and sought to establish a mixed-use Town Centre containing up to 10,000 new dwellings and 5,000 new jobs.



The draft Master Plan suggested rezoning to Town Centre to B4 Mixed Use, and proposed building heights and floor space ratio controls of up to 40 storeys (approximately 128 metres) and 4.5:1 respectively. The Master Plan did not propose any amendments to the planning controls that apply to the remainder of the Camellia-Rosehill precinct outside of the identified 40-hectare town centre boundary.



Legend

New Square	Light Rail Corridor	5 storey	21 storey
New Development Lot	Light Rail Stop	6 storey	27 storey
New Park	Public / Community use	8 storey	36 storey
New Greenway/Transit	Potential School	9 storey	40 storey

Productivity Commission White Paper: Rebooting the economy

The NSW Productivity Commission released its White Paper: Rebooting the Economy on 31 May 2021. The purpose of the paper is to outline a new productivity reform agenda to spur economic growth following the COVID-19 induced recession.

A total of 60 recommendations have been identified to guide to steer policy formulation to set up the foundations for long-term productivity and economic growth. The opportunities are centred around the four foundations: talent, innovation, housing and infrastructure.

The following recommendations in the Productivity Commission’s White Paper may be of relevant to the Camellia-Rosehill Place Strategy:



Consolidate Employment Zones- Progress reforms to employment zones, including the following:

- Rationalise existing business and industrial zones in the Standard Instrument Local Environmental Plan to reduce the number of zones.
- Broaden the range of permissible activities to ensure prescriptions are reserved for genuinely incompatible land uses.

Optimise Industrial Land Use - Evaluate the retain-and-manage approach to managing industrial and urban services land in Greater Sydney against alternative approaches, to identify what would maximise net benefits to the State. Adopt the approach that maximises the State’s welfare in the next update to the Greater Sydney Region Plan.

4. Economic context

When considering the likelihood of a master plan's vision from an economic perspective, it is important to consider broader market influences and understand their potential role in the precinct. This market testing chapter undertakes a series of tests of the Place Strategy against current employment forecasts for both the precinct and the Central City District, as well as comparisons against other precincts in Sydney.

The intent of this is to ascertain whether the provisions of jobs under the Place Strategy are reasonable, based on what is expected to occur in the wider Central City District. It also draws on analysis of housing demand in the Parramatta LGA. This analysis considers:

- The size of total jobs against existing forecasts.
- Whether the share of future jobs that the precinct would accommodate as a proportion of all Central District jobs is reasonable.
- A high-level view of what role housing can play in the context of both the precinct and GOP.
- What a reasonable assumption is for the timing of full build out of the precinct based on wider growth rates.
- Whether the share of the Central City District's future growth that the precinct will contribute to is reasonable.
- Whether there are other precincts, or new products, that are likely to challenge the uptake of this precinct over the next five years.

Having considered both the business-as-usual and Place Strategy, the precinct's inherent economic constraints will be examined to determine what the key considerations are in achieving the Place Strategy vision.

4.1 Summary and classification of jobs

It is important to be able to ground the Place Strategy in what is expected to occur in the wider Central City District.

The first step of this is to ensure all jobs are consistently classified. We have therefore translated the jobs into the four Broad Industry Categories (BICs) that are used to categorise jobs:

- Knowledge Intensive
- Health and Education
- Population Serving
- Industrial

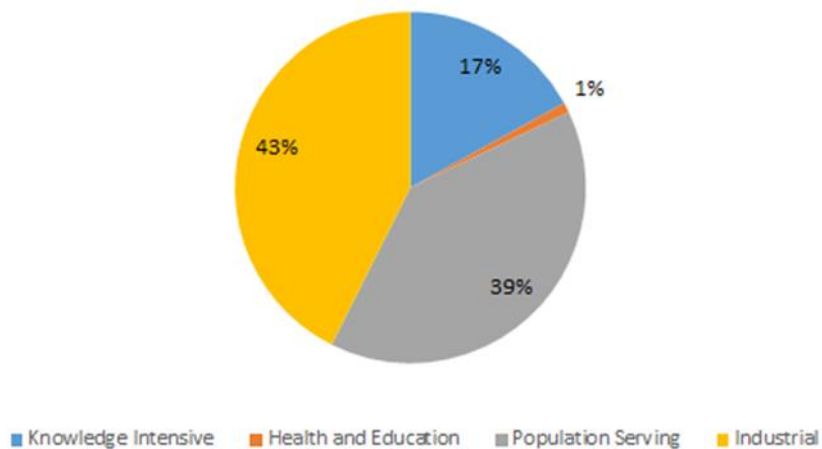
The BICs are groupings of ANZSIC 2006 1-digit industry codes and provide a simplified understanding of job types in a precinct. The groupings are depicted in the table below.

FIGURE 8 ALLOCATION OF ANZSIC INDUSTRY CODES INTO BROAD INDUSTRY CATEGORIES

Classification	ANZSIC 2006 1 digit industry
Knowledge-intensive	<ul style="list-style-type: none"> ▪ Information media and telecommunications ▪ Financial and insurance services ▪ Rental, hiring and real estate services ▪ Professional, scientific and technical services ▪ Administrative and support services ▪ Public administration and safety
Health and education	<ul style="list-style-type: none"> ▪ Education ▪ Health care and social assistance
Population-serving	<ul style="list-style-type: none"> ▪ Retail trade ▪ Accommodation and food services ▪ Arts and recreation services ▪ Construction ▪ Other services
Industrial	<ul style="list-style-type: none"> ▪ Agriculture, forestry and fishing ▪ Mining ▪ Manufacturing ▪ Electricity, gas, water and waste services ▪ Wholesale trade ▪ Transport, postal and warehousing

In 2016, 4,299 jobs were located in the Camellia-Rosehill Precinct. Of this, 1,831 were industrial jobs, 1,698 were population serving, 732 were knowledge intensive and only 39 were in health education.

FIGURE 9 PROPORTION OF JOBS IN EACH BIC



Source: SGS (2021)

4.2 Context

Employment

The table below contextualises Camellia-Rosehill's employment mix, changes over time and the level of industrial specialisation compared to particular benchmarks. The Location Quotient (LQ) analysis indicates that the precinct's employment mix is characteristic of traditional industrial precincts, with an existing 'critical mass' of transport and logistics, construction and retail/wholesale trade jobs.

From 2011 to 2016, there has been a decline in manufacturing employment. However, this is in line in broader trends in District and Greater Sydney, as demonstrated overleaf. The precinct has experienced modest jobs growth between 2011 and 2016, and in 2016 employed approximately 4,300 persons.

The precinct has a high degree of relative specialisation in Arts and Recreation which driven by presence of Rosehill Racecourse and the former Speedway (was still in operation at the last census). This is atypical of industrial precincts.

Building on the LQ analysis, consultation was undertaken with representatives of key industries in the precinct to further understand the precinct's role in the Greater Sydney economy. An emerging trend not necessarily captured by the LQ analysis is the regional significance of certain industries and their broad catchment. These include:

- VIVA Energy: 50% of NSW's fuel passes through the terminal. Fuel pipeline supplies fuel to Sydney Airport.
- Boral: Plasterboard supplies to all of NSW.
- Concrete Recyclers: largest supplier of road base/aggregates and sand products in Sydney (35% of Sydney's requirements).
- Rosehill Racecourse: One of two premier racecourses in Sydney.

FIGURE 10 EMPLOYMENT CHANGE AND LOCATION QUOTIENT ANALYSIS

ANZSIC Industry of Employment	Camellia-Rosehill: total jobs (2016)	Camellia-Rosehill: jobs growth (2011-16)	LQ specialisation: compared to Central City District industrial lands	LQ specialisation: compared to Greater Sydney's industrial lands
Agriculture, Forestry and Fishing	21	21	1.71	1.51
Mining	0	-12	0.00	0.00
Manufacturing	585	-316	0.68	0.75
Electricity, Gas, Water and Waste Services	93	-46	0.91	1.42
Construction	515	177	1.15	1.16
Wholesale Trade	575	89	1.20	1.43
Retail Trade	343	54	0.84	0.86
Accommodation and Food Services	39	-3	0.51	0.33
Transport, Postal and Warehousing	677	14	1.26	1.22
Information Media and Telecommunications	4	4	0.12	0.07
Financial and Insurance Services	19	-10	0.36	0.39
Rental, Hiring and Real Estate Services	72	14	1.84	1.43
Professional, Scientific and Technical Services	78	30	0.56	0.48
Administrative and Support Services	62	-7	0.54	0.51
Public Administration and Safety	353	25	2.60	3.29
Education and Training	12	-2	0.29	0.18
Health Care and Social Assistance	27	6	0.30	0.16
Arts and Recreation Services	224	93	7.56	6.55
Other Services	89	20	0.53	0.48
Total known jobs	3,788	151	1.00	1.00
Total unknown jobs	216	184	-	-
Total jobs	4,004	335	-	-

Source: SGS (2021)

Shift share of employment

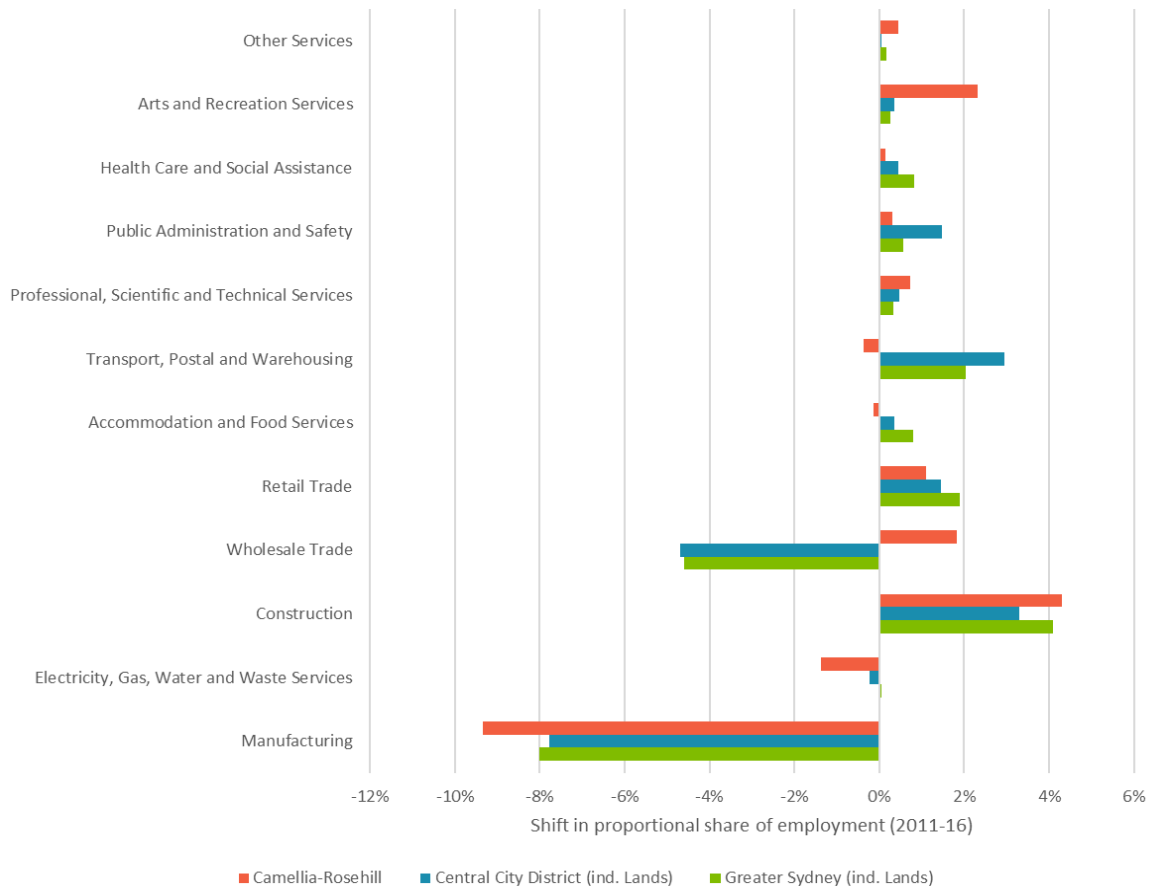
The manufacturing decline in Camellia-Rosehill in line with broader District and Greater Sydney trends (-8 to -10%).

The increases in Wholesale Trade employment at Camellia-Rosehill are atypical of District and Greater Sydney industrial averages.

The reduction in transport and logistics employment in Camellia-Rosehill is inconsistent with growth identified in District and Greater Sydney industrial averages.

It is acknowledged that the industry shift in share of employment is expected to change further by the closure of certain industries and the establishment of stabling and maintenance yards to service Parramatta Light Rail and Sydney Metro West.

FIGURE 11 SHIFT SHARE ANALYSIS



Source: SGS (2021)

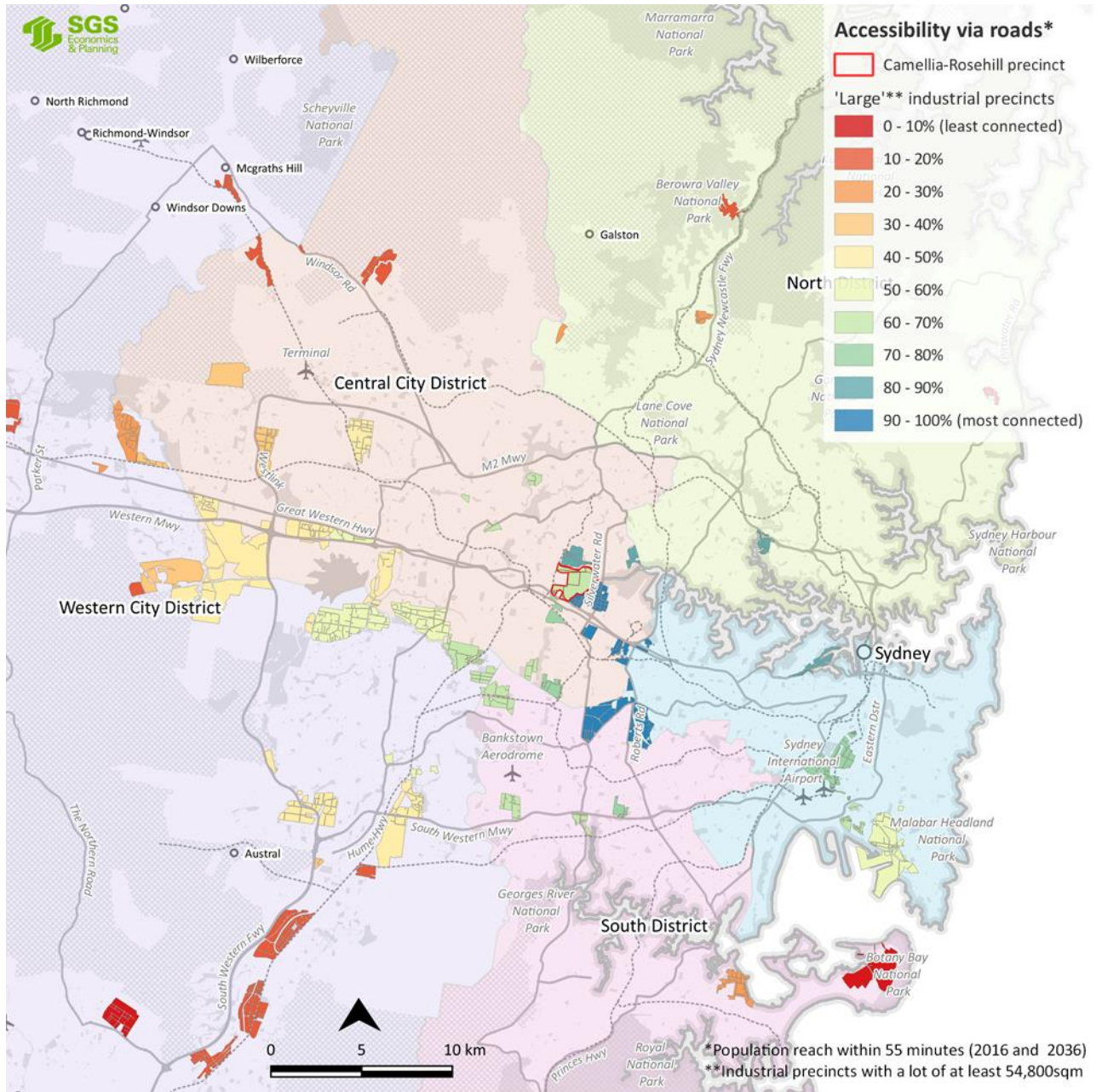
4.3 Precinct access

The Accessibility Analysis shown overleaf indicates that Camellia-Rosehill is well-connected compared to other industrial precincts in Greater Sydney. Camellia-Rosehill is well-positioned to having its industrial role enhanced to account for innovation and circular economy opportunities given its central positioning within Sydney and current diversity of lot sizes (particularly large lots).

The accompanying map highlights the relative connectedness of the Camellia-Rosehill precinct, compared with other precincts on the city fringe that are often considered to be where future industrial demand should be directed.

With a rise in last-mile logistics, highly accessible industrial precincts will be increasingly important assets in the Greater Sydney economy.

FIGURE 12 ACCESSIBILITY SCORES FOR INDUSTRIAL PRECINCTS IN GREATER SYDNEY

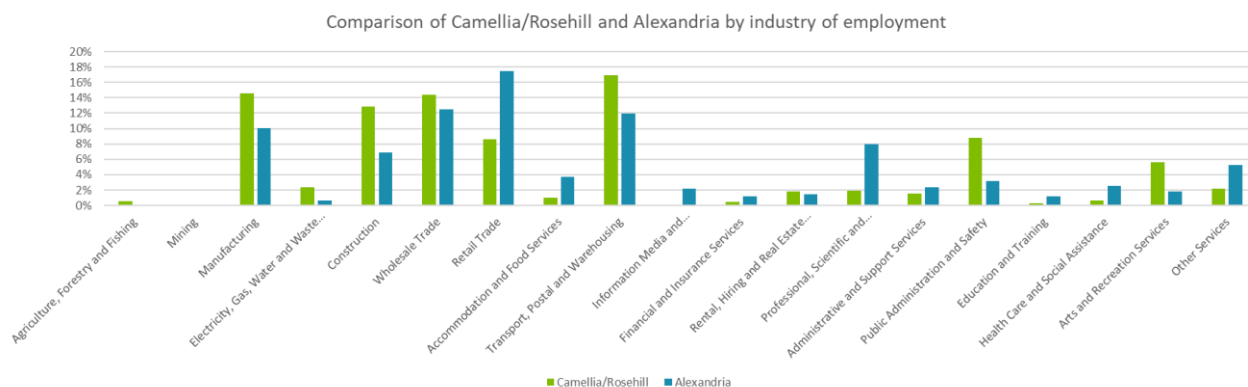


Source: SGS (2021)

4.4 Comparison of employment profile

Camellia/Rosehill already shares an employment profile not too dissimilar to Alexandria – there may be capacity to transition the precinct to become GPOP’s Central Enterprise District. However, it is acknowledged that Alexandria itself is still undergoing transformation.

COMPARISON OF CAMELLIA/ROSEHILL AND ALEXANDRIA BY INDUSTRY OF EMPLOYMENT



4.5 Summary and classification of Place Strategy

Floorspace ratios have been applied by Cox to estimate the potential employment capacity of the Place Strategy. Under the Place Strategy, across the whole precinct and its variety of different land uses, there is estimated to be floorspace capacity for approximately 15,400 jobs. This capacity is not the same as identified demand and the realisation of these jobs over time will be contingent on a number of factors. These include:

- The establishment early on of a clear commercial and economic identity that will attract jobs to the precinct
- The continued investment in the precinct to bring online new floorspace as demand continues to grow or lower density productive land uses transition to high density ones over time
- The management of any potential land use conflicts that may inhibit the growth of certain industries
- Any of the economic constraints identified in later sections of this report (precinct access, contamination, flooding, etc.)

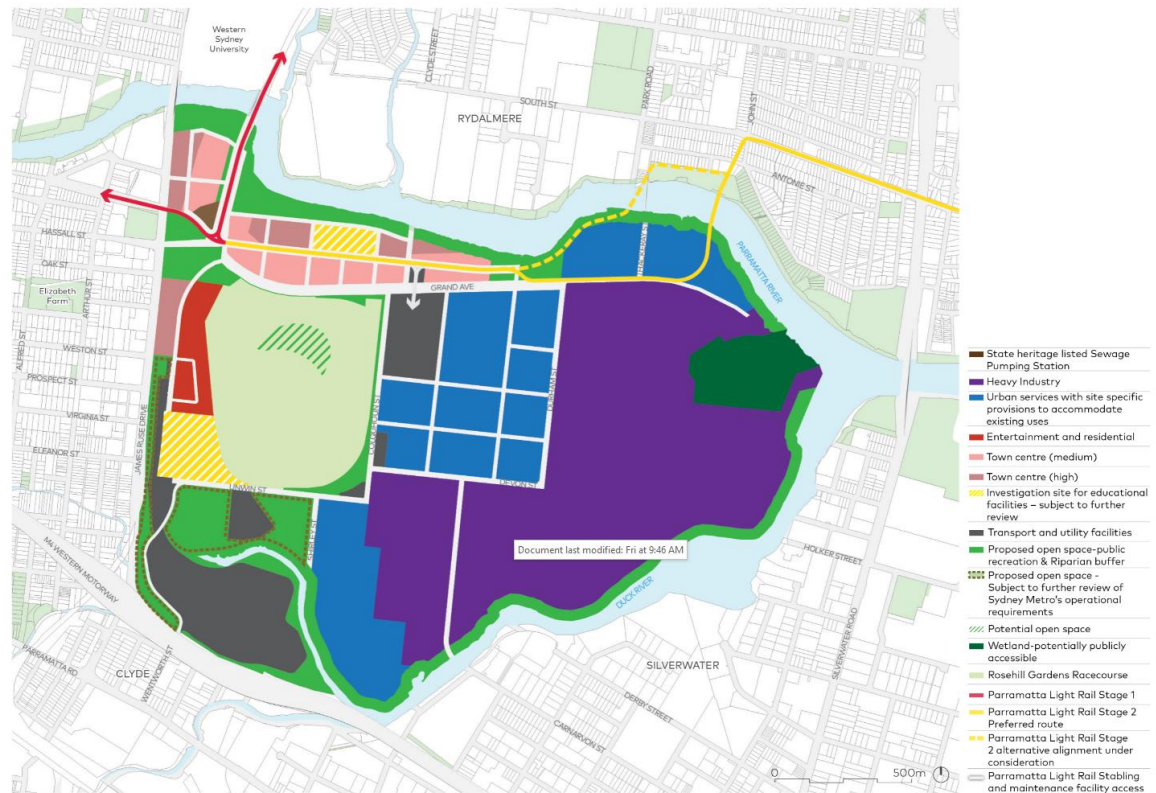
FIGURE 13 EMPLOYMENT CAPACITY BY LAND USE

Identified Land Use	BIC	Maximum number of jobs (capacity)
Heavy Industry	Industrial	2,653
Urban services with site specific provisions to accommodate existing uses	70% Industrial, 30% Knowledge Intensive	10,885
Entertainment and residential	50% Population Serving, 50% Knowledge Intensive	491
Town centre (medium)	Population Serving	603
Town centre (high)	Population Serving	516
Investigation site for educational facilities – subject to further review - Primary School	Health and Education	100
Investigation site for educational facilities – subject to further review - K-12 School	Health and Education	200
TOTAL	-	15,448

Source: Cox (2022)

It is noted that the forecast number of jobs has been derived using the Landcom planning assumptions, converting employment generating floor space (by type) into jobs. This is a supply-side approach to estimating job creation that the Place Strategy has used to estimate job capacity. In practice, if certain sites develop at lower FSRs than what is provided under the controls, this would result in a commensurate reduction in employment capacity and therefore jobs. This is noted because of the large scale of the urban services land in the master plan and the fact that not all sites are likely to be developed in the same manner (to their maximum gross floor area). Some sites may develop in more traditional industrial densities, for instance between 0.5:1 to 1:1.

FIGURE 14 EMPLOYMENT CAPACITY SUMMARY



	Area	Efficiency	NET FSR	LZN	HOB (storeys)	HOB (m)	Mix	Dwelling: GFA	Emp (X:GFA)	Emp Density (X:Ha)	Residential (GFA)	Dwellings (90sqm)	Population (@2.4ppd)	Employment (GFA)	Jobs	Other
							Resi	Retail/Com								
State heritage listed Sewage Pump Station	5,125	-	-	SP2	-	-	-	-	-	-	-	-	-	-	-	-
Heavy Industry	1,061,335	100%	-	E5	4	16	-	-	-	25	-	-	1,051,335	2,653	-	-
Urban services with site specific provisions to accommodate existing uses	500,517	100%	1.5	E3	4	20	-	-	80	-	-	-	870,775	10,885	-	-
Entertainment and residential	51,697	95%	4	SP3/MU	8-12	36	80%	20%	90	80	157,159	1,746	4,191	39,290	491	-
Town centre (medium)	98,773	95%	4.5	MU1	12-24	80	95%	5%	90	35	401,143	4,457	10,697	21,113	603	-
Town centre (high)	69,094	95%	5.5	MU1	24-40	130	95%	5%	90	35	342,964	3,811	9,146	18,051	516	-
Investigation site for educational facilities – subject to further review	20,198	100%	-	SP2	-	-	-	-	-	-	-	-	-	100	1,000	-
Investigation site for educational facilities – subject to further review	56,100	100%	-	SP2	-	-	-	-	-	-	-	-	-	200	2,000	-
Transport and utility facilities	282,941	-	-	SP2	-	-	-	-	-	-	-	-	-	-	-	-
Open space-public recreation & Riparian Buffer	453,154	-	-	RE1	-	-	-	-	-	-	-	-	-	-	-	-
Riparian buffer (viva energy)	61,241	-	-	RE1	-	-	-	-	-	-	-	-	-	-	-	-
Wetland-potentially publicly accessible	98,714	-	-	C2	-	-	-	-	-	-	-	-	-	-	-	-
Potential open space	26,264	-	-	RE2	-	-	-	-	-	-	-	-	-	-	-	-
Rosehill Gardens Racecourse	372,417	-	-	RE2/SP3	-	-	-	-	-	-	-	-	-	-	-	-
Waterways	306,537	-	-	W2/W1	-	-	-	-	-	-	-	-	-	-	-	-
Total	3,544,107										901,266	10,014	24,034	2,010,564	15,448	3,000

Source: Cox Architecture (2022)

4.6 Summary and classification of jobs

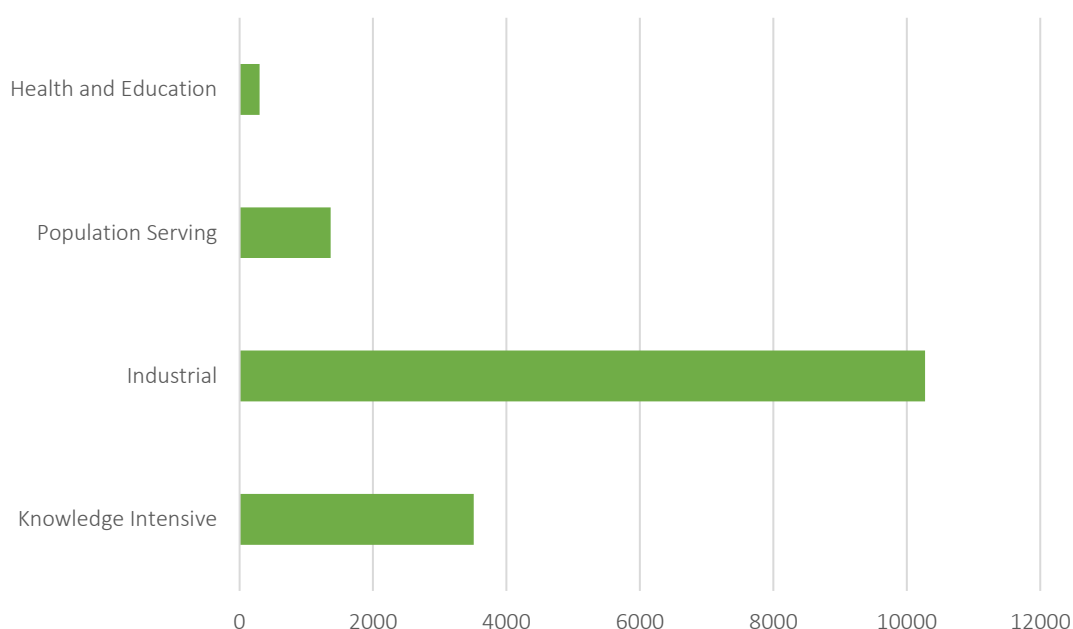
An approximate translation of the job capacity as identified in the Place Strategy retains a predominance of industrial-aligned jobs with Knowledge Intensive and Population Service making up the balance. The development of a school (or schools) will create jobs also, however the number would be contingent upon Department of Education ratios and expectations of staffing, which the job to floorspace ratio method does not permit.

This aggregation for the purposes of job estimates is likely to have a more nuanced industry profile as the precinct establishes and grows. Businesses may locate at different parts of the precinct based on their specific requirements. In practice, areas notionally marked as having ‘industrial’ jobs may include

some 'knowledge intensive' jobs and vice versa. The intent of this exercise is to have some view as to the potential job density of future industries over the long term.

FIGURE 15 JOB CAPACITY BY BIC AT FULL BUILD-OUT

	Knowledge Intensive	Industrial	Population Serving	Health and Education	Total
Place Strategy	3,511	10,273	1,365	300	15,449
%	23%	66%	9%	2%	100%



Source: SGS (2022)

4.7 Capacity comparison to existing projections

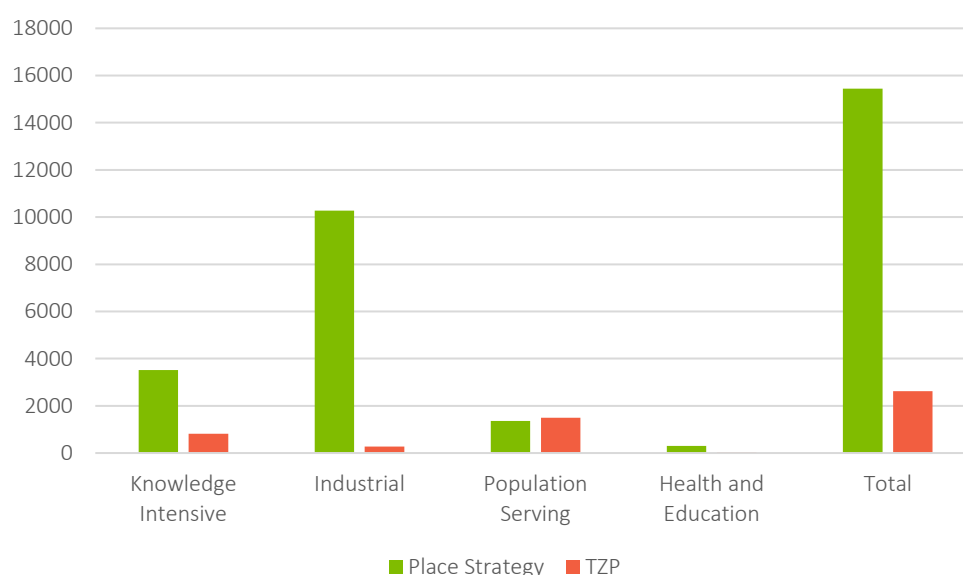
Transport for NSW provides projections of employment at the small area level for NSW. These projections, named Travel Zone Projections (TZP), align with the NSW Government Common Planning Assumptions and use various employment and economic forecasts as inputs into the model. To that degree, Travel Zone Projections (TZP) are a useful benchmark to ascertain what the employment quantum and profile would be in Camellia-Rosehill in the future under business as usual.

As shown in the table below, the number of jobs forecast under the TZP the intervention in the market via the implementation of the Place Strategy is likely to result in the provision of more employment capacity in the precinct.

However, it is important to note that TZPs are based on specific assumptions that are not responsive to recent policies and or distortions to the market. For example, the TZP project a substantial decrease in the number of jobs between 2021 and 2026, specifically, jobs in manufacturing and transport, postal & warehousing. This suggests that the TZPs have accounted for the completion of Parramatta Light Rail but have not accounted for Sydney Metro West, which was announced in 2020 (TZPs last updated in 2019).

FIGURE 16 COMPARISON OF PLACE STRATEGY AT FULL BUILD-OUT AND TZP JOB FORECASTS TO 2036

	Knowledge Intensive	Industrial	Population Serving	Health and Education	Total
Place Strategy	3511	10273	1365	300	15,449
TZP	812	278	1496	42	2,628



Source: SGS (2022)

4.8 Comparison of growth rates

A comparison of the different jobs growth rates is provided in the graph above, with an average growth rate of 8% per year for the Place Strategy if delivered by 2036. In comparison, a business-as-usual approach would likely warrant a 2% reduction in jobs per year.

It is instructive to compare this to forecast growth across the wider District. Between 2016 and 2036, the Central City District is expected to grow by 21,000 jobs to 650,000. This equates to an average annual growth rate (AAGR) of approximately 2%.

Further, when observing historical growth rates of other major employment precincts in Sydney, a sustained AAGR of 5-6% has not been observed over a twenty-year period. Macquarie Park, in its growth phase in the early 1990s grew at between 4.7% and 6.2% in the 10 years to 2006, so while these growth rates have been seen at certain stages of some precincts' development, it is important to recognise that they are both historically and locally high.

While it is difficult to predict exactly how long it will take to achieve the jobs that the Place Strategy has capacity for, considering a growth range of between 2% (from the Central District projections) to around 4% AAGR (the lower bound of Macquarie Park's high growth phase as the precinct was establishing), full realisation of this job capacity could be considered to lie somewhere between 2036 and 2056.

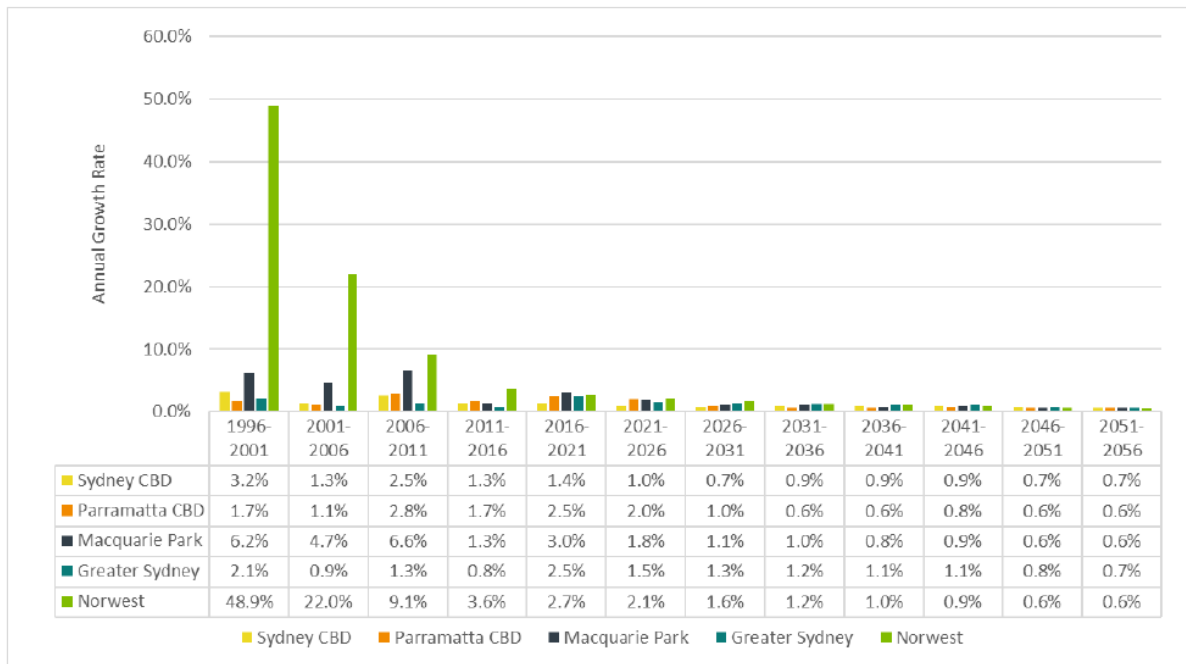
It is not possible to be precise on exactly when this would occur, as there are many factors that will influence its early success through to continued growth over the medium to long term. One of the key considerations would be the 'threshold' at which the intrinsic value of a site increases and warrants redevelopment or an intensification of uses. Triggers in the context of Camellia-Rosehill could include improved connectivity (via infrastructure improvements), government-led initiatives, the emergence of a new anchor industry etc. For example, the Norwest Business Park experienced rapid growth when ownership was consolidated and development led by a single investor, while Macquarie Park experienced continued growth following the construction of the Epping to Chatswood Rail Link.

FIGURE 17 COMPARISON OF JOBS GROWTH FORECASTS

Average Growth/Decline Rate	Place Strategy	TZP
Knowledge Intensive	11%	1%
Health and Education	12%	0%
Population Serving	-2%	-1%
Industrial	14%	-9%
All Jobs	8%	-2%

Source: SGS (2022)

HISTORIC AND PROJECTED GROWTH RATES OF KEY EMPLOYMENT CENTRES 1996-2056



Key considerations

TZPs are a standard departure point when looking at master plan schemes and the potential future jobs that may result of that scheme were to be implemented (as opposed to a BAU scenario). If a precinct is attractive to businesses in getting new jobs due to new or improved infrastructure, the attraction of an anchor tenant or the realization of a certain critical mass, it may ultimately grow in a different trajectory to what the TZP projects. Often there is some sort of previously unforeseen catalyst that would set this different trajectory.

Further, if a precinct is successful in obtaining new jobs that are greater than what is forecast in the TZPs, it is more likely that the precinct will take jobs from other precincts, rather than create net new jobs, unless there is a clear demonstration that the precinct will attract industries that cannot locate anywhere else.

Projecting out the impacts of a master plan over time with granularity is a challenge as it depends on the successful delivery of infrastructure improvements and market take up in early stages. The growth rate comparison shown on the previous page shows that build out to 2056 is logical compared to other precincts within Sydney.

However, it is important to note that every precinct grows differently based on prevailing conditions, in terms of both the market and the delivery of key infrastructure projects. Figure 18 includes an analysis of growth rates of different precincts in both regional and metropolitan New South Wales and Victoria. It indicates a high degree of variability between precincts, but that there is typically high growth in the early stages of precinct establishment and that it gradually tapers off over time. This also would suggest that more constrained or less favourable sites would likely be developed last.

FIGURE 18 SAMPLED GROWTH AREAS

	0-5yrs	5-10yrs	10-15yrs
Docklands	23%	19%	10%
Olympic Park	5%	19%	3%
Cremorne	10%	3%	1%
Syd airport	5%	2%	1%
Melb airport	1%	7%	2%
Ballarat West	14%	1%	3%
East Bendigo	6%	1%	2%
Pakenham Nth	15%	0%	16%
Wodonga Nth	0%	3%	20%
Average	9%	6%	7%
<i>Average (urban)</i>	9%	10%	3%
<i>Average (rural)</i>	9%	1%	10%

Source: SGS (2021)

4.9 Economic constraints

Camellia-Rosehill’s economic potential is driven by both its internal levers of attraction (heavy industrial zoning, large lot sizes, potential anchor industries, etc.) and external high-level drivers (proximity to growing GPOP market and universities, supply-chain and circular economy opportunities, etc.). However, these internal and external drivers do not operate in isolation and are impacted by internal and external constraints.

While the impact of external economic fluctuations on the precinct are often difficult to pinpoint without more detailed economic analysis, the internal precinct-specific economic constraints are more readily identifiable. The history of the precinct, previous studies, consultation with landowners and analysis as part of this master plan process has identified the following economic constraints in Camellia-Rosehill which may, to a degree, impact on the precinct’s capacity to realise the job numbers predicted under the Place Strategy:

- **Land contamination:** Camellia-Rosehill’s heavy industrial history has resulted in the precinct being heavily impacted by asbestos, chromium and hydrocarbon contamination. Any development within the precinct, particularly those incorporating residential land uses or resulting in soil movement, requires extensive remediation or capping. This heavily impacts on the feasibility of redevelopment and has been considered in the feasibility analysis of the Place Strategy.
- **Accessibility:** The precinct is almost entirely serviced via the Grand Avenue access point. This significantly impacts the attractiveness of the precinct for freight and logistics operations or industries in which accessibility is a key consideration for business establishment. There is scope for accessibility-enhancing infrastructure to be delivered as a result of any development contributions received as part of the implementation of the Place Strategy.
- **Flooding:** The precinct is significantly impacted by stormwater flooding, with most of the precinct impacted by at least the 1 in 100 year flood. This environmental constraint is further impacted by the precinct’s lack of accessibility discussed above and it impacts on the capacity for safe and efficient evacuation of the site. As a result, it is anticipated that additional costly design responses

would need to be utilised, asset protection insurance premiums are likely to be higher and certain sensitive land uses may not be appropriate at all on some sites in the precinct.

- **Sensitive infrastructure and land uses:** Gas/fuel pipelines traverse through the precinct and a blast protection area surrounds the VIVA Energy Terminal. These limit the location of sensitive land uses in the precinct.
- **Land use requirements.** At face value, the Camellia precinct may present as having significant vacant or undeveloped land. In practice, this may be intentional, with certain businesses building in buffers or requiring large areas of hardstand for storage or future expansion. This can impact on the achievement of critical mass or employment density aspirations.

4.10 Housing Context

Urban renewal in existing urban areas is often contested with other land uses. In almost all instances, residential land uses conflict with any other use (industrial, commercial, public/private recreation) as opposed to other non-residential land uses conflicting with each other.

Camellia is set to be serviced with new infrastructure (Parramatta Light Rail), is in close to the burgeoning Parramatta CBD and is located along the Parramatta River foreshore. Given this, it may be desirable to locate some quantum of housing in the precinct, particularly as it offers a funding source for other critical infrastructure that can benefit all land uses in the precinct, such as improvements to the precinct's accessibility. It is also likely to be desirable in certain areas close to amenities such as the river foreshore and public transport. However, it should also be noted that any funding received from residential development will also need to be allocated towards population-serving community infrastructure given there is no current provision of it in the precinct. This is the subject of separate studies.

The Parramatta Local Housing Strategy demonstrates that it not critical that Camellia be developed with a residential component as the District Plan housing targets can be achieved in other identified growth areas within the Parramatta LGA. This includes the Parramatta CBD, Telopea, Wentworth Point, Melrose Park, Sydney Olympic Park (and Carter Street precinct), Carlingford, Epping and Granville. Infill development is set to also contribute towards greater housing throughout the LGA.

This economics report does not include a housing demand study, nor is one necessarily required given the rapid growth of GPOP in which the supply of dwellings is set to outpace the targets set by the GSC. However, it is acknowledged that housing may play a role in the evolution of the Camellia-Rosehill Precinct and the Parramatta CBD and can contribute to supporting vibrancy and maximizing the benefits of public transport investment. In planning for this, the implications and role of residential development in any master plan need to be recognised, implemented carefully and with any potential land use conflicts addressed before any rezoning takes place, noting that most housing will be delivered in a 10 to 20 year time horizon.

FIGURE 19 PARRAMATTA HOUSING TARGETS

Period	District Plan Target	Housing Strategy Provision	Dwellings per year	Target achieved?	Comment
0-5 year (2016-2021)	21,650	23,720	4,744	Yes ✓	Target exceeded by 2070 dwellings
6-10 year (2022-2026)	Not provided	23,660	4,732	N/A	
11-20 year (2027-2036)	Not provided	40,520	4,052	N/A	
Total over 20 years (2016-2036)	83,975⁵	87,900	4,395	Yes ✓	Target exceeded by 3,925 dwellings (with a further 20,020 dwellings in train in growth precincts beyond 2036)

Precinct	Planning Forecast (to 2036) (dwgs) ⁵	Growth Precincts	% Growth
Melrose Park	6,330	Total GOP area = 64,110 dwellings	73% in GOP area
Wentworth Point	8,980		
Carter Street	5,860		
Sydney Olympic Park	8,190		
Camellia ⁷	3,500		
Parramatta East	3,610		
Parramatta North	800		
Parramatta CBD	7,180		
Westmead (North Precinct)	4,470		
Carlingford	4,470		
Telopea	4,890		
Granville (North & South)	5,830	All growth precincts = 73,020 dwellings	83% in Growth Precincts
Epping	8,910		
Infill growth (B2, R3, R4 zones)	8,790		
R2 zone (dual occs & secondary dwellings)	6,090		17% outside of Growth Precincts
Total	87,900		

Source: Parramatta Local Housing Strategy (2020)

5. Market profile

Parramatta has the second lowest amount of employment-zoned land in the Central District behind the Hills, at 708 hectares (as of January 2020).

According to the NSW Government Employment Land Development Monitor (ELDM), approximately 6% of this is undeveloped. This is unsurprising given that the Parramatta LGA has an established development pattern and long-term industrial precincts, which have largely been developed out over time, resulting in low levels of undeveloped land (43 hectares overall).

When *serviced* land (water and sewer connection) is taken into consideration, Parramatta's supply reduces to 18 hectares, of which two thirds of this is in the Camellia/Rosehill Precinct.

SUPPLY OF EMPLOYMENT LAND STOCKS, JAN 2020

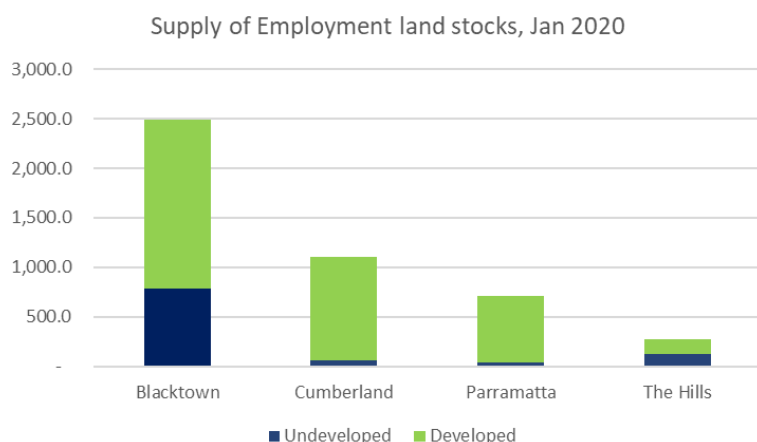


FIGURE 20 SUPPLY OF ZONED EMPLOYMENT LAND STOCKS BY LGA, JAN 2018-2020

District	LGA	Jan-18 (Ha)			Jan-19 (Ha)			Jan-20 (Ha)			Percentage of undeveloped
		Undeveloped	Developed	Total	Undeveloped	Developed	Total	Undeveloped	Developed	Total	
Central City	Blacktown	934.9	1,574.4	2,509.3	843.3	1,664.5	2,507.8	790.3	1,700.0	2,490.3	32%
	Cumberland	69.4	1,030.8	1,100.2	68.4	1,030.0	1,098.4	66.1	1,035.3	1,101.4	6%
	Parramatta	32.1	670.1	702.2	39.9	668.6	708.5	43.0	665.7	708.7	6%
	The Hills	144.6	135.2	279.8	133.5	141.8	275.4	131.0	143.9	274.9	48%

FIGURE 21 UNDEVELOPED AND SERVICED EMPLOYMENT LAND STOCKS, JAN 2020

	Undeveloped and serviced land (Ha)	Proportion of total LGA
Camellia/Rosehill	11.9	65.7%
Rydalmere	0.3	1.7%
Silverwater	5.9	32.6%
TOTAL	18.1	

5.1 Future supply

It is important to recognise too the Camellia precinct is not the only one delivering new industrial or similar floorspace. Across the Central City District and Greater Sydney, there are several new or proposed developments of differing scales that may compete for a share of future industrial jobs and provide a share of future floorspace supply. Locally, proposed development in the Clyde industrial precinct is anticipated to realise new industrial floorspace in the coming years. Most significantly, the Western Sydney Priority Growth Area is proposed to experience significant growth and complement the new Western Sydney Airport and proposed Aerotropolis precincts, albeit over the next few decades.

The following table provides examples of future industrial developments in close proximity to the Camellia/Rosehill precinct. The majority of these developments include a mix of commercial and industrial uses and are expected to be completed between 2022-2024.

Cordell project ID	Name	Address	Suburb	Description	Expected completion year
7474881	Manchester Road warehouse buildings	148 & 300 Manchester Road (Lots 11 & 12 DP1165540)	Auburn	Proposed construction of 6 industrial warehouse buildings with ancillary offices and landscaping. 73,000 square metres in total.	2024
8106253	Church, Ferris & Barney Streets commercial & industrial development	574-580 & 584 Church Street, 1 & 5-7 Ferris Street & 8-12 Barney Street	North Parramatta	Construction of a 3 storey commercial & industrial development to comprise motor vehicles showroom & service centre.	2024
7511139	Reclaimed Asphalt Pavement processing & Polymer Modified Bitumen blending facility	1A Unwin Street	Rosehill	Reclaimed Asphalt Pavement processing & Polymer Modified Bitumen blending facility	2024
7452955	Industrial development double entry	62 Ferndell Street	Granville	Construction of 4 industrial buildings including ancillary office/light industrial/warehouses cafeteria	2024
7565102	Woolworths warehouse & distribution centre	11-13 Percy Street (Lot 1 & 2 DP1183821)	Auburn	Construction of a 2-storey warehouse/distribution centre/office	2024
7550929	Nelson Road warehouses	26-28 Nelson Road (Lot 112 DP1242108)	Yennora	Construction of 2 warehouses (22,129 square metres & 21 loading bays) & 4 ancillary offices (1,377 square metres)	2022
7328880	Smithfield distribution centre	149 McCredie Rd	Smithfield	Construction of 2 new warehouse buildings of 41,831 square metres separated into 8 tenancies; office spaces of 3,874 square metres	2023

Source: Cordell Connect (2021)

5.2 Industrial market vacancy rates

CBRE has reported that in the second half of 2020, vacancy rates in the Central West Industrial Market (only industrial zones) were at 3.4%, which is low, although higher than other industrial sub-markets in Sydney¹. While it does not speculate as to why it is slightly higher it may be that the major logistics markets of the South and West are driving major demand, whereas the Central City is a traditionally manufacturing-centric industrial market, albeit a changing one. That being said, 3.4% is still very low.

The 2016 Parramatta Employment Land Study provided more detailed precinct-specific vacancy rates, which can be seen on the following table. The more recent update undertaken by City of Parramatta Council does not provide more detail on vacancy rates, so these are to be viewed with caution given their age. However, what they show historically is that Camellia has had relatively low vacancy rates, but what is more interesting is the very low rates of Rydalmere, which suggest that there has been a higher demand for the type of light industrial/urban services product that this precinct traditionally caters for.

Recent engagement with commercial agents focusing on the industrial market of Rydalmere and Silverwater reported that:

- Vacancy rates range between 2-3%
- Vacancy rates have decreased over past 12-18 months and there is not much stock in the local market

As part of this study, consultation was also undertaken with agents specialising in the Camellia-Rosehill precinct. It was reported that:

- Industrial sites in Camellia/Rosehill are highly demanded and are on the market for under a month on average, but at an absolute of maximum of 6 months.
- Based on current interest and the e-commerce boom, surplus VIVA Energy landholdings, if appropriately remediated and fit for light industrial purposes, is likely to be occupied very quickly².

FIGURE 22 VACANCY RATES PARRAMATTA LGA

Parramatta employment precinct	Vacancy rate (2016)
Old Toongabbie	1.7%
Pendle Hill	10.3%
Northmead (Briens Road)	5.3%

¹ CBRE Industrial & Logistics Vacancy Report, H2 2020

² Commercial agent consultation (June 2021), Commercial agent consultation (August 2021)

Parramatta employment precinct	Vacancy rate (2016)
Northmead (Kleins/Boundary Roads)	1.9%
North Parramatta (Church Street)	7.7%
North Parramatta (Grose Street)	5.2%
Harris Park (Gregory Place)	0.0%
Parramatta (River Road West and Alfred Street)	7.5%
Rydalmere (IN1 Zone)	2.8%
Rydalmere (IN2 Zone)	1.7%
Rydalmere (Kirby Street)	0.0%
Melrose Park	1.9%
Rosehill (James Ruse Drive)	10.5%
Camellia/Rosehill	3.2%
Clyde	4.2%
Granville (Parramatta Road)	4.4%

Source: Parramatta Employment Lands Strategy (2016)

5.3 Industrial land demand

To understand what pressures may be placed on industrial land supply, it is instructive to consider what future demand for industrial land might look like. City of Parramatta Council undertook a detailed industrial land study of key precincts in the LGA in 2019, however this has not been publicly released, so any more detailed demand-side analysis has not been able to be drawn on.

In lieu of that, some high-level analysis on the future industrial sector has been undertaken to get a sense of what the total demand for industrial land may be in the Central District. It has been done at this level (rather than at a precinct or LGA level) because of the distributed nature of industrial precincts and the fact this sector often operates at a district scale.

This high-level analysis suggests that with a 24% increase in industrial jobs between 2016 and 2036, and applying an average job to gross floor area and floor space ratio controls on these to translate them into land area, this could create demand for approximately 400 hectares across the Central City District by 2036.

Across the district, as shown previously, there is some 1,000 hectares of undeveloped industrial land, although the vast majority of this is in Blacktown and the Hills (and when undeveloped and serviced land is taken into consideration, these LGAs only have approximately 60 hectares of serviced supply available as of 2020).

So, while at face value there appears to be sufficient industrial land to meet future need, from a location and servicing perspective, the picture is far tighter.

In the case of Camellia-Rosehill, 28.7% of land is undeveloped, but only 11.9% of land is both serviced and undeveloped. While this may point to a high percentage of industrial zoned land being too constrained to develop (and hence not serviced), it is also acknowledged that Viva Energy is in the process of rationalising their surplus land and preparing it for light industrial purposes. It may also reflect the need for certain operations to maintain a supply of hardstand for storage or buffer purposes, which from the outside appears to be vacant. Some of this land may not be serviced and may contribute towards the total quantum of undeveloped land.

Notwithstanding this, it should be ensured that industrial land is appropriately protected and supported to ensure future jobs can be supported.

Again, these are very high-level summaries, which a more comprehensive industrial land study would interrogate in more detail. However, in the absence of this data being available, this presents a high-level view of the supply-demand profile of the Central City District.

FIGURE 23 POTENTIAL ADDITIONAL INDUSTRIAL LAND AREA DEMAND, 2016-2036

Industrial jobs 2016	Industrial jobs 2036	Change (%)	Average J:FS area (sqm)	Additional Potential FS demand (sqm) 16-36	Representative FSR	Additional potential land area demand (ha) (2036)
107,565	132,872	24%	80	2,024,559	0.5:1	405

FIGURE 24 PROPORTION OF SERVICED LAND OF ALL UNDEVELOPED LAND, 2020

LGA	Undeveloped and serviced (Ha)	Undeveloped total (Ha)	%age
Blacktown	53	790	7%
Cumberland	13	66	19%
Parramatta	18	43	42%
The Hills	9	131	7%

At a Metropolitan level, the Central West industrial sub-market (that includes Parramatta) has observed significant capital value growth in the previous 12 months to Q1 2021, according to research by Savills. This suggests an increasing value placed on industrial land in this part of Sydney.

With industrial land supply relatively constrained (insofar as it is rare that new industrially-zoned land is created in inner and central part of the city), it is instructive to see what trends are influencing the Eastern City from an industrial land perspective to understand what may influence the Central District in coming years. Separate analysis from Savills from 2020 show a significant increase in prime capital values for eastern Sydney’s industrial lands between 2017 and 2020. This corresponds to various things, including the rise in demand for online shopping and the value placed on customer proximity, dramatically increasing the value of inner-city industrial land.

While the Central City District does not have the port or the airport to probably see such dramatic increases, the growing population of residents and jobs, and the maturing of the central city’s economy, would indicate that with constrained supply around Greater Parramatta, a similar trend may also eventuate in the coming year. The most recent Savills data indicates that such growth may already be occurring.

FIGURE 25 CHANGE IN PRIME CAPITAL VALUE, SYDNEY 2009-2019

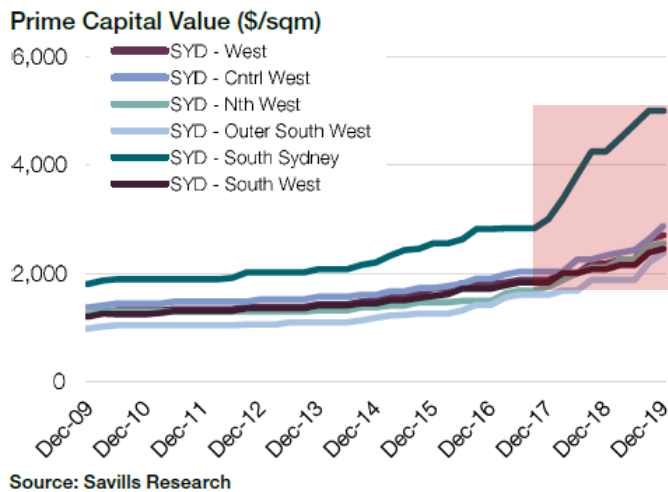
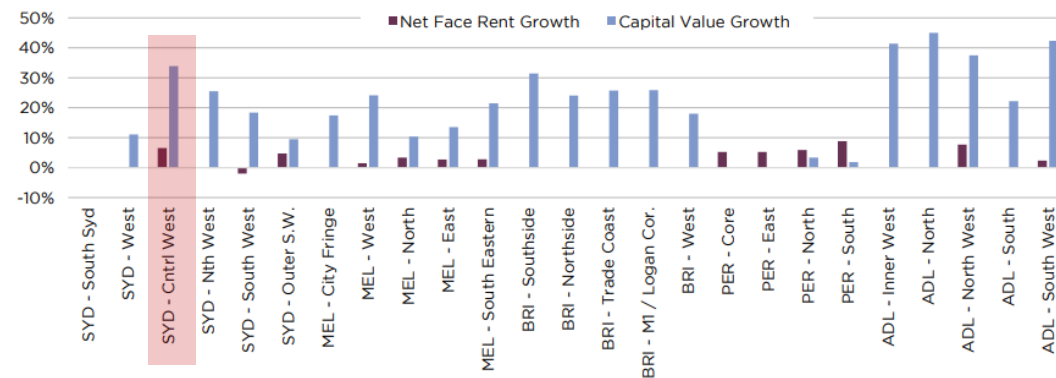


FIGURE 26 CHANGE IN PRIME CAPITAL VALUE, SYDNEY 2009-2019



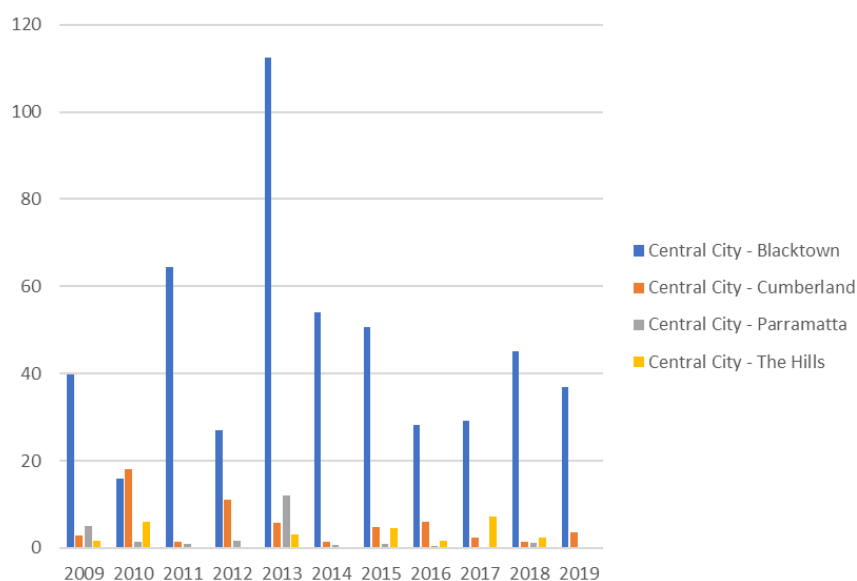
5.4 Industrial land take-up rates

Historic take-up rates of industrial land in the Central City District have been varied. In Parramatta, on average between 2009 and 2019, take-up has been 2.4 hectares, whereas in Blacktown, this is 45 hectares. This likely reflects the higher supply of undeveloped industrial land in Blacktown compared with Parramatta.

Job growth is just over 1% per annum in industrial and 2% total jobs in Central City District. With the Camellia precinct proposing to deliver new industrial (or urban services) floorspace (not zoned land), the higher growth rate of 2% per annum may reflect the ability for Camellia to channel future demand through its continued release of development.

As outlined earlier in this report. If a 2% AAGR is assumed to grow the current (2016) job number to the Place Strategy's total jobs capacity, it could be expected that full build out may occur around 2056. However as previously discussed, Camellia-Rosehill's inherent economic and access constraints may inhibit take up of industrial land, particularly as other new industrial precincts come online and gain critical mass (such as the Western Sydney Employment Area).

FIGURE 27 INDUSTRIAL LAND TAKE-UP RATES 2009-2019



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Blacktown	39.8	15.8	64.4	27	112.4	54	50.7	28.2	29.3	45	36.8	503.4
Cumberland	2.9	18.2	1.5	11	5.8	1.5	4.8	6.1	2.3	1.5	3.7	59.3
Parramatta	5.1	1.4	0.9	1.6	12	0.7	1	0.5		1.1	0.1	24.4
The Hills	1.7	6.1			3.2		4.5	1.6	7.2	2.5		26.8
Total	49.5	41.5	66.8	39.6	133.4	56.2	61	36.4	38.8	50.1	40.6	613.9

Source: Employment Lands Development Monitor, January 2020

5.5 Industrial land price points

In 2019, industrial building approvals in the Central City District were of the highest value across all of Greater Sydney districts. The largest industrial buildings approvals were in the Blacktown LGA, which reflects the larger supply of available zoned land.

Land values in Central West Sydney are of higher value as compared to all other districts in Sydney, besides South Sydney (which includes Alexandria and Banksmeadow industrial precincts).

Agency consultation undertaken in June 2021 reinforced the rental ranges for the Central City shown in this table.

With continued pressure on inner city (South) industrial precincts raising prices well above anywhere else in the country, there is a likelihood that some businesses will be priced out of these areas and look to relocate in more affordable precincts. The Central West's industrial rents are more affordable, as are capital values. If the master plan delivers a high-quality product akin to what many emerging businesses seek in the south Sydney area, then this could potentially see rents at the higher end of the Central City averages.

Under the Place Strategy, it is anticipated that landowners will have the option of either intensifying industrial land uses on their sites or activating currently undeveloped land. In either option, there needs to be an impetus to drive such change. While market trends suggest that take up of industrial land, particularly in the Central City District remains high, land is unlikely to be developed if landowners perceive greater financial returns in the future by leaving land under-utilised. The implementation of the Place Strategy and an overarching vision for the precinct provides certainty and assists landowners in understanding the long-term opportunity costs for developing their sites now instead of in anticipation for potential changes in land use controls. Further, proposed road improvements, coupled with greater permissible densities/heights for urban services land, may have a catalytic effect in encouraging additional or more intense industrial development.

FIGURE 28 INDUSTRIAL LAND PRICE POINTS

CENTRAL WEST SYDNEY (Auburn, Chullora, Granville, Homebush, Rydalmere, Silverwater)	Prime	Secondary
Rental Net Face (\$/sq m)	\$140-\$185	\$125-\$140
Yield- Market (%)	4.00-4.50	4.75-5.50
Land values 3,000 – 5,000 sqm (\$/sqm)	\$1,500 (high)	\$1,000 (low)
Land values 10 000 – 50,000 sqm (\$/sqm)	\$1,000 (high)	\$800 (low)
Land values 10 ha and above (\$/sqm)	\$1,000 (high)	\$800 (low)

SOUTH SYDNEY (Alexandria, Botany, Banksmeadow, Rosebery)	Prime	Secondary
Rental Net Face (\$/sq m)	\$170-\$235	\$160-\$170
Yield- Market (%)	4.00-4.50	4.5-5
Land values 3,000 – 5,000 sqm (\$/sqm)	\$3,000 (high)	\$2,500 (low)
Land values 10 000 – 50,000 sqm (\$/sqm)	\$2,500 (high)	\$2,000 (low)

WESTERN SYDNEY Arndell Park, Eastern Creek, Erskine Park, Greystanes, Huntingwood, Smithfield, Wetherill Park, Yennora	Prime	Secondary
Rental Net Face (\$/sq m)	\$115-\$135	\$100-\$110
Yield- Market (%)	4.00-4.50	4.75-5.50
Land values 3,000 – 5,000 sqm (\$/sqm)	\$950 (high)	\$850 (low)
Land values 10 000 – 50,000 sqm (\$/sqm)	\$850 (high)	\$700 (low)
Land values 10 ha and above (\$/sqm)	\$800 (high)	\$700 (low)

Source: Savills Quarter Time National Industrial Report, Q1 2021

5.6 Current market

There are also a number of industrial products currently on the market. While these will not be once Camellia is developed, they are reflective of the fact that stock is always turning over in an area the size of the Central City District. It is therefore instructive to compare what close precincts offer that could be considered competition. The following table provides examples of industrial sites for lease in close proximity to the Camellia/Rosehill precinct.

Industrial sites in Rydalmere provide a mix of large and small floor spaces. This is similar to Granville which has established industrial sites of small and large scales. Prices per sqm for both precincts are typically within low to mid range.

As both areas are established industrial precincts, industrial sites are typically of lower quality and are older stock that would be provided in Camellia.

Address	Rent p.a	Sqm	Price per sqm
13 Muriel Avenue, Rydalmere	\$65,000	430	\$151
2 Euston street, Rydalmere	\$150,000	1192	\$126
11 Bridge street, Rydalmere	\$38,000	859	\$155

Address	Rent p.a	Sqm	Price per sqm
20 Wentworth Street, Granville	\$105,000	704	\$149
25 George Street, Granville	\$70,000	325	\$215
12-16 Ferndell Street, Granville	\$169,650	1,305	\$130

20 WENTWORTH STREET, GRANVILLE



Other industrial precincts in Sydney can provide examples of industrial sites for lease that may be more akin to the role of the 'urban services' type of industrial precinct, as opposed to the traditional 'dirty economy' industrial precincts. Alexandria in the east and Prestons in the west have been assessed as different examples of comparable products.

Industrial sites in Prestons typically provide a larger floor space as compared to Alexandria which offers several smaller bulky goods industrial sites. Prices per sqm for Alexandria is typically in the mid to high range as compared to Prestons which is low to mid range.

Prestons is providing new industrial stock as compared to Alexandria which typically offers older stock as it is an established industrial precinct. However, the industrial sites are of higher quality in both areas as compared to sites in Granville and Rydalmere and are strategically located close to Ports and the Harbour/Parkland CBD.

Address	Rent p.a	Sqm	Price per sqm
2/45-51 Huntley St, Alexandria	\$34,840	100	\$348.40
Unit 3, Unit 3/80 O'Riordan St, Alexandria	\$65,500	179	\$365.90
8/24-26 Burrows Rd, Alexandria	\$102,300	372	\$275

Address	Rent p.a	Sqm	Price per sqm
2/239 Kurrajong Road, Prestons	\$157,000	981	\$160
29/10 Yato Road, Prestons	\$25,080	102	\$246
Unit 3, 87 Jemma Road, Prestons	\$52,000	346	\$150

2/239 KURRAJONG ROAD, PRESTONS



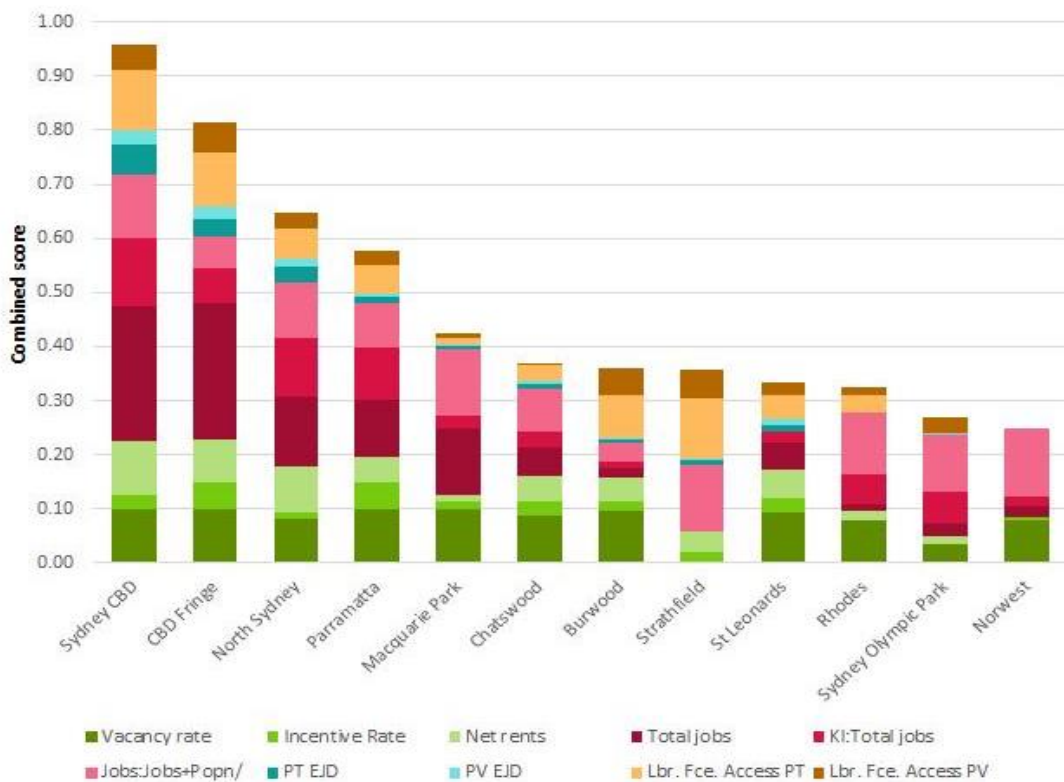
5.7 Commercial land strategic view of centres

The role of Camellia as a major commercial strategic centre is considered not to be an appropriate land use outcome for the precinct, and this is borne out in the Place Strategy.

The reason for this is that strategic commercial centres compete for jobs across a wider sub-region and many jobs are relatively footloose in where they choose to locate. This means that centres with a more compelling proposition attract more jobs, leading to agglomeration outcomes. Not all businesses value the same things, however, cumulatively those centres with a more attractive offer tend to attract more businesses (with obvious supply constraints impacting how much can be accommodated).

The nature of the Camellia precinct, without a clear commercial identity and no discernable characteristics that would suggest it being competitive at a Metro level, would likely sit to the right of this chart, where, incidentally, both Rhodes and Sydney Olympic Park sit. The chart shows the relative competitive offers of multiple centres that would compete for a share of future office-based jobs.

If Camellia is to attract some form of Commercial, it must identify a market that is not appropriately serviced in the District. This can be the emerging hybrid commercial-industrial model that typifies many of the businesses in the Eastern City’s industrial precincts. These businesses require a mix of commercial floorspace along with productive or flexible floorspace to support their business operations.



5.8 Commercial market dynamics in Central City

Building on this commercial proposition, it is more instructive therefore to consider the competition for commercial coming from B5, B6 and B7 zones than competing with the Parramatta CBD.

When supply is considered, there is a similar pattern to that observed with industrially-zoned lands across the Central District. Blacktown and the Hills have reasonable amounts of undeveloped land available (27% and 47% of total zoned land respectively).

Parramatta and Cumberland, however, have much lower levels available (9% and 3% respectively), of total zoned land.

With this zoning (and particularly the B5 and B6 zones) designed as centre support functions, the growth of Parramatta as the CBD of the Central City will continue to create demand for such CBD-support businesses to locate close to Parramatta, further highlighting the opportunities that Camellia has to play an important and distinct productive role in the Central City economy.

It is acknowledged that the B4 Mixed Use zoning in the proposed town centre would also generate employment-generating land uses. However, these would likely be population-support retail tenancies (supermarkets, takeaway food, etc.) and would not be significant component of the total Central City District employment share. Further, due to the precinct’s proximity to the Parramatta CBD, the provision of general retail tenancies is unlikely to be substantial.

FIGURE 29 SUPPLY OF ZONED B5, B6 & B7 LAND STOCKS BY LGA, JAN 2020

LGA	B5 Business Development (ha)			B6 Enterprise Corridor (ha)			B7 Business Park (ha)			Total (B5, B6 & B7) (ha)			Percentage undeveloped
	Undeveloped	Developed	Total	Undeveloped	Developed	Total	Undeveloped	Developed	Total	Undeveloped	Developed	Total	
Blacktown	28.8	178.5	207.3	5.0	-	5.0	82.1	138.3	220.4	115.9	316.8	432.7	27%
Cumberland	0.2	17.3	17.5	4.0	113.5	117.5	-	11.5	11.5	4.2	142.3	146.5	3%
Parramatta	5.8	18.7	24.5	0.7	41.4	42.1	-	9.5	9.5	6.5	69.6	76.1	9%
The Hills	-	37.8	37.8	78.9	27.8	106.7	100.7	134.8	235.5	179.6	200.4	380.0	47%

Source: Employment Lands Development Monitor, January 2020

Further, the proposed Town Centre has been planned to provide retail development that will service the residential and employment population of Camellia. The retail area is not envisaged to support sub-regional retail needs. The quantum of retail provided has not been identified through a retail needs assessment and SGS has not undertaken any retail analysis of the proposal. The master plan’s provision of retail floorspace is indicative of a town centre of this size, however additional retail analysis, including the impact on local infrastructure and surrounding retail centres in the broader retail network, is recommended prior to any consideration of a larger retail centre in Camellia.

5.9 Diversion of jobs

Any change to job numbers in a precinct requires a redistribution of jobs from elsewhere to retain the Greater Sydney job control total.

While detailed re-distribution analysis has not been done for this study, it is likely that if the full jobs capacity is met, jobs would be sourced from other precincts with similar employment profiles that would compete for this share of future jobs. This map provides a qualitative overview of what this distribution may look like.

Briefly, the following comments are made on the most relevant of these precincts:

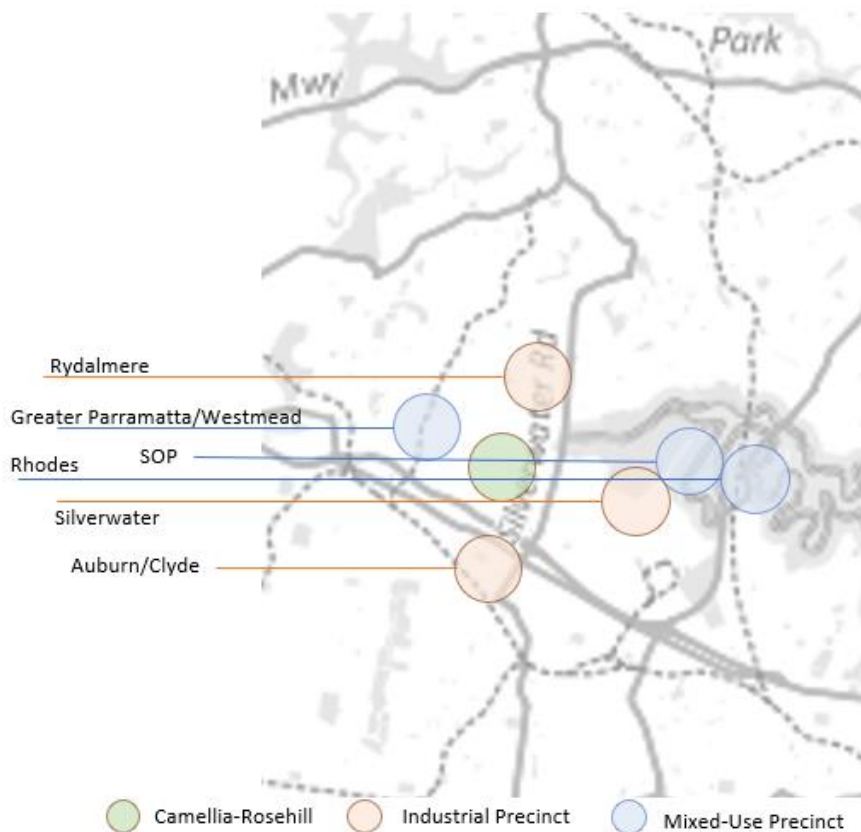
- **Rydalmere & Silverwater** – established industrial precincts with low vacancies and minimal additional development capacity. Demand in industries requiring this form of light industrial

floorspace will likely be attracted to Camellia, particularly as much of the stock in Rydalmere and Silverwater is relatively old.

- **Auburn** – a current redevelopment of the Manchester Road site south of Auburn will deliver up to 14 hectares of new industrial floorspace prior to the Camellia Place Strategy being delivered. Depending on the similarity to the stock provided in Camellia, this could absorb the demand for industrial floorspace in the short to medium term. Applying the average annual take-up of 2.4 hectares observed in the Parramatta LGA over ten years to 2019, this could conceivably be exhausted in 5-6 years.
- **Parramatta, Rhodes and Sydney Olympic Park** – these three centres are different to the anticipated commercial offer that Camellia will present. It is not anticipated that many of the future jobs will be diverted from these centres, although there are likely to be a number of businesses that will value proximity to these centres but within more flexible floorspace, that will be attracted to Camellia.

Further, it is acknowledged that in the short to medium term, several jobs currently located at the future Clyde Stabling Yards may shift to other nearby industrial precincts or even within the precinct. The exception is the speedway which has a commitment from Government to be relocated to Eastern Creek. In the long term, it is expected that Metro operations would facilitate the creation of new jobs and surplus land could be used as open space per the Place Strategy.

FIGURE 30 LOCATION OF COMPARABLE PRECINCTS



6. Feasibility analysis

SGS has used a high level feasibility model to understand the feasibility of different development proposals.

Rather than testing multiple sites for multiple different future uses, a series of typical development forms have been tested that appear throughout the precinct, as envisaged by the Place Strategy (but not necessarily applying the maximum FSRs permitted under the Strategy). These are:

- Traditional mixed use model of a predominantly residential development with some commercial floorspace
- An urban services model with a predominantly industrial function
- A new urban service typology with a mix of light industrial and commercial functions in a (slightly) higher density format
- A large format freight and logistics facility
- A large format general industrial facility.

This allows each of the typical land use forms, which represent all of the key land uses across the Place Strategy, to be compared for their relative feasibility.

A Residual Land Value (RLV) model has been used to test high level feasibility. An explanation of RLV modelling theory is explained on the following page.

Data has been sourced variously from market reports, review of market conditions, industry standard costing data sources, Council contribution plans and from other consultants, to create as accurate a picture as can be when undertaking strategic feasibility on schematic land use plans.

Remediation costs – one of the major impactors of feasibility in Camellia – have been sourced from Golder Associates Pty Ltd and applied on a sliding scale of likely order of magnitude. That is, the highest remediation costs have been applied to residential uses, mid-range costs to more intensive employment uses and the lowest range costs to the low density industrial uses of freight and logistics and General industry.

A detailed list of modelling assumptions and other clarifications is provided at the end of this chapter.

It is important to recognise that this is a high-level point in time feasibility assessment. Just because something is not feasible now, does not mean that it will not be in the future. Even changes to the development costs, or the presentation of a particular product to the market that is not found elsewhere may lead to a feasible outcome if it can generate revenues above what has been tested. The intent here is to provide a relative view of different development typologies and to test whether any of what is proposed is considered wildly unfeasible.

More detailed site-specific and land-use-specific feasibility analysis is likely to be required when determining whether to develop a particular site.

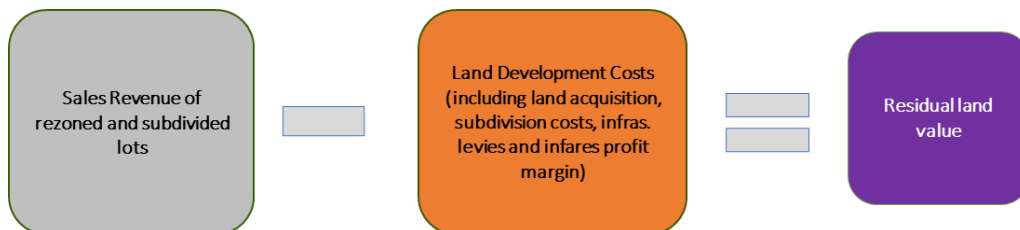
6.1 Development feasibility method

Development feasibility analysis compares costs and revenues of a hypothetical development to determine if the project would be financially viable. A key test for financial viability is to compare the RLV from a hypothetical development with the existing use value (EUV) of the site in question.

RLV can be defined as the maximum amount a rational developer will pay a rational land seller for a site for redevelopment. RLV is estimated by deducting the anticipated development costs from the anticipated revenues. This is shown conceptually in the figure below. As the profit margin for development is included in the development costs, a developer will be able to develop profitably while still paying the RLV for the land.

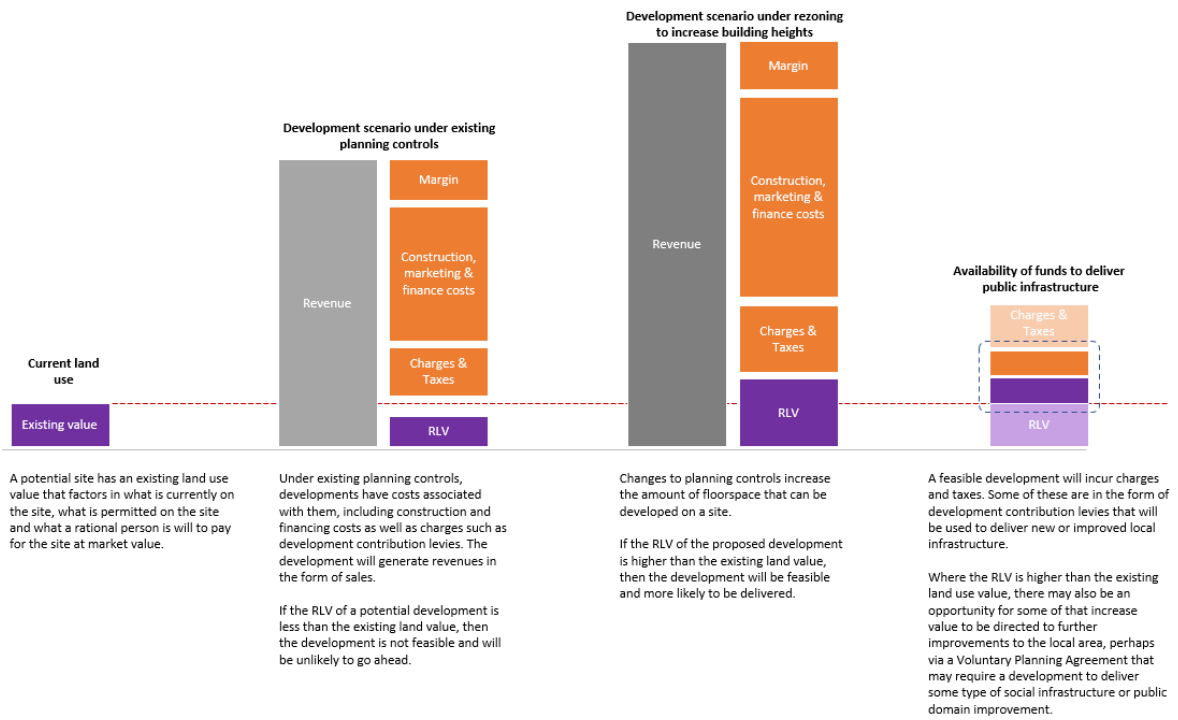
Development feasibility is expressed through the ratio of the RLV divided by the expected cost for a development site.

If RLV is greater than 1.25	If RLV is between 1 and 1.25	If RLV less than 1
Development is typically regarded as feasible because a developer could afford to pay 25% more than the likely value of a site, leaving some room for the value of a site to increase following rezoning or for a developer to need to pay above market rate potentially to acquire multiple sites.	Development is said to be marginally feasible, as a developer could afford to pay more than a site's value to acquire, but could not afford to pay a 25% premium that may be required.	Development is said to be unfeasible. In this case, a developer would only be able to feasibly develop the land if they could acquire a particular site for less than has been assumed in the analysis, if they could sell the resulting lots and dwellings for a higher price, or if they could undertake the development for less than the cost assumptions in this model.



Feasibility process

The following image provides a broad overview of the concept of feasibility and residual land value analysis.



Land-use typologies tested

Five separate land use typologies have been tested as they are representative of what could be provided under the Place Strategy (but not necessarily going to the maximum density permitted under this Strategy). These are explained here, with overview of there likely land use and built form.

Typical land use scenario	Planning control assumptions	Summary	Example
Mixed use (Residential and commercial)	Zone: B4 Mixed Use FSR: 3.5:1 Residential/Commercial split: 90%/10%	Typical high density mixed use development with predominantly residential focus	
Urban Services (industrial)	Zone: IN2 FSR: 0.8:1 1-2 storeys	Flexible industrial facility with ancillary commercial in mezzanine. Double height ground floor with good loading access	
Urban Services (industrial and commercial)	Zone: IN2 (potentially B5/6/7) FSR: 1.5:1 Industrial/ Commercial split: 50%/50% 2-3 storeys	Mixed industry building with flexible ground floor uses and ability to utilise upper floors for commercial or small-scale production spaces	
Large lot Freight and Logistics	Zone: IN1/2 FSR: 0.4:1	Large lot warehouses for freight and logistics. Good truck access	
Large lot general industrial	Zone: IN1/2 FSR: 0.4:1	Large lot general purpose industrial use with mix of internal floorspace and functional hardstand	

Grounding the feasibility in the wider market

The undertaking of feasibility modelling for a precinct that may look fundamentally different to what it does now requires a clear articulation of what the precinct's future vision and identity is likely to be.

To aid the feasibility analysis, we have made some assumptions about the following:

- The character of the various sub-precincts
- The likely market that the various land uses are expected to capture
- What similar places can be drawn from in terms of data

In summary:

- The residential precinct is expected to be similar in profile to Sydney Olympic Park, Wentworth Point or Rhodes. While it will not have the access to mass transit (rail/metro) that Sydney Olympic Park and Rhodes has, it will be connected via the PLR and is closer to the Parramatta CBD. As such, the average 2-bed unit price is benchmarked against these, at \$700,000.
- The large-format industrial uses would be comparable to the high end of the Western Sydney logistics market, particularly if and when improvements are made to truck access to the arterial road network. This also reflects the strategic role the precinct could play from a freight and logistics perspective, with prices in the Eastern City increasing well beyond these rates.
- The urban services typology – a hybrid of commercial and industrial – doesn't have a comparable precinct to benchmark against in the Central District. It is predicated on being the 'Alexandria of the Central District', and assumptions have therefore been made that commercial rates are higher than what is observed in industrial precincts but lower than nearby commercial precincts.

6.2 Summary of results

A summary of the results is provided in this table. This indicates that a Mixed use development typology and an Urban Services typology with a commercial aspect to it are likely to be feasible. More traditional industrial uses are not if land is to be acquired prior to development.

Each of these is expanded on over the following pages, with commentary on what price points (or other variables) are required to deliver feasible outcomes.

It is noted that across all of the tested options, a straight comparison of revenues to costs indicates that if development were to occur via current landowners re-developing their land (rather than new owners acquiring and then developing), then all of these land use types as tested have greater revenues than costs, indicating that conceptually, the product proposed is a feasible proposition.

FIGURE 31 HIGH-LEVEL FEASIBILITY ANALYSIS

	Mixed Use	Urban Services (IN)	Urban Services (COMM)	Industrial (F+L)	Industrial (Gen)
Land area (sqm)	10,000	10,000	10,000	50,000	50,000
Zoning	B4 IN2	IN2	IN2	IN1	IN1
FSR (x:1)	3.5	0.8	1.5	0.4	0.4
GFA residential (sqm)	25,200				
No. Dwellings	308				
GFA Commercial (sqm)	2,800		6,000		
GFA industrial (sqm)		6,400	6,000	18,000	18,000
Residential sales value	\$ 215,560,081				
Commercial GRV	\$ 18,666,667		\$ 40,000,000		
Industrial GRV		\$ 26,311,111	\$ 24,666,667	\$ 54,000,000	\$ 54,000,000
Total income	\$ 234,226,748	\$ 26,311,111	\$ 64,666,667	\$ 54,000,000	\$ 54,000,000
Total Taxes & charges	\$ 14,917,636	\$ 1,204,566	\$ 2,847,459	\$ 1,910,688	\$ 2,096,504
Total Development costs	\$ 133,515,332	\$ 7,317,934	\$ 27,926,914	\$ 23,978,374	\$ 20,597,029
Margin	\$ 39,037,791	\$ 4,385,185	\$ 10,777,778	\$ 9,000,000	\$ 9,000,000
Total costs	\$ 187,470,759	\$ 12,907,685	\$ 41,552,151	\$ 34,889,063	\$ 31,693,534
Residual Land Value	\$ 46,755,989	\$ 13,403,426	\$ 23,114,516	\$ 19,110,937	\$ 22,306,466
Existing value	\$ 15,000,000	\$ 15,000,000	\$ 15,000,000	\$ 50,000,000	\$ 50,000,000
RLV: Existing value	3.12	0.89	1.54	0.38	0.45

Mixed use land use

The Mixed use scenario is considered feasible, unsurprising given its predominant floorspace type would be residential.

This scenario assumes basement car parking, although not at the costs that may be incurred if contamination needs to be addressed. However, per the Contamination Report (by Golder), basement car parking is only to be permitted in limited circumstances.

Remediation costs used here were at the highest level provided.

Commercial floorspace is assumed on the lower levels of the multi-storey development, constituting 10% of total GFA.

An assumption has been made that commercial rents would be lower than those in nearby commercial precincts such as Rhodes and Sydney Olympic Park to reflect its more local focus (rather than that of a strategic commercial centre), with a rent of \$400 per sqm used. This reflects a vision for a precinct that caters to a professional market but at a lower price point than a large centre. If this rent is reduced to \$300/sqm, the feasibility ratio drops to 2.9.

Residential property values were pegged against products considered to be similar to what will be delivered in Camellia. It was assumed that a two-bed unit would be priced similar to that currently on the market in Sydney Olympic Park, at \$700,000.

With all other variables kept constant, if FSR dropped to 2:1, then development in this scenario would be still be considered (at approximately 1.6:1). Additional contribution requires through, for instance a Key Sites contribution requirement would add additional costs to this) as well as reducing land area) and may need to be counter-balanced by increasing yield to offset this.

FIGURE 32 HIGH-LEVEL FEASIBILITY FOR MIXED-USE DEVELOPMENT

	Mixed Use
Land area (sqm)	10,000
Zoning	B4
FSR (x:1)	3.5
GFA residential (sqm)	25,200
No. Dwellings	308
GFA Commercial (sqm)	2,800
GFA industrial (sqm)	
Residential sales value	\$ 215,560,081
Commercial GRV	\$ 18,666,667
Industrial GRV	
Total income	\$ 234,226,748
Total Taxes & charges	\$ 14,917,636
Total Development costs	\$ 133,515,332
Margin	\$ 39,037,791
Total costs	\$ 187,470,759
Residual Land Value	\$ 46,755,989
Existing value	\$ 15,000,000
RLV: Existing value	3.12

Urban services land use

The two urban services scenarios give slightly different feasibility results.

A more traditional industrial typology with an FSR of 0.8:1 is considered marginally unfeasible, with an RLV ratio of 0.9. However, it is noted that the Place Strategy would generally provide higher FSRs, meaning that there is additional scope to incorporate more feasible development of urban services.

Sensitivity testing on lots smaller than 1 hectare indicate that feasibility would reduce.

The assessment considered a rental value per sqm of \$185 – reflecting High Prime net face rents in the Central West. With other variables held, an increase to \$200/sqm would deliver a marginally feasible result. For context, this is the mid-range price point for prime industrial floorspace in South Sydney, suggesting that in the future, such an increase is possible.

The urban services model that splits floorspace 50:50 across commercial and industrial on in a development with a 1.5:1 FSR indicates it would deliver a feasible result. Under this scenario, if remediation costs were upped to the top range (\$4.9M per hectare) the product would still be marginally feasible (RLV ratio of 1.15).

This model is relatively untested as a new product in Sydney, although many of the former industrial buildings in Alexandria, Roseberry, Leichhardt and even Surry Hills have informally taken on this form.

FIGURE 33 HIGH-LEVEL FEASIBILITY FOR URBAN SERVICES DEVELOPMENT

	Urban Services (IN)	Urban Services (COMM)
Land area (sqm)	10,000	10,000
Zoning	IN2	IN2
FSR (x:1)	0.8	1.5
GFA residential (sqm)		
No. Dwellings		
GFA Commercial (sqm)		6,000
GFA industrial (sqm)	6,400	6,000
Residential sales value		
Commercial GRV		\$ 40,000,000
Industrial GRV	\$ 26,311,111	\$ 24,666,667
Total income	\$ 26,311,111	\$ 64,666,667
Total Taxes & charges	\$ 1,204,566	\$ 2,847,459
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Margin	\$ 4,385,185	\$ 10,777,778
Total costs	\$ 12,907,685	\$ 41,552,151
Residual Land Value	\$ 13,403,426	\$ 23,114,516
Existing value	\$ 15,000,000	\$ 15,000,000
RLV: Existing value	0.89	1.54

Urban services urban services land use

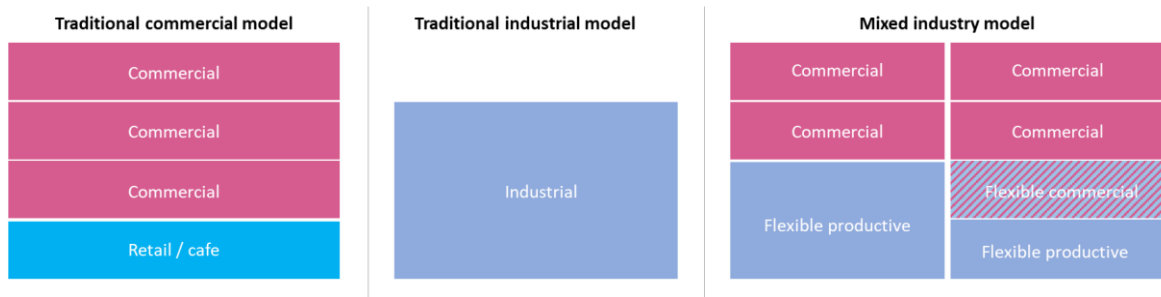
As indicated on the previous slide, this built form typology is relatively new to the Sydney market. There have been proposals put in for developments in places such as Mascot and Botany (for instance the Dexis Botany Quarter Proposal from 2019) that provide an indication of what such a product may look like.

The diagram below illustrates the hybrid approach and how it may differ from traditional commercial and traditional industrial models. This has been proposed to NSW Department of Premier and Cabinet and the GSC in previous work SGS undertook on the Meadowbank Education and Employment Precinct.



Source: Slattery (2018)

FIGURE 34 CROSS SECTIONS OF DIVERSE USE BUILDING TYPES



Large format industrial land use

The two larger format industrial typologies on the larger 5 hectare sites both return moderately unfeasible outcomes. This is largely driven by the fact that significant development and remediation costs are incurred to essentially deliver a similar type of development, hence the proposed type not delivering a residual land value greater than the existing value.

Sensitivity testing on FSRs (up to 0.6:1 have some impact on feasibility but not enough to cross the RLV ratio threshold of 1.)

In order to deliver a feasible outcome, per sqm rental values would need to exceed \$250/sqm, with all other variables kept constant. There are currently no industrial rates at that level in Sydney, however, a recent report by the Financial Review, as informed by Colliers International, suggests that low vacancy rates and increased take ups for industrial lands are being observed, with the take up of industrial land in Sydney to grow by 48%. This is reflected in agency consultation. Over time, this may place upward pressure on rents.

It is noted (and expanded on in the findings and insights section of this chapter), that some new warehousing and industrial development is already taking place. The subdivision and delivery of new serviced industrial land, with a Sustainable Road Products Facility at the proposed Central Sydney Industrial Estate is evidence of this advance.

If land values are removed from the equation (i.e. a feasibility ratio is not derived from the difference between the RLV and existing use value (EUV), then on a revenue to costs aspect alone, both these land

uses generate more revenue than costs, indicating that they are feasible if a land owner wishes to subdivide and lease it to the market.

FIGURE 35 HIGH-LEVEL FEASIBILITY FOR INDUSTRIAL DEVELOPMENT

	Industrial (F+L)	Industrial (Gen)
Land area (sqm)	50,000	50,000
Zoning	IN1	IN1
FSR (x:1)	0.4	0.4
GFA residential (sqm)		
No. Dwellings		
GFA Commercial (sqm)		
GFA industrial (sqm)	18,000	18,000
Residential sales value		
Commercial GRV		
Industrial GRV	\$ 54,000,000	\$ 54,000,000
Total income	\$ 54,000,000	\$ 54,000,000
Total Taxes & charges	\$ 1,910,688	\$ 2,096,504
Total Development costs	\$ 23,978,374	\$ 20,597,029
Margin	\$ 9,000,000	\$ 9,000,000
Total costs	\$ 34,889,063	\$ 31,693,534
Residual Land Value	\$ 19,110,937	\$ 22,306,466
Existing value	\$ 50,000,000	\$ 50,000,000
RLV: Existing value	0.38	0.45

6.3 Findings and insights

The results of the feasibility modelling of different development scenarios tested indicate that the urban services model in some form, may be feasible if it presents a product that meets a certain need in the market. The novel typology, if provided in a precinct with good amenity is likely to not have much competition from other precincts. The more commercial markets of Parramatta, Sydney Olympic Park and Macquarie Park are more corporate in their focus and the surrounding industrial precincts of Silverwater and Rydalmere are older light industrial stock.

The proximity of the precinct to Parramatta may create a new proposition.

It is important to recognise that on-site development feasibility alone does not mean that the whole swathe of urban services-identified land in the Place Strategy can be built out in the early stages. The market depth for this product is still relatively small (as discussed in the Market section). As such, it is more likely that such a product would be delivered incrementally over time, perhaps first as a proof-of-concept to ensure that there is sufficient market demand.

In terms of freight and logistics and general industrial, the lack of feasibility does not preclude these uses from being considered. Some logistics companies may place a value on proximity to market that would mean they pay more to be on the site if the transport infrastructure was sufficient. This analysis simply notes that in a straight market decision, buying the sites and then developing for the same type of use is unlikely to be considered feasible.

There are examples where undeveloped former industrial land has been purchased and turned into industrial developments. The recent purchase of the 14 hectare Manchester Road site by Mirvac from Payce for \$94m in 2019 indicates that there is demand for these sorts of strategic purchases.

Additionally, site-specific development applications may be lodged that do not require the acquisition of sites. One example is the Goodman property group's site at 3-11 Shirley Street in the precinct which had a development application approved in 2016 for an additional industrial building and a change of use of a premise to a warehouse and distribution centre.

Without knowing the commercial details of this, it appears that the site has been leased by the current landowners (as the most recent sale recorded was in 2002).

In this instance, the development of the site would not require any land acquisition and so feasibility would be simply a case of whether the construction costs were outweighed by the ongoing revenues received via the leasing of the facilities to the current tenants.

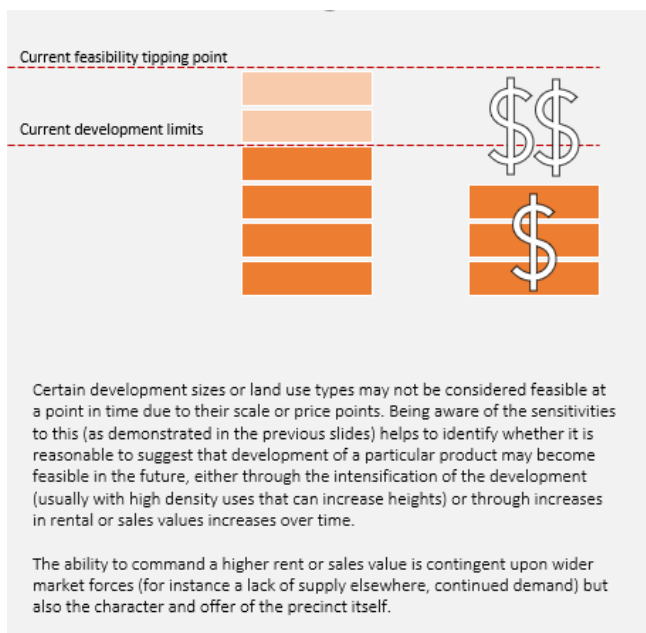
Feasibility as master plan input

Point in time development feasibility is a useful mechanism to understand whether a land use is feasible, and if not, how *unfeasible* is it. This can help to shape design and vision decisions with respect to types of land uses. It is not, however, intended to be the only mechanism to determine what the land uses for a long term master plan vision. The concept of 'highest and best use' is often used to justify why a certain land use type should be preferred over another, and is grounded in the concept that the use with the 'highest' land value is therefore the 'best' land use. This is a flawed yet pervasive ideology that disregards strategic vision, and is skewed to uses that generate more wealth for landowners or developers, not to any of the other uses that may be considered appropriate, and even desirable, on a site or in a precinct, or that have wider economic benefits not captured in land value.

In the context of Camellia, this plays out in the consideration of residential as a land use on key sites along the foreshore. While there appears to be strategic merit for some residential (this report does not assess the residential demands placed on the site), the application of 'highest and best use' would likely lead to the transition of the entire site to residential as it commands a higher land value than the current industrial uses.

However, this misses the point. There are a range of other, ostensibly lower value land uses that play a critical role in shaping the future of this precinct for various reasons. Firstly, because there is continued demand for industrial uses and the emerging commercial/industrial hybrid put forward as a land use typology in this work. Secondly, because these uses have a locational need to be near to areas of population, employment and transport infrastructure, meaning that Camellia is well served to accommodate them, and they are constrained with where they are able to locate due to zoning limitations. Thirdly, a new typology applied to Camellia can establish a clear point of difference between it and other precincts such as Rhodes and attract investment (both in commercial/industrial and residential) that actively seeks to co-locate with this land use.

So feasibility analysis should be used to identify for unfeasible but desired land uses *how unfeasible* they are and how likely is this gap to close. The fact that development is not feasible now does not mean that it should not be accommodated in a long term master plan such as Camellia as it does not mean that a development will *never* be feasible. The addition of height (within reason), or the increase in sales or rental values over time can lift these developments towards feasibility.



6.4 Impacts on feasibility

There are a number of things that will influence the feasibility of a development and the gradual realisation of a master plan (both positive and negative). This is also determined by what land uses are preferred.

From a residential perspective, the following aspects are likely to impact feasibility:

- Sufficient densities for residential sales revenue to cover the cost of development including wider issues such as remediation.
- The wider amenity of the precinct, including the services it provides and the surrounding land uses that will have an impact on expected sales prices. If, for instance, the residential developments look across to the fuel storage tanks, this may have an impact on prices, compared to other precincts of a similar nature without this aspect (for instance Rhodes of Wentworth Point). This is NOT a signal to remove those uses to maximise residential values, but a reflection of how the market may perceive residential located close to these retained uses.
- Public transport access (or a lack thereof), and wider access to jobs, education and services.
- The scale of wider precinct infrastructure delivery costs will have an impact on feasibility. For example, if certain key sites are required to deliver specific infrastructure, particular that which doesn't deliver revenue (such as a school or open space) and this comes at the expense of uses that otherwise would (residential or commercial/industrial) this cost burden will likely impact

development feasibility. However, unlike commercial or industrial, residential may be able to offset this with increased yield, depending on the accepted scale of development.

- Landholder expectations. Currently residential uses emerge with good development feasibility results, but this assumes current market values for property acquisition and these values reflect the industrial nature of the precinct. If the intention to move towards higher value uses becomes public, market values can be expected to rise and some landowners may hold onto sites with a view to selling further down the development timeline when the precinct character has shifted significantly.

From a commercial and industrial perspective, the following aspects would likely impact feasibility:

- Alignment of market demand with the product being supplied (i.e., are there other precincts offering something similar in a better location).
- Does the proposed development typology (particularly in the Urban Services precinct) offer a unique product that is not supplied elsewhere in proximate precincts? In the case of Rydalmere for instance, much of the stock is relatively old, and a new and flexible typology in Camellia may enable it to command higher rents than existing industrial precincts nearby.
- Land use conflicts, or the risk of them occurring, would likely suppress demand because it would create uncertainty about long-term investment in plant and equipment, which for industrially-aligned industries in particular is of concern due to fit out costs. The management of these, through clear separation of conflicting uses and clear boundaries of use is important to manage this.
- The provision of, or commitment to deliver, enabling infrastructure (such as trunk services, enhanced road access etc.) will have a positive impact on markets and likely positively influence land and rental values.
- Management of supply is important so that the market is not flooded with stock resulting in lower rental or sales values. This is discussed in more detail later in the report under sequencing considerations.
- Pressures outside of the precinct will also influence revenues (and therefore feasibility). For instance, as industrial land values and rents continue to grow in the Eastern City, there is likely to be a displacement impact on certain businesses. This will help to drive demand, particularly if the stock and precinct structure is suitable for these displaced businesses. This will likely drive land and rental value increases, particularly if supply elsewhere of a similar standard is unavailable.
- Ease of development is also a contributing factor to the attractiveness of development. If development can occur quickly, without undue regulatory hurdles, this can reduce risk for developers. The Special Activation Precinct complying development mechanism or the State Significant Development designation for warehouses and data centres applied in western Sydney may help to address this.

Future feasibility analysis

The feasibility testing undertaken in this report reflects the level of detail and data available to test with a degree of certainty. Because the Place Strategy does not have detailed lot-level design clarity, and no detailed costs for construction, this report uses average revenue streams and high level construction

cost estimates applied to hypothetical sites that reflect the general composition of the Place Strategy. The intent is to provide broad commentary on the development feasibility across the entire precinct.

The nature of the Place Strategy and its lack of detailed design (which is simply a reflection of the stage that the project is at) means that it is commensurately difficult to detail the development costs for large swathes of the precinct. This is particularly the case for the residential parts of the precinct, as they will have specific design and amenity aspirations that will shape their ultimate structure as a way of making them attractive as a place to live or invest.

This detailed information comes once developments begin to document in more detail their site design aspirations, based on the Place Strategy. More detailed lot-level feasibility testing can then be undertaken with this further level of design resolution and costing.

This more detailed feasibility analysis that considered more specific development costs can identify the tipping point whereby *at a precinct or sub-precinct level*, certain contribution rates or infrastructure costs become a burden that prohibit development at the scales proposed. This requires more design resolution and detail.

6.5 Assumptions and caveats

Data has been collected from a range of sources as inputs into the modelling. These are outlined in detail on the following two pages.

There are several other caveats that need to be recognised when reviewing this feasibility modelling to ensure that it is used in the way it was intended as a strategic input to aide in land use options for the Place Strategy.

- The RLV modelling used in this process is 'static' i.e. it reflects feasibility at a point in time, based on current construction costs, revenues and other assumptions. This approach assumes that development of a site occurs in one year, which is unlikely on larger or more complex sites. A more detailed feasibility modelling process that considers development sequencing, inflation, holding costs etc. would be required as more detail on design complexity, costs and timing of sequencing is made available.
- The use of feasibility modelling to ascertain infrastructure contributions would require more detailed cost inputs than have been available as part of this process. This would also require the involvement of land valuations. The land values used in this modelling have been sourced from various market reports focused on the Central City land market, but do not reflect the specific land values of the individual sites in question.
- Development has been reported as feasible when the tested development results in the RLV being greater than the EUV. This is underpinned by the assumption that development would occur if and when a site is sold, and that the purchaser would not develop if this uplift was to not occur. If, however, the site is developed by current landowners (and particularly on a vacant part of the site) then this may still be considered an attractive investment, as long as the revenues expected outweigh the costs of construction.

Input type	Input	Value/ range	Source
Site	Site area	1 hectare – 5 hectares	Two different typical lot sizes were tested to reflect the varying sizes that development parcels may take. Smaller (1 hectare) lots were used to test the mixed use and urban services scenarios, while the larger (5 hectare) size was used to test larger format uses of freight and logistics and general industrial.
Site	FSR	0.4:1 – 1.5:1 (commercial/ industrial uses) 3.5:1 mixed use	FSRs for non residential uses came from various sources. The low (0.4:1) FSRs reflect what are often seen on low density industrial uses. 0.8:1 for the industrial-centric Urban services typology reflects a shift towards higher density industrial uses with some ancillary office. The 1.5:1 urban services reflects an emerging typology of use that may operate with industrial ground floors and one to two storey of commercial above. The 3.5:1 FSR for mixed use was sourced from the Cox study.
Revenue	Residential sales value	\$700,000 per unit	Benchmarked against median sales prices for 2 bed units in Sydney Olympic Park (and comparable to Wentworth Point also)
Revenue	Commercial rental values	\$400/sqm	Review of comparable commercial centres (Parramatta, Rhodes, SOP & Macquarie Park) indicated a \$/sqm rental value of \$425(Macquarie Park) - \$565 (Parramatta). Camellia considered to not be as established so a lower value was used, recognising that the Commercial offer across the various master plan scenarios is not reflected easily elsewhere in the market.
Revenue	Industrial rental values	\$135-185/sqm	Savills National Industrial Market Q1 2021 report. \$135/sqm reflect high-prime values in current Western Sydney market for large format warehouses. \$185/sqm reflects current high-prime values in the Central West market (which surrounds Camellia). Lower value was used for F&L and General industrial scenario. Higher value used for urban services scenario.
Revenue	Capitalisation rates	4.5% (Industrial) 6% (Commercial)	Savills Q1 reports
Taxes & Charges	Development contributions S7.12	1% of development costs	City of Parramatta Council
Taxes & Charges	Development contributions S7.11	\$20,000 per dwelling	GLN Planning
Taxes & Charges	Development contribution per worker	\$3,000	GLN Planning
Taxes & Charges	DA Fees	Various	City of Parramatta Council
Taxes & Charges	State development contributions	\$12,000 per dwelling	GLN Planning
Input type	Input	Value/ range	Source
Costs	Construction costs	various	Rawlinsons Construction Handbook 2020, sourcing Sydney prices for products that best match what is proposed.
Costs	Professional fees	10% of total costs	Industry standard ranges for profession fee!
Costs	Contingency	15% of costs	Industry standard
Costs	Finance/holding costs	10% of costs	Industry standard
Costs	Marketing/legal fees	2.5% of GRV	Industry Standard
Costs	Remediation	\$155,000 per hectare to \$4.9M per hectare	Averages of remediation cost ranges provided by Golders. Low range applied to industrial land uses, medium range applied to urban services uses and high range applied to residential uses.
Existing use value	Existing use value	\$1,000/sqm - \$1,500/sqm*	Savills Q1 Industrial report, sense checked with market data of recent sales in the area. Applied lower value to large sites and higher to smaller sites to reflect how market operates. Assumed that existing use value remains as industrial.

Note

*During consultation with key stakeholders in the precinct, comments were received which suggested that the value of industrial land is likely to be higher as 'Currently industrial land in Silverwater is selling in small parcels for over \$2000/m²', and that there are 'good returns for developers to remediate the land to industrial standards or higher and then build employment or industrial facilities'.

7. Strategic alignment

The consideration of economic alignment of the Place Strategy is more than a quantitative question. There is a need also to consider how the Place Strategy aligns with the strategic economic (or productivity) vision for Camellia, and its role in the wider local, district and metropolitan economic context.

A brief review of five key documents has been undertaken to ascertain their respective positions on the role of Camellia specifically, or industrial precincts more broadly. The documents are:

- Productivity Commission White Paper 2021
- Greater Sydney Region Plan
- Central City District Plan
- Greater Parramatta to Olympic Peninsula (GPOP) strategy
- Parramatta Local Strategic Planning Statement
- Parramatta Employment Lands Strategy (2016) and Employment Lands Strategy – Review and Update (2020)

7.1 Alignment with State economic/productivity policy

Greater Sydney Region Plan

The Greater Sydney Regional Plan emphasises that industrial and urban services land is planned, retained and managed. Principles for industrial and urban services land across Greater Sydney include either a ‘retain and manage’; ‘review and manage’; or ‘plan and manage’ approach to support the City’s productivity and integrated economy. Industrial and urban services land in the Camellia-Rosehill Precinct are to be reviewed and managed.

The Place Strategy aligns with this as it still proposes the retention of significant portions of industrial related uses. However, the Place Strategy introduces residential land uses that both remove the industrial function of certain parts of the precinct and introduce the risks of land use conflict. This will need to be managed carefully.

However, it is noted that the Regional Plan does seek to provide for ‘next generation living’ in parts of the precinct and the Place Strategy may align with this objective.

Central City District Plan

The District Plan identifies synergies in water, energy and transport in Camellia, and establishes the strategy to evolve Camellia into a highly productive part of the Central River City. This includes a focus on coexisting water, energy and transport uses that generate a range of employment types, including highly skilled jobs.

The Place Strategy mostly aligns the objectives of the District Plan.

GPOP Place-Based Infrastructure Compact

The Camellia-Rosehill Precinct was assessed as having high upfront costs if redeveloped for residential uses, relative to other precincts. These costs are considered to be too high to be cost-effectively funded. The majority of the Place Strategy aligns with the GSC's recommendation to safeguard and enhance industrial and urban services lands in the precinct. However, the redevelopment of the Camellia Town Centre will need to address the criteria set by the GSC in their advice to the NSW Government. More specifically, matters regarding remediation, traffic and infrastructure need to be resolved. Further to this, the Place Strategy needs to demonstrate that any potential land use conflicts with residential land uses are addressed and planned for in a manner that does not reduce the operability of industrial and commercial land uses. The continued progression of this Place Strategy provides opportunities to achieve full alignment.

NSW Productivity Commission White Paper

There is scope within the Camellia-Rosehill Place Strategy to implement the simplified employment zones, as exhibited by DPIE earlier in 2021.

The City of Parramatta LGA is to 'review and manage' its industrial and urban services lands, as opposed to 'retain and manage'. To this effect, the Productivity Commission's White Paper does not impact upon the Place Strategy.

Parramatta Employment Lands Strategy (2016) and Employment Lands Strategy - review and Update (2020)

The Parramatta Employment Lands Strategy (2016) recommended that a structure plan be prepared for the entire precinct. While it allowed for the reduction of existing employment land, it requires that no reduction of employment densities be facilitated as a result of any structure plan.

The Parramatta Employment Lands Strategy – Review and Update has a vision to rezone employment and Industrial Land for higher order jobs and increased employment density and retain industrial zoning for outside of the proposed Camellia Town Centre (contingent on the NSW Government response to the GPOP PIC).

To that effect, the Place Strategy is consistent with the updated Parramatta Employment Lands Study.

Parramatta Local Strategic Planning Statement

The Parramatta LSPS has identified Camellia as a precinct which will have an infrastructure and growth focus. It was identified that the future City of Parramatta will need to have maintained its Metropolitan Significant Strategic Employment Lands at and transitioned Silverwater-Camellia-Rydalmere for industrial uses that meet contemporary needs and provide jobs and services higher order jobs and increased employment density. There is also a need to support the intensification of employment lands in Camellia with infrastructure. There will be intensification of dwellings and employment in Camellia, predicted to increase to 3,500 and 5,000 respectively by 2036, subject to the NSW Government's response to the GPOP PIC recommendations. The LSPS aligns with the Place Strategy.

8. Summary & insights

8.1 Sequencing considerations

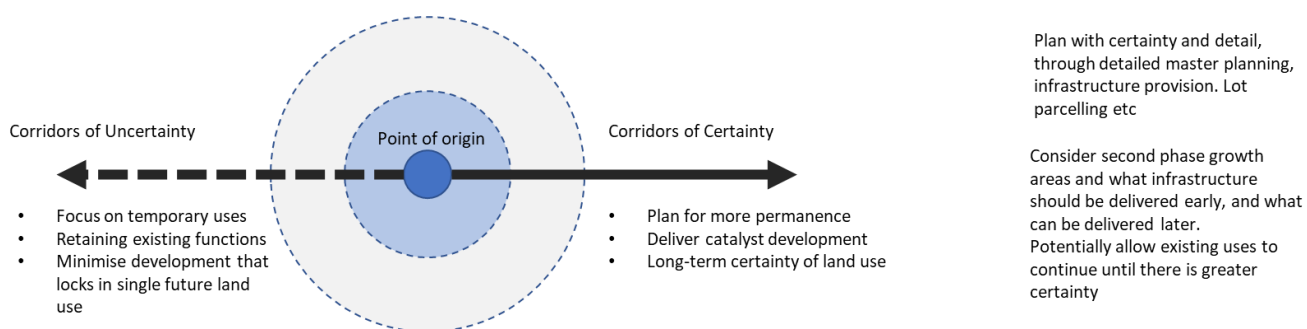
The delivery of the Place Strategy will be done over years and potentially decades. It is important to keep this in perspective when considering the analysis done in this report as it reflects on current conditions and assumptions around the likelihood future demand and price points. It is also important to consider this long term delivery process when thinking about how the master plans are gradually realised.

The Place Strategy and its job numbers as presented reflect a full build out – that is – if and when this is realised, this is what it will look like upon maturity. In practice, the first several years are likely to be characterised by smaller scale interventions that grow over time.

The delivery of the Place Strategy should be considered in this way and thought should be given to where development originates and in what direction/s it travels outward. There are a range of considerations that must be taken into account when identifying these points of origin and directions of growth. These include:

- Profile of the likely first mover/s and what their locational and operational needs are
- The amount of land/floorspace needed to provide supply for first phase of growth
- Land sub-division needs
- Likely co-location industries and their locational needs
- The likely scale of growth and a clear view on the direction this growth should radiate out towards.

A series of scenario-specific sequencing considerations are provided on the following pages.



For residential development, the concurrent delivery of a town centre and supporting social infrastructure (including open space) is a non-negotiable. This is to ensure that future residents are not relying on out-of-precinct infrastructure to meet various needs in the early stages.

From a commercial and industrial perspective, there are a series of other considerations that need to be given to sequencing:

- Existing uses that are considered catalysts for the transition of the precinct towards a focus on circular economy and other innovative functions (for example food to energy or construction material recycling businesses) are not only retained but provided with the space and infrastructure to grow and consolidate their specialised role. This may be an expansion into any of the three employment-focused areas - urban services, heavy industry or innovation and industry.
- Curating the early stages of development through the targeting of particular industries considered strategic to the growth and specialisation of the precinct, and understanding what their locational and operational needs are and how this fits within the master plan's structure.
- Understand any sensitive land uses that may inhibit the full realisation of the industries' operations and value, particularly residential and the risk of encroachment.
- A more detailed alignment with the City of Parramatta to understand from the updated Employment Lands Study what the specific demand quantum and profile may be to ascertain how large the first 'parcel' of land given to urban services is. This may also require the partnering with an institutional industry developer who may be able to deliver a super-lot in one go.
- The early establishment of the mixed commercial-industrial urban services typology, similar in profile to the proposed 'Productivity Support' zone (right) put forward through the DPIE review of employment zones would benefit from location close to the future town centre and PLR stop, to maximise access and visibility. This would be considered the first phase of the urban services zone's development.
 - The urban services transitional area proposed under the Place Strategy seem to closely align with the proposed E3 Productivity Support zone.
- The design of the initial developments should be flexible and clearly identifiable as a unique product in order to differentiate it from other traditionally industrial precincts, or commercial centres.
- As the precinct begins to develop an identity, and the mix of industries begins to take shape, the precinct will likely start to be recognised as a distinct urban services/mixed industry precinct. If this model is successful, and the urban services precinct is well integrated with the town centre and any entertainment functions provided, the urban services offer can expand.
- Where accessibility is good and the precinct is more skewed towards commercial uses, the mixed commercial/industrial model can remain. The further away from the centre, this can transition to the full industrial version of the urban services product. This would create a buffer to either existing industries or any future freight and logistics operations.
- The intent here is that as the precinct gains momentum and desirability, and supply is managed, this will place upward pressure on rents. Over time, it is anticipated that this would change the feasibility equation of the currently unfeasible fully industrial urban services offer to being feasible and therefore deliverable.
- However, the expectation of increased revenues must also be considered in terms of the impact it may have on land value uplift. If the commercial aspect of the early stages of the precinct's

development does particularly well, it may lead to a degree of speculative land acquisition which in turn may impact on future development feasibility. Providing certainty through clear land use intentions is important to reduce the risk of land speculation. Clear land use and development controls would need to be in place to minimise this risk.

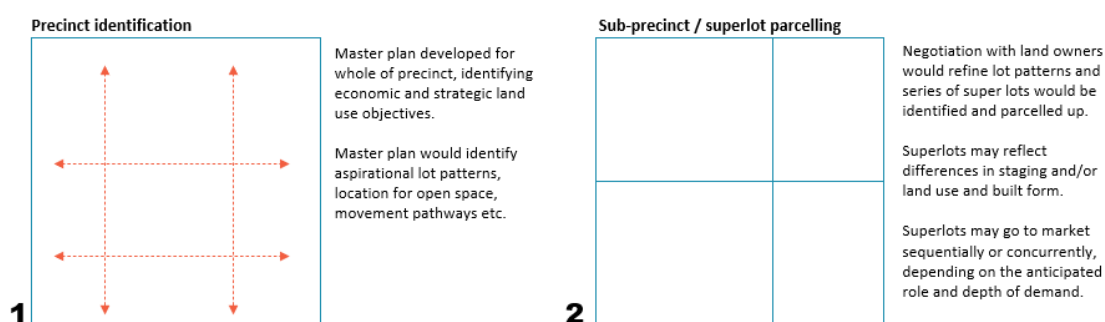
The proposed 'E3 Productivity Support zone put forward by NSW DPIE has the following objectives:

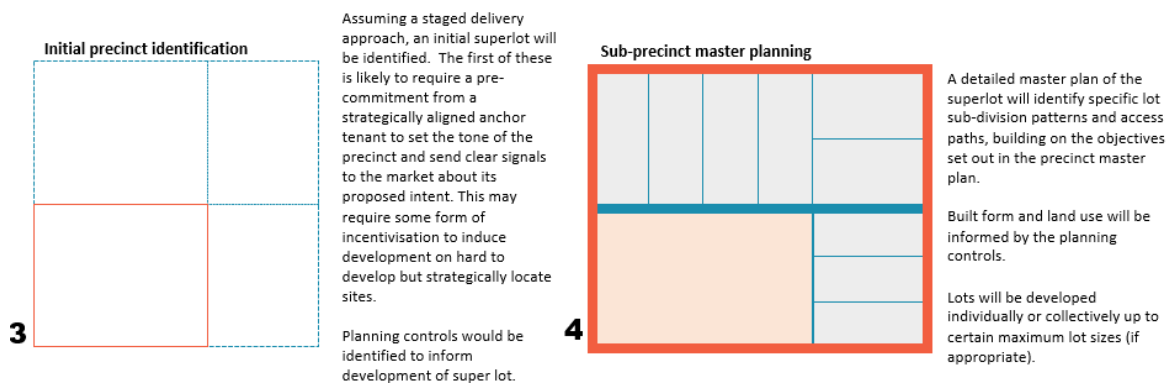
- Allows for a mix of services, low impact industry, creative industry, manufacturing, warehousing, office and limited supporting retail.
- Essentially replaces B5 Business Development, B6 Enterprise Corridor, some B7 Business Parks and in exceptional circumstances limited areas of IN2 Light Industrial zones that no longer function as traditional industrial precincts.
- Suits locations near catalyst development (such as health and education) to support those uses through development such as a larger campus style business park.
- Suits emerging and new industries that need larger floorplates.
- Limits retail to uses requiring larger lots/floorplates (e.g., specialised retail premises), or that meets workers' or businesses' daily needs, or that sells products manufactured on site.
- Generally does not support residential uses.

Sequencing

The process of sequencing therefore requires a consideration of which parcels of land are to be delivered first, and in which general sequence land will be re-developed. This has the dual benefit of controlling supply and also allowing existing businesses to continue operating with a high degree of certainty.

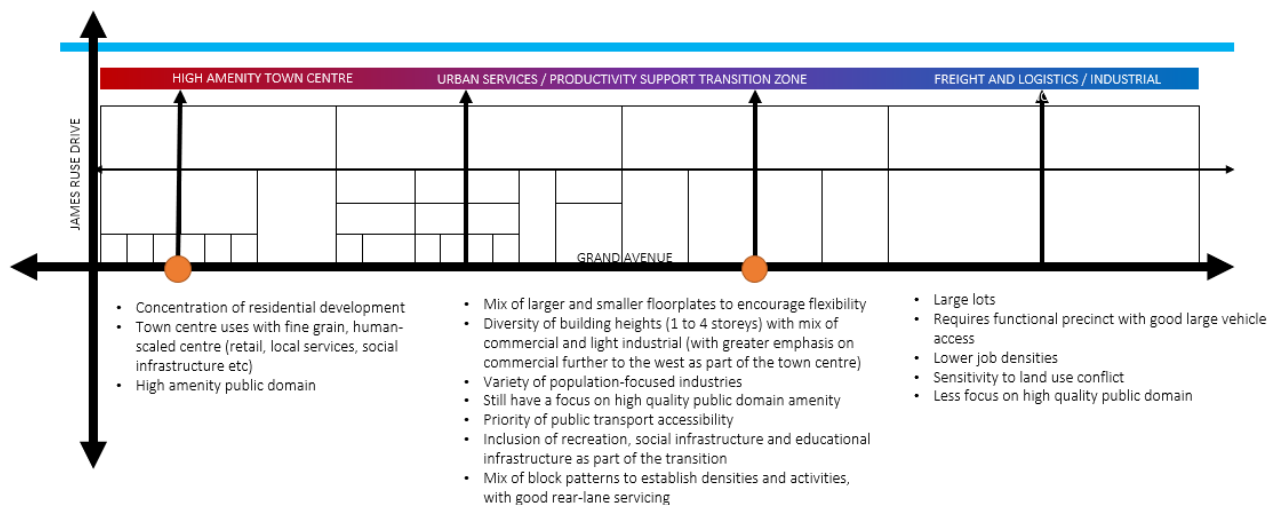
This process is stepped out in the following illustration of lot parcelling and development sequencing.





Land use transitions

Sequencing should also give consideration to the transitioning of land uses along the Grand Avenue spine. The following conceptual transect identifies how land uses and their accompanying built form and lot structure characteristics should be considered along this axis and how the Urban Services sub-precinct adjacent the river can more effectively work as an integrated transition zone, rather than an abrupt ‘buffer’ zone. It is not intended to be a detailed lot parcelling analysis but an illustration of how such lot sizes can transition across the precinct.



Role of governance

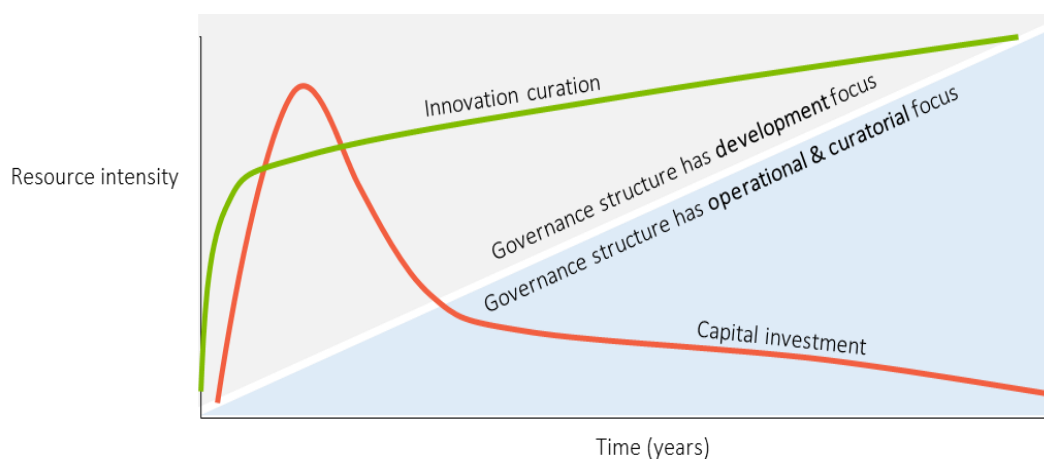
The realisation of a precinct that goes beyond a business-as-usual residential led product, or is more complex and varied than a monocultural freight and logistics park requires some degree of curation in order to realise this ambition. This can take various forms, and it is recognised that a governance structure does not form part of the brief, nor can it be easily reflected in a master plan.

Nonetheless, it is instructive to consider what a curated approach to precinct delivery may enable, without ascribing particular roles to key stakeholders. A governance body, in the form of, for example a Development Corporation, could:

- Carefully plan land release and sequencing to respond to future market demand and ensure the precinct delivers its economic vision
- Facilitate the amalgamation and parcelling of land to coordinate development (similar to the role that Landcom/UrbanGrowth NSW played in Green Square)
- Facilitate and manage some form of business levy or precinct-specific infrastructure contribution to ensure it delivers on the objectives of the Place Strategy
- Undertake investment attraction through the targeting of businesses or industries considered critical to the success of the precinct
- Manage a streamlined development consent process, similar to the Special Activation Precinct or SSD processes in place elsewhere in the state

Such a governance structure may change its focus over time, from an initial focus on site consolidation or infrastructure coordination to one of investment attraction. Alternatively, it may have a finite lifespan to simply get the transformation underway.

GOVERNANCE STRUCTURE TRANSITION



Source: SGS Economics and Planning (2021)

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