



SGS
Economics
& Planning

MANCHESTER ROAD STRATEGIC JUSTIFICATION

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Prepared for
PAYCE

Independent
insight.



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EXECUTIVE SUMMARY

This report has been prepared for PAYCE, concerning a proposed redevelopment of an existing industrial site at Manchester Road in Auburn. The report synthesises SGS' analysis of the context, feasibility, economic impact, social impact, and strategic justification for the proposal.

Strategic and planning context

The Greater Sydney Region Plan has identified the Greater Parramatta area to be of significant importance to emerging industries in the Sydney area. The subject site is located within a 'Review and Manage' region of the Central City District Plan, allowing for flexibility in the use of undeveloped industrial land. The Cumberland Draft Employment Lands Strategy aspires for Cumberland to provide jobs for higher order industries and provide space for emerging industries.

Much of Greater Sydney's recent industrial development is geared towards large scale precincts related to freight and logistics. At the same time, inner city industrial zones are being redeveloped into higher value advanced manufacturing, production and service-based industries that support centre operations.

Current development planned and under construction in Auburn is largely based upon existing industries and demands for warehousing, freight and logistics, and waste material recycling. The Manchester Road site provides limited access to the motorway and major arterial network, limiting its role supporting future freight and logistics operations that may seek a site of this scale. It does, however, provide opportunity for smaller-scale, local and emerging industries to move into an established area with good accessibility to a local workforce who skills align with this role. It also provides an opportunity for the precinct to support the growth of the Parramatta CBD and Greater Paramatta to Olympic Park (GPOP) corridor.

Cumberland LGA profile

There has been strong growth in health services and education as well as Professional, Scientific and Technical Services, though a significant proportion of the available workforce does not have higher education qualifications past secondary school.

Vocational training in the area has a significant hospital and health component, as well as software training within a broad spectrum of educational offerings. The labour force is led by workers in the Health Care and Social Assistance sector and Retail Trade.

Growth in floorspace demand is strong for freight and logistics, local light industrial, light manufacturing, retail, and special and urban services., all of which are proposed for inclusion in the PAYCE development.

Westmead hospital is a major employer for the health care industry, and proximity to the health science campus of the University of Sydney may provide opportunities for the site. The site may be able to provide facilities and training to the surrounding population.

Site feasibility

High level feasibility analysis compared PAYCE's proposed project case with an alternative scenario that builds the site out to full capacity under the current planning controls. This analysis indicates that PAYCE's Project case delivers a feasible outcome (delivering a positive residual land value (RLV), of approximately \$38 million), while the Industrial build out case is

marginally unfeasible, delivering a negative RLV, of around \$3.5 million. Sensitivity testing of the modelling results suggests that the Industrial build out scenario may be marginally feasible using slightly different assumptions, such as lower construction costs or slightly higher rents per square metre for industrial space.

However, the addition of acquisition costs for the site for another developer would add significant cost to the feasibility equation and likely further disincentivise the development of the site solely for industrial uses.

Economic impacts

The highest rates of future growth in employment in the Cumberland LGA are expected in non-industrial sectors. However, industrial and urban services jobs are expected to make up a significant proportion of Cumberland's economy in 2036. Despite shifts towards other industries, there will still be demand for industrial floorspace in Cumberland to service projected jobs growth in this sector.

Both the Project case and Industrial build out scenario will deliver a significant increase in employment at the site. Either scenario also has the potential to deliver a significant proportion of the Cumberland LGA's floorspace demand 25% and 40% of future industrial demand and 73% and 116% of urban Services demand.

The Project case is likely to generate a higher number of jobs and value-add in construction.

Social impacts

The Project case would likely generate demand for primary and secondary school places, though this would likely be able to be accommodated in existing schools. There would likely be demand for 1 to 2 child care centres, and potentially for a pre-school at the site.

There is likely to be a need for a community meeting place within the site, and there may also be demand for health facilities. The expected provision of open space and recreation facilities as part of the proposal would likely satisfy the requirements under the guidelines.

The provision of new facilities as part of the development will deliver benefits for the existing community around the site, and would also provide a significant contribution to the Cumberland LGA's dwelling target under the Central City District Plan.

The development has the potential to deliver benefits and opportunities for both future residents and those currently living in the Auburn area.

Strategic assessment

The NCB suggests that the Project case is likely to deliver an increase in wider benefits compared to both the base case and the alternative full industrial build out case. The Project case also meets more of the GSC's Directions and Objectives compared to the Industrial build out scenario.

Key findings and rationale

Circumstance

The site has a 'Review and Manage' designation. This designation by the GSC under the Central City District Plan allows for industrial and urban services land to be identified for retention, or allowed to transition to higher order employment activities to maximise business and employment outcomes, reflective of the changing nature of industry in the area.

There is continued demand for industrial floorspace in LGA. While some industries traditionally associated with industrial precincts are projected to see slowed growth or even decline, there are other established and emerging industries that will continue to demand industrial floorspace in Cumberland. There are few opportunities to increase industrial floorspace in the Cumberland LGA to meet this future demand.

The Manchester Road site has unrealised potential. The site provides over 14 hectares of industrially-zoned land, however only 28,000 square metres of it are developed and it supports only 50 jobs. The Bluescope steel site is highly specialised and it is unlikely that when their tenancy expires, the facility could be re-appropriated by another business without significant cost or demolition.

Full industrial redevelopment is unlikely to be feasible. While the site could potentially provide nearly 120,000 square metres of industrial floorspace, remediation and redevelopment costs are high. Remediation costs, demolition of the steel works and site acquisition make a full build out of industrial unlikely to be feasible. While a full industrial build out would deliver more industrial and urban services jobs, it is unlikely to occur due to the costs of delivery exceeding expected returns. Adding site acquisition costs to this further impacts the development feasibility negatively.

Outcome

The site therefore presents an opportunity to leverage its strategic location to deliver a development that delivers a significant increase (167%) in industrial floorspace on site AS WELL AS meeting a number of other strategic objectives that a site of its size and location can do.

The scheme proposed by PAYCE would:

- Realise the employment and industrial potential of the Manchester Road site, increasing on-site industrial floorspace by around 167%.
- Accommodate approximately 25% and 73% of Cumberland's future growth of industrial and urban services jobs respectively, providing new and flexible building stock to support emerging industries such as advanced manufacturing, local business growth and urban services that support the LGA's growing population.
- Accommodate jobs and locations for local businesses that align with the workforce skills of the Cumberland LGA.
- Aligns employment type with resident workforce skills and potential to support industry training for local population, particularly as 41% have no formal education beyond secondary school.
- Provides opportunity to support maturation of the Parramatta CBD by providing new employment floorspace for businesses that require proximity to commercial centres but require the floorspace flexibility of industrial precincts.

But beyond simply the employment potential that the proposed development provides, its innovative mix of industrial, residential and commercial would also:

- Maximise the site's strategic location by putting 1,150 new homes within walking distance of Auburn train station and the vibrant Auburn town centre.

- Provide two hectares of new open space for the community of Auburn and Cumberland. It's location adjacent the Duck River Parklands also enables it to add a significant amount of open space to this important Green corridor, designated as a major piece of Green Grid infrastructure by the GSC.
- Invest in the upgrade to a highly degraded stretch of the Duck River and contribute to the refocus onto the Duck River as an important community asset for the Central City.
- Provide additional community facilities and services, such as a child care centre and medical practices, able to be used by both future residents and the surrounding existing community.
- Directly and indirectly create around 5,900 new jobs in the construction and operational phases of the project.
- Deliver new affordable housing, and contribute to the achievement of housing targets set by the GSC.

It is a unique situation that the site finds itself in. The proposal by PAYCE acknowledges the loss of the full industrial capacity. However due to the expected costs of remediation and acquisition, the realistic delivery of a full build out is impractical. The site therefore runs the risk of remaining industrial in zoning only, without being able to deliver the facilities to support the growth of new industries seeking to locate in Cumberland.

PAYCE's proposal realises significant industrial floorspace and maximises the strategic merit of the site. But it also proposes a number of other land-uses that mean that from a wider community benefit perspective, the proposal can contribute positively to 23 of the Greater Sydney Region Plan's 38 objectives.

1. INTRODUCTION

This chapter outlines the purpose and structure of this report, and the scenarios tested in the analysis.

1.1 Introduction

PAYCE is proposing a significant redevelopment of an existing industrial site at Manchester Road in Auburn, located in the Cumberland LGA. The site is located adjacent to existing railyards, and is in close proximity to both Auburn and Clyde Stations, as well as the Duck River.

FIGURE 1: MANCHESTER ROAD SITE PROPOSAL



Source: PAYCE, 2018.

This report summarises SGS' analysis of the context, feasibility, economic impact, social impact, and strategic justification for the proposal, which would see the site rezoned from its current IN1 General Industrial to accommodate a broader mix of uses, including residential. The remainder of the report is structured as follows.

Chapter 2 – Strategic Context outlines the strategic and planning policy context relevant to the site, and identifies the key trends and drivers influencing the provision of industrial land in the area and in Sydney more broadly.

Chapter 3 – LGA Profiling reviews the current social and economic profile of the Cumberland LGA, and forecasts future employment, floorspace requirements and skills of the available workforce relevant to the site.

Chapter 4 – Site Feasibility considers the financial feasibility of the proposal in comparison to the alternative scenario where the site is developed for industrial uses only.

Chapter 5 – Economic Impacts outlines the likely economic impact of the proposal and potential costs and benefits considering the demand for different land uses in the Cumberland LGA.

Chapter 6– Social Impacts outlines the likely social impacts of the proposal, including the need for new community and recreation facilities to services the proposed level of development.

Chapter 7 – Strategic Justification considers the strategic rationale for the PAYCE proposal, with regard to its surrounding context and the objectives of the Greater Sydney Region Plan.

1.2 Report method

Scenarios

To assess the relative merits of the PAYCE proposal from feasibility, economic impact and social impact perspectives, three scenarios are used throughout this study. This is an important part of any impact assessment as it establishes what the *marginal* impacts are likely to be above a base case. Each scenario is described below.

Base case

The base case scenario assumes that the site is retained in its current form, with its current land uses and facilities, without any major investments.

A limited set of economic activities would be expected to remain operational, with significant growth not expected, based on the site's recent history. Employment would remain limited to the two businesses currently occupying the site, namely Bluescope Steel (manufacturing) and Dixie Cummings (furniture distribution warehouse). The Bluescope lease commenced in 1970 and expires in 2020. The Bluescope lease is a ground lease across eight hectares of land. The remaining six hectares of the site has always been vacant. Dixie Cummings is a sub-lease of some of the Bluescope space. Based on PAYCE's discussions with the head tenant, Bluescope would prefer to leave the site before 2020.

Employment is currently 50 jobs across the two businesses, so by applying an expected industrial employment growth rate of 11%¹ across the Cumberland LGA from 2016 to 2036, this should rise to 56 jobs by 2036. With this type of growth and the fact that much of the site is undeveloped or fit only for highly specialised uses (the Bluescope steel site), standalone development across the site of an industrial-only nature is unlikely.

The recently released draft report on Cumberland LGA's Employment Lands² identifies the need for a bridge to the north over the rail line to link the precinct to the Auburn industrial area off Parramatta Road and thereby activate it and stimulate accelerated industrial and employment activity. Such a bridge (in the order of \$50-80 million³) is unlikely to be provided by the State Government for such a small precinct and, if required to be funded by industrial development on the site, would make pure industrial development at this location even less feasible.

Project case (PAYCE mixed use development)

Under the proposed Project case, PAYCE would make significant investments to the site, to create a mixed use precinct supporting both residential and employment uses.

This scenario assumes that the existing structures on the site would be removed and the site remediated, to be replaced with new industrial uses alongside other employment-generating floorspace and residential units. The Project case has assumed the inclusion of employment uses through:

¹ Source: TfNSW TPA, 2016

² AEC, 2017, Draft Employment and Innovation Lands Strategy

³ The Bennelong Bridge from Wentworth Point to Rhodes for buses, pedestrians and cyclists was \$63 million. This excludes the cost of any potential land acquisitions.

- Around 1,000 square metres of retail floorspace – in the form of small shops (grocers, cafes, child care and so on),
- Around 7,500 square metres of commercial office floorspace,
- Around 75,000 square metres of industrial floorspace, comprised of:
 - 60,000 square metres of medium and large industrial space, and
 - 15,000 square metres of small and urban service floorspace.

A 1,000 square metre community centre, and 20,000 square metres of open space are also included in this scenario, with the open space to include outdoor amenities and recreation facilities. PAYCE is also proposing to undertake improvements to Duck River.

The residential portion of this scenario includes a total of 1,150 dwellings, of which a minimum of 5% (58) will be in the form of affordable housing. The dwellings are likely to be in the form of apartments, with a maximum of building height of 12 storeys, and the following mix of units:

- Studio – 2%
- 1 bedroom – 20%
- 2 bedroom – 68%
- 3 bedroom – 10%.

Residential uses would occupy around 70,000 square metres of the site, with a floor space ratio (FSR) of 1:1.5.

Industrial build out case

The industrial build out case is based on a scenario where the whole subject site is developed for industrial uses only, under the current planning controls applicable to the site.

The site is currently zoned as IN1 General Industrial, with a FSR of 1:1. Using the site's total area of 14.2 hectares, the scenario includes the development of 142,000 square metres of industrial floorspace, with associated parking spaces, consistent with the relevant Development Control Plan.

This equates to an additional 119,280 square metres of employment floorspace compared to the industrial (approximately 28,000 square metres) and office (approximately 1,300 square metres) floorspace currently on the site.

Application of the scenarios

The testing of both the Project and Industrial build out scenarios in relation to the base case is done to understand the relative merits of the proposed mixed use scenario compared to the most likely alternative use of the site under its current planning controls.

The economic impact analysis considered all three scenarios, and tested the Project case and Industrial build out case against the Base case. The social impact analysis considered the Project case in relation to the Base case, and the feasibility modelling tested the Project case against the Industrial build out case.

2. STRATEGIC CONTEXT

This chapter summarises the relevant policy and planning vision relevant to the site, and identifies key trends and drivers influencing the provision of industrial land in nearby areas and Sydney overall.

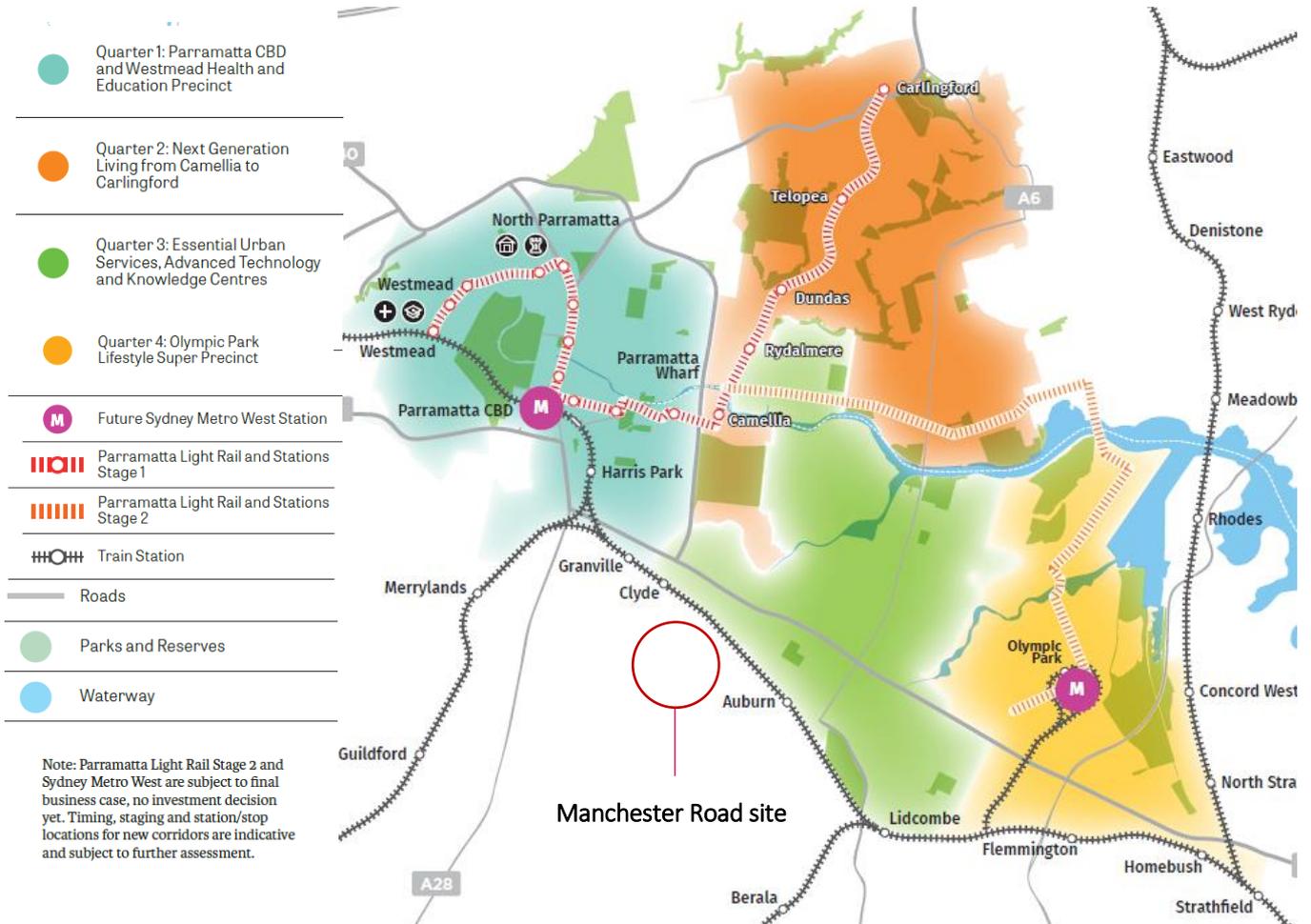
2.1 Policy context

Greater Sydney Region Plan

The *Greater Sydney Region Plan* (GSRP, March 2018) is a vision for a three-city metropolis for Sydney. It sets out to deliver a greater Sydney where people have access to jobs, education and services within 30 minutes of where they live. It seeks to integrate land use and transport planning to improve liveability, productivity and sustainability.

The Manchester Road site sits within the Central River City metropolis. Specifically, adjacent to the Greater Parramatta to Olympic Peninsula (GPOP) economic corridor. The GSRP distinguishes quarters with a focus on providing advanced technology and urban services in in Quarter 3 which sites adjacent to the subject site.

FIGURE 2: DELIVERING A MORE CONNECTED AND COMPETITIVE GPOP ECONOMIC CORRIDOR



Source: Greater Sydney Commission, 2018.

The Plan considers four spatial elements: Jobs, Housing, Connectivity and Landscape. In addition, there are ten directions aligned with these elements to deliver the Plan, these directions are shown in Figure 3.

FIGURE 3: GREATER SYDNEY REGION PLAN DIRECTIONS

A city supported by infrastructure	A collaborative city	A city for people	Housing the city	A city of great places
Infrastructure supporting new developments	Working together to grow a Greater Sydney	Celebrating diversity and putting people at the heart of planning	Giving people housing choices	Designing places for people
				
A well-connected city	Jobs and skills for the city	A city in its landscape	An efficient city	A resilient city
Developing a more accessible and walkable city	Creating the conditions for a stronger economy	Valuing green spaces and landscape	Using resources wisely	Adapting to a changing world
				

Source: Greater Sydney Commission, 2018.

There are several objectives relevant to the Manchester Road site given its location and potential to provide productivity, liveability and sustainability outcomes.

From an economic perspective, the direction “*Creating the conditions for a stronger economy*” under “*Jobs and skills for the city*” has particular relevance to Manchester Road.

Each direction in the Plan is supported by a number of objectives. The current zoning of the Manchester Road site as IN1 means that Objective 23 “*Industrial and urban services land is planned, retained and managed*” has particular relevance.

Within this objective, the Plan has two strategies to encourage the management and retention of this land by focusing on creating local employment opportunities without compromising the viability of industrial centres. This has informed the approach taken to the masterplan process undertaken by PAYCE.

It is important, however, that the site is considered in relation to how it addresses all of the directions in the Plan. This has been considered later in this report.

Central City District Plan

The *Central City District Plan* (GSC, March 2018) provides a more detailed context to the directions and objectives of the Greater Sydney Region Plan specific to the area. The District Plan identifies that the Central City District has the highest proportion of industrial and urban services land, at approximately 34%, of the total in Greater Sydney. Around 27%, or 1,244 hectares, is currently undeveloped.

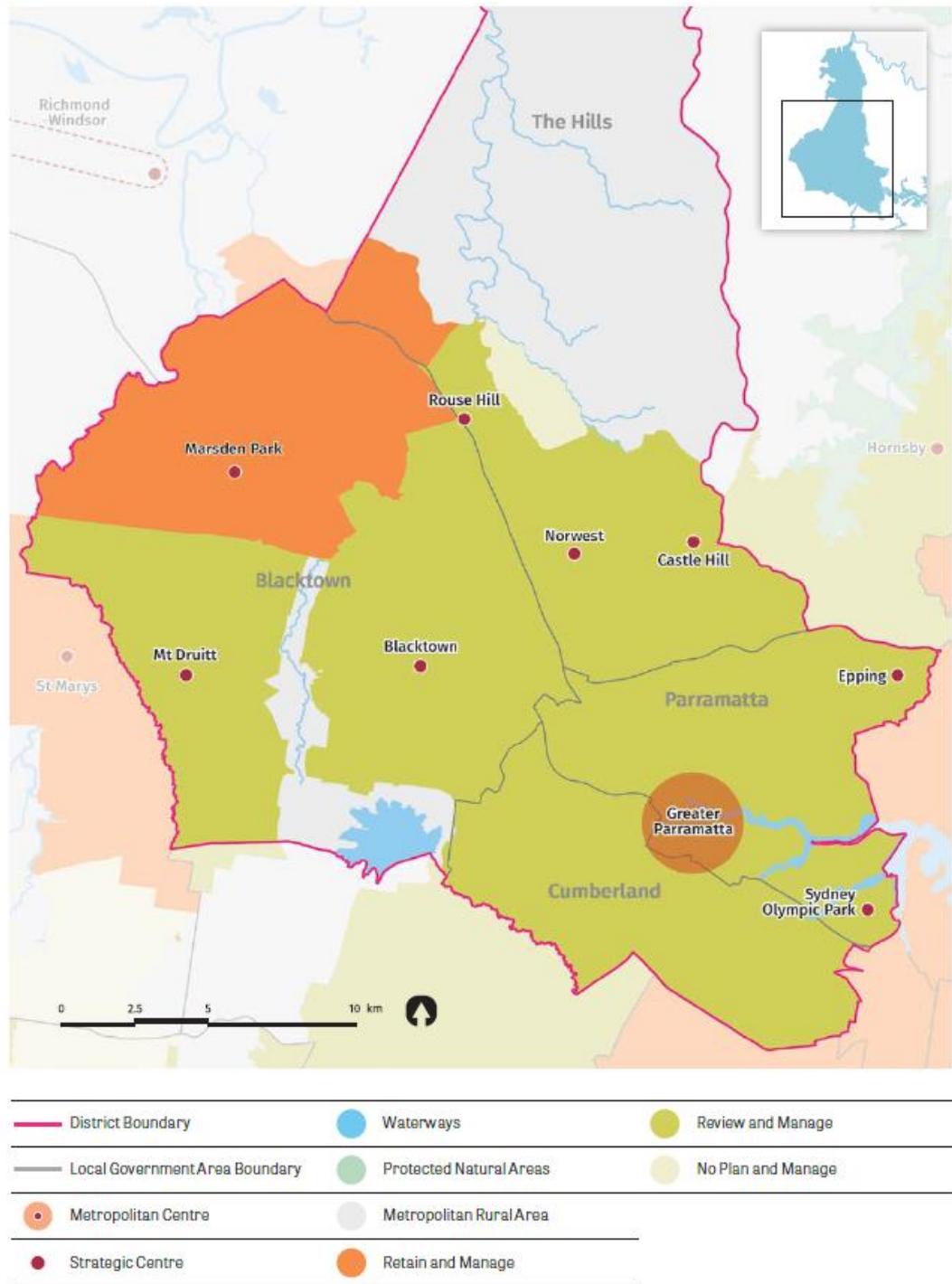
The Plan identifies that land in the Cumberland LGA is home to innovative industries in digital innovation, media, arts, creative industries, food and beverage manufacturing, allied health, research and development and advanced technology manufacturing.

Planning Priority C11 for the Central City District focuses on maximising opportunities for advanced manufacturing and innovation. Cumberland LGA is identified as operating under a ‘Review and Manage’ principle.

This allows for all industrial and urban services land to be reviewed, and either retained or allowed to transition to higher order employment activities with a considered approach to

maximise business and employment outcomes in line with the changing nature of industry in the area.

FIGURE 4: CENTRAL CITY DISTRICT INDUSTRIAL AND URBAN SERVICES LAND APPROACHES



Source: Greater Sydney Commission, 2018.

Draft Employment and Innovation Lands Strategy – 2017

The *Draft Employment and Innovation Lands Strategy* has been prepared by AEC and Mecone for Cumberland Council after its formation in 2016. The Strategy was prepared in order to assist the Council in transitioning the LGA's economy towards higher order, productive and knowledge-intensive industries, and away from its traditional base in manufacturing and related industries.

Council is seeking to develop an Innovation Ecosystem, focusing on key industry sectors, and to grow a number of sectors that will leverage off the diversity and skills of migrants in the community. Another key objective of the development of the Strategy has been to ensure that employment lands are sustainable and able to adapt to the changing needs of industry and business over time.

The key implications for employment and innovation lands for the whole LGA identified in the report are:

- Demand for accessible lands close to customers and labour pools will increase with the rise and growth of Parramatta.
- Use of high knowledge workers, increased automation and shorter distribution chains will increase as businesses seek to value add and improve efficiency/productivity.
- Logistics will remain the dominant driver of demand, with new warehousing models emerging which will include strong demand for small-scale facilities.
- Cumberland is well-placed to capture emerging demand from re-shored manufacturing facilities, with a large labour and consumer market.
- The fit-out and configuration of warehouses will evolve with the use of robots and supply chain efficiencies, with the potential need for greater heights and FSRs.
- More traditional industry sectors are likely to depart the LGA. As such, Cumberland can attract businesses across a range of other industrial activities – including those focused on warehousing and distribution, and manufacturing industries in knowledge, technology, innovation and value adding activities.

The report identifies that there will be opportunities for Cumberland in:

- The development of business and supply chain clusters – using existing employment lands to support innovation, capitalising on proximity to transport networks and in attracting new businesses.
- Research and development – catalysed by proximity to a university, hospital or research organisation.
- Technology and creative industries – being able to accommodate and grow high knowledge and creative jobs, which typically gravitate to areas with retail amenity, transport access, and proximity to major centres like Parramatta.
- Artisan industry – ethnically diverse population could be leveraged for their artisanal skills and contribute to the overall uniqueness and character of the LGA, and could be housed anywhere, including in existing centres.

2.2 Trends and drivers

Emerging Trends

SGS has developed a strong understanding of trends being observed in industrial lands in Sydney. Some emerging trends relevant to the subject site are:

- A strong correlation between employment lands and major transport routes.
- Employment lands are growing throughout Sydney with demand for the resource still strong.
- Different industries have different locational characteristics and create different types of employment precincts.

- Inner city industrial areas are maturing into more bespoke production and urban services land uses.
- Observed changes in the demand for industrial products in the Eastern city are an indication of what will be in demand in the Central and Western cities in the near to medium-term
- Freight and logistics requires a significant footprint and large open spaces to operate and develop for use.
- While land is being provided for new industrial uses in the Western city, many businesses still require proximity to customers or suppliers in more established precincts in the Central and East Districts.

Local Market Trends

SGS has reviewed data from Cordell Connect to identify what is happening and expected to happen in the local market. All projects captured in Cordell Connect are given a project status to indicate their current phase of development. The database captures all development within a defined region, and the data has been refined to purely commercial and industrial developments. Therefore residential, mixed use and agricultural developments are not capture in this analysis.

Based on a review of development applications and approvals, there appears to be a strong demand for warehousing and storage facilities. Most of the applications are for established sites with alterations or additions being undertaken. Some of the uses include automotive services, food storage and processing, and furniture distribution.

Within Auburn, there is the development of a cold storage warehouse and distribution facility for seafood products to the south of the Manchester Road site, located on George Young Street. Veolia is developing a waste material recycling facility, to be located on Grand Avenue to the north of the site adjacent to the Parramatta River.

Discussions with commercial property agents in the area indicated that most properties in Auburn were ‘tightly held’ with low vacancy rates⁴. Indications are that most properties are being offered on short term leases.

Most commercial property is being developed in conjunction with residential developments. Adjacent suburbs like Granville and Parramatta have higher turnover rates, with more vacancies.

2.3 Summary of findings

Planning and policy context

The Greater Sydney Region Plan has identified the Greater Parramatta area to be of significant importance to emerging industries in the Sydney area. The Plan notes that managing existing industrial land is vital to local and regional areas within Greater Sydney. The Cumberland LGA is also identified as being ideal for innovative and creative industries.

The subject site is located within a ‘Review and Manage’ region of the Central City District Plan. This allows for flexibility for the use of current undeveloped industrial land.

The Draft Employment Lands Strategy aspires for Cumberland to provide jobs for higher order industries and provide space for emerging industries. This includes leveraging the skills of the high migrant population in the LGA.

⁴ This contrast with the 2017 Draft AEC report does indicative relatively high vacancies on across the Clyburn precinct (~10%) (p26) in typically aged former factory buildings and lower vacancies in the LGA’s other industrial precincts. The report identifies the area adjacent called Corridor West Auburn has low vacancy rates.

Emerging trends

There is a trend in Greater Sydney towards large scale precincts related to freight and logistics. This requires efficient access to motorway and major arterial roads, either through direct access to major roads or entry/exit ramps. Urban services precincts require disbursement throughout the city to be effective in servicing local communities.

Inner city industrial zones are being redeveloped into higher value advanced manufacturing, production and service-based industries that support centre operations. At the same time larger scale warehousing and manufacturing is moving west into more greenfield open space land, particularly around the M4/M7 intersection.

Local market trends

Current development planned and under construction in Auburn is based upon existing industries and demands for warehousing, freight and logistics, and waste material recycling. No advanced manufacturing or highly skilled technical industries are planned or under development. According to consultation with agents, low vacancy rates are seen in the Auburn area, and any vacancies are for short term lease offerings with tight control of current property provision.

Site possibilities

The site provides limited access to the motorway and major arterial network. It is within proximity to M4 Motorway and Great Western Highway, but requires travel on local roads to access.

The site provides opportunities for new space for industries to move into an established area with strong accessibility to an available workforce. The site provides new floorspace that can meet the changing requirements for industrial floorspace, and is unique in that it offers a greenfield development opportunity, while most developments in the area currently are alterations and additions to existing sites.

3. LGA PROFILING

This chapter reviews the current social and economic profile for the Cumberland LGA, forecast future employment, and the floorspace requirements and skills of the available workforce relevant to the subject site.

3.1 Economic profile

Existing employment

In 2011, the Cumberland LGA employed over 53,000 workers (Census, 2011) this has estimated to have grown by 11% to over 68,000 in 2017 (Census, 2016). Of this total approximately 32% are industrial jobs.

Table 1 shows the industry profile and growth by industry for each ANSZIC employment category.

TABLE 1: CURRENT INDUSTRY PROFILE IN CUMBERLAND LGA

ANZSIC 1-digit	2006	2011	2016	CAGR%	2016 Share %
Agriculture, Forestry and Fishing	55	39	183	49%	0%
Mining	47	30	71	15%	0%
Manufacturing	15,036	11,607	9,754	-13%	14%
Electricity, Gas, Water and Waste Services	216	229	538	36%	1%
Construction	3,421	3,440	6,288	23%	9%
Wholesale Trade	6,718	5,520	4,722	-11%	7%
Retail Trade	6,473	5,559	7,578	5%	11%
Accommodation and Food Services	2,480	2,251	3,405	11%	5%
Transport, Postal and Warehousing	5,975	5,313	6,736	4%	10%
Information Media and Telecommunications	640	527	612	-2%	1%
Financial and Insurance Services	564	974	1,664	43%	2%
Rental, Hiring and Real Estate Services	778	658	903	5%	1%
Professional, Scientific and Technical Services	1,916	2,026	2,526	10%	4%
Administrative and Support Services	1,238	1,202	2,086	19%	3%
Public Administration and Safety	1,886	1,826	2,548	11%	4%
Education and Training	4,325	4,314	5,175	6%	8%
Health Care and Social Assistance	4,376	4,408	6,403	14%	9%
Arts and Recreation Services	416	467	625	15%	1%
Other Services	2,520	2,374	2,887	5%	4%
Inadequately described and Not Stated	673	669	3,881	79%	6%
Not stated	-	-	1,349	-	2%
Total	59,750	53,433	68,585	5%	100%

Source: ABS, 2011 and SGS Economics and Planning, 2016.

While Manufacturing has declined between 2011 and 2016, it remains the biggest industry by employment share. The top five industries by employment share are: Manufacturing, Retail Trade, Transport, Postal and Warehousing, Education and Training and Health Care and Social Assistance.

Cumberland LGA Workforce Profile

A review of the Cumberland LGA workforce profile in Table 2 below shows similar trends to the industry profile above. The biggest share of available workers is in Health Care and Social Assistance, followed by Construction, Retail Trade and Accommodation and Food Services.

While the biggest industries in terms of employment are Manufacturing and Transport, Postal and Warehousing, these industries are either on the edge or outside the top five in terms of available workers in Cumberland.

The available workforce is split approximately 60/40 male to female, led by high number of male workers in trades, manufacturing and construction. Female workers are most prominent in health care.

TABLE 2: CUMBERLAND LGA WORKFORCE PROFILE, 2016

ANZSIC 1 digit	No. Workers	Share of Workers %	Rank by Share
Health Care and Social Assistance	10,327	12%	1
Construction	9,223	11%	2
Retail Trade	8,745	10%	3
Accommodation and Food Services	6,611	8%	4
Manufacturing	6,290	7%	5
Professional, Scientific and Technical Services	5,580	6%	6
Transport, Postal and Warehousing	5,422	6%	7
Education and Training	4,915	6%	8
Financial and Insurance Services	4,711	5%	9
Inadequately described and Not Stated	4,174	5%	10
Public Administration and Safety	4,127	5%	11
Administrative and Support Services	3,548	4%	12
Wholesale Trade	3,217	4%	13
Other Services	3,000	3%	14
Not stated	2,415	3%	15
Information Media and Telecommunications	1,643	2%	16
Rental, Hiring and Real Estate Services	1,121	1%	17
Arts and Recreation Services	892	1%	18
Electricity, Gas, Water and Waste Services	584	1%	19
Agriculture, Forestry and Fishing	202	0%	20
Mining	84	0%	21
Total	86,831	100%	-

Source: TfNSW TPA, 2016.

3.2 Social profile

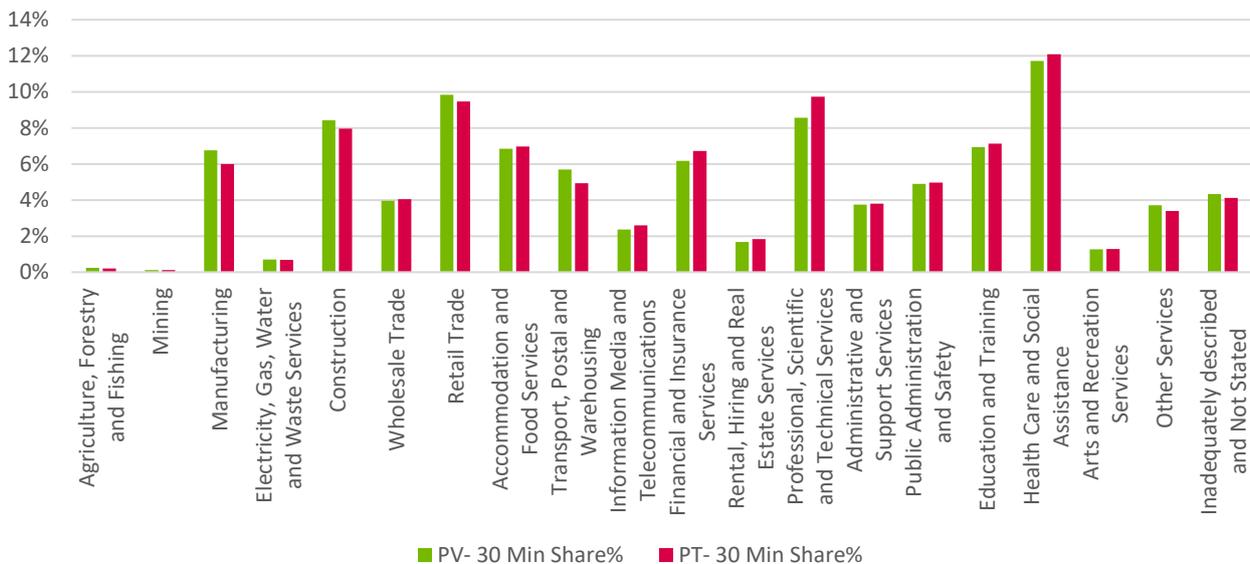
Workforce Accessibility

SGS used Transport for NSW's Transport Performance Analytics (TPA) travel time matrices to look at the accessibility for the site based on current private vehicle (PV) and public transport (PT) travel times. An estimation of the available workforce within 30 minutes and 60 minutes of the subject site by industry was determined.

The summary of the workforce share by industry for both a 30-minute catchment and a 30-60 minute travel catchment are shown below in Figure 5 and Figure 6. This shows that there is no significant difference between private and public transport accessibility to the site for either short or longer trips, or any major difference in workforce availability within a 30 minute or longer travel time area.

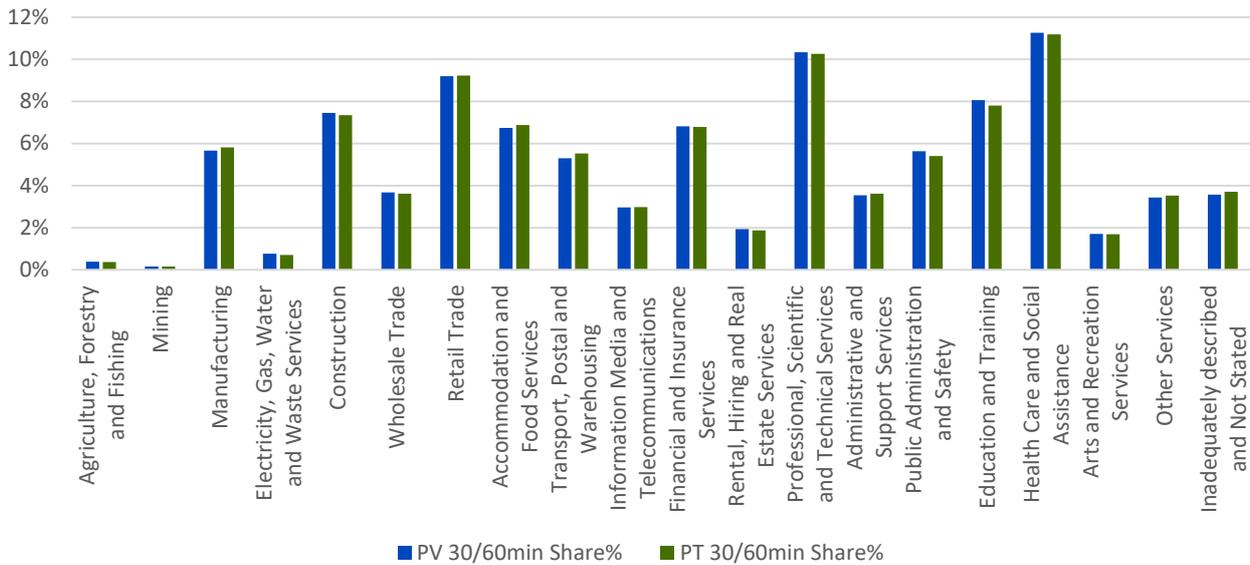
All industries that are expected to grow in the Cumberland LGA are would be well serviced at Manchester Road by potential employees within both catchments, particularly those working in Education and Training, Health Care and Social Assistance, and Professional, Scientific and Technical Services. It also shows the availability of a higher number of available male workers within 30 minutes and 60 minutes.

FIGURE 5: WORKFORCE ACCESSIBILITY BY TRAVEL TIME FROM MANCHESTER ROAD SITE – 30 MINUTE CATCHMENT



Source: TfNSW TPA, 2016.

FIGURE 6: WORKFORCE ACCESSIBILITY BY TRAVEL TIME FROM MANCHESTER ROAD SITE – 30-60 MINUTE CATCHMENT



Source: TfNSW TPA, 2016.

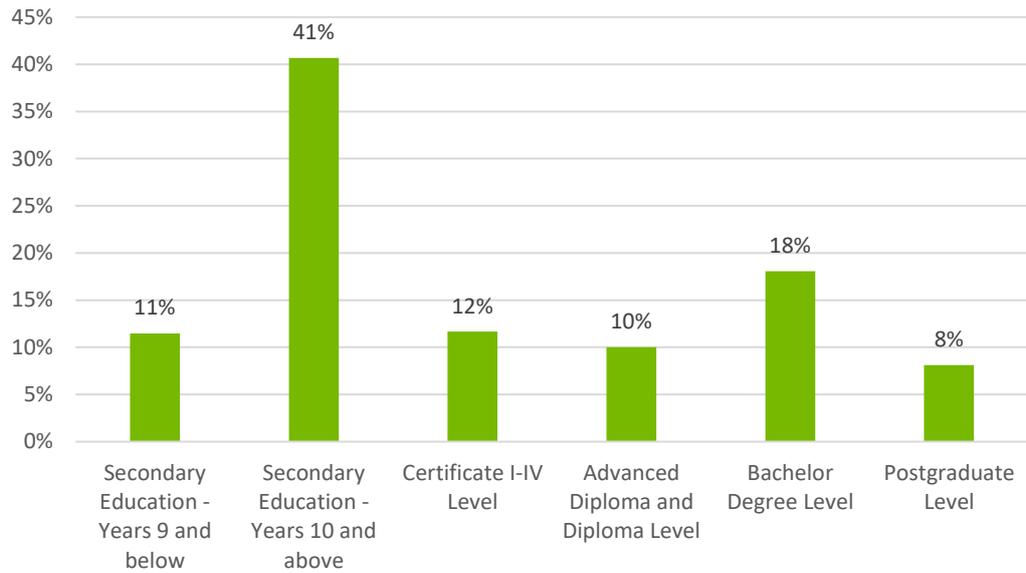
Workforce Qualifications

A summary of the educational attainment for the workforce was developed, to understand the level of education in the Cumberland LGA and the relevant workforce catchment. Figure 7 below shows the summary for the Cumberland LGA. This shows that 89% of the population has completed Year 10 or above, with 26% of the population completing university, and 22% with some kind of vocational accreditation.

The proportion of the workforce that has completed Year 10 or above but has no further qualifications is quite high at 41%. Therefore, there are likely to be gaps in the available workforce to fill some of the expected advanced manufacturing and technical industry jobs that will grow in the coming years.

Considering the attainment by gender, there is a significantly higher number of males with Certificate I-IV level qualifications (+6,000 likely due to trade professions), and a slightly higher proportion of females with Advanced Diploma and Bachelor degrees (+2,000).

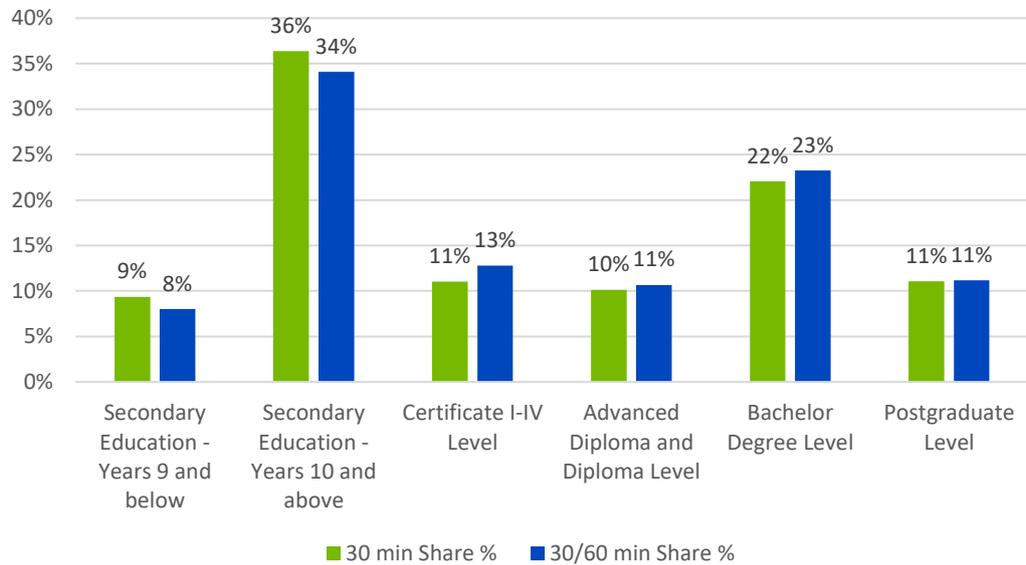
FIGURE 7: CUMBERLAND LGA EDUCATIONAL SUMMARY



Source: ABS, TfNSW TPA, 2016.

Figure 8 illustrates the same information for the 30 and 60 minute catchments, and shows similar results. There are higher percentages of higher educational attainment in this catchment compared to the LGA, particularly university studies. Approximately 33% of the catchment has completed university studies, an 11% increase compared to the whole Cumberland LGA.

FIGURE 8: TRAVEL TIME CATCHMENT EDUCATIONAL SUMMARY



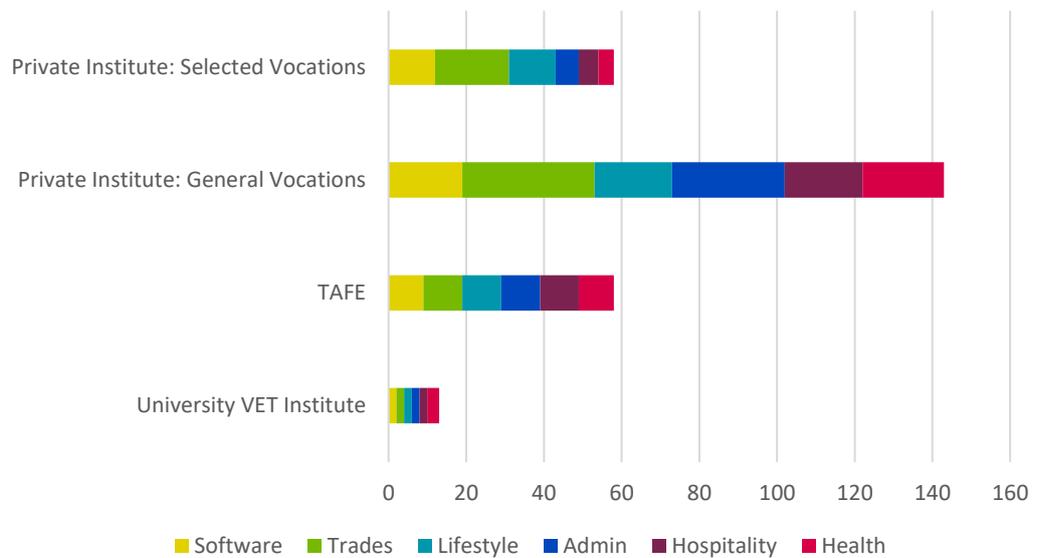
Source: ABS, TfNSW TPA, 2016.

Vocational Training

A review of vocational education in the Cumberland LGA and within the vicinity of the site was undertaken to develop an understanding of the training provision. A 30-minute travel catchment was considered.

A total of 110 institutions were found to be offering training, with the majority being private institutes offering general training. At these sites, a total of 272 courses were found to be offered, with courses relatively evenly spread between software, trades, lifestyle, administration, hospitality and health, with trades courses accounting for the highest offering at 24%. A summary of the offerings is shown Figure 9 below.

FIGURE 9: CUMBERLAND AND ENVIRONS TRAINING COURSE OFFERING



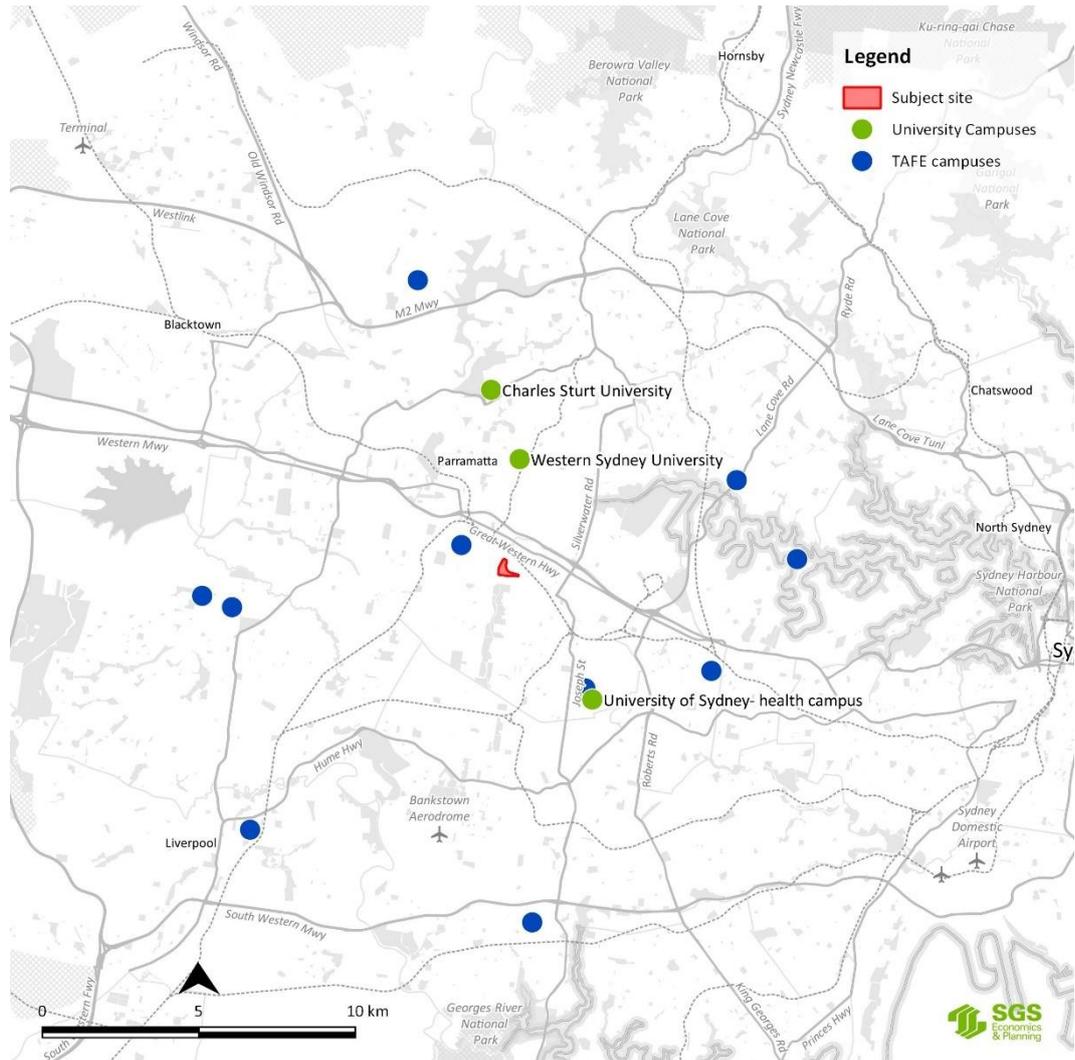
Source: SGS Economics and Planning, 2018.

There are three universities with campuses in proximity to the site: Western Sydney University, Charles Sturt University and the University of Sydney Faculty of Health Sciences at Lidcombe.

The TAFE NSW Western Sydney campuses offer a broad range of study areas including electrotechnology and other emerging industries. A review of the courses indicated a 'silo' structure to the courses into the specified study areas. There is potential cross-pollination of courses around digital design, manufacturing and fabrication, and health services to complement the University of Sydney campus.

The location of the current TAFE and University sites within that catchment are shown below in Figure 10.

FIGURE 10: UNIVERSITY AND TAFE INSTITUTIONS IN PROXIMITY TO MANCHESTER ROAD



Source: SGS Economics and Planning, 2018.

3.3 Summary of findings

Employment, Workforce and Education

There has been strong growth in health services and education as well as Professional, Scientific and Technical Services. However, a significant proportion of the available workforce does not have higher education qualifications past secondary school. There is potential for the site to assist in providing education to the workforce, and to upskill and create employment opportunities in advanced industrial employment areas that may seek to locate in the precinct.

Vocational training in the area has a significant hospital and health component, as well as software training within a broad spectrum of educational offerings. The University of Sydney Health Sciences campus is located approximately six kilometres from the site (an 11-minute drive or 30-minute journey via walking or public transport). The development proposal includes a free shuttle bus to Auburn station which would greatly reduce the 16-minute walk time currently and nearly half the travel time via public transport between the site and the university despite two public transport interchanges being required.

Labour force is led by workers in the Health Care and Social Assistance sector and Retail Trade. All growth industries identified are well resourced by potential employees within 30 and 60 minutes of the site.

Site Possibilities

Westmead hospital is a major employer for the health care industry. The surrounding area currently has no adjacent industrial land to provide fabrication or supply services to facilitate operations. There is potential opportunity for the provision of services and products to support the health care industry in the GPOP economic corridor.

The proximity to the health science campus of the University of Sydney may provide opportunities for the site. This could include partnerships and for educational facilities for health science to be located at the subject site.

The site may be able to provide facilities and training to the surrounding population. A significant proportion of the population that has not attempted any tertiary education, and there may be opportunities to align with the changing nature of job requirements in industries locating in industrial precincts.

4. SITE FEASIBILITY

This chapter outlines the results of feasibility testing of the proposal, comparing the project case to the full industrial build out scenario.

4.1 Method and scenarios tested

Method

The feasibility testing undertaken used SGS' Residual Land Value (RLV) model. The RLV model compares the expected costs of development (construction, land acquisition, professional fees, taxes, etc.) and expected revenues (rents and sales values) to calculate whether a development option is feasible or not. The model also factors in developer profit margins.

Where a development's total revenues exceed its costs and profit margin, a development will have a feasibility ratio above 1, and is therefore deemed to be feasible.

It is noted that as the proposal is in schematic design phase, detailed cost and revenue data is not available. This analysis makes assumptions about costs and revenues as part of the modelling.

Scenarios tested

SGS has used the RLV model to test the feasibility of the Project case (the PAYCE mixed use scenario) compared to the Industrial build out case. In addition, the modelling includes a scenario where the site is sold by PAYCE and the Industrial build out scenario is undertaken by another developer – that is, the floorspace and costs assumptions are the same as for the Industrial build out with the addition of land acquisition costs. This is to reflect a reasonable scenario where PAYCE sells the site and the future owner is required to build out under current planning controls.

The purpose of this testing is not to identify the quantum of development required to make the scenarios financially viable. It is to compare the relative feasibility of the Project case to the likely alternative where the site retains its current zoning and land uses under the current controls.

Modelling inputs and assumptions

The modelling has been used based on the estimated floorspaces for different development components provided by PAYCE, as identified for each scenario in Section 1.2. The cost and revenue assumptions used across the scenarios in the modelling are detailed in Table 3 below.

TABLE 3: COST AND REVENUE ASSUMPTIONS

Input/assumption	Value	Source
Costs		
Site acquisition/land value	Current value (as industrial) - \$82,500,000 Purchase cost (2014) - \$50,000,000	PAYCE
Demolition and remediation	\$30,000,000	PAYCE
Construction costs:		Rawlinsons Construction Handbook (2018)
▪ Retail	▪ \$2,739/sqm	
▪ Commercial office	▪ \$2,530/sqm	
▪ Industrial (med/large)	▪ \$873/sqm	
▪ Industrial (small/US)	▪ \$775/sqm	
▪ Parking (underground)	▪ \$1,725/sqm	
▪ Parking (at grade)	▪ \$84/sqm	
▪ Community Centre	▪ \$1,360/sqm	
Open space	\$15,000,000	PAYCE
External works and services	\$30,500,000	PAYCE
Construction contingency	5% of costs	PAYCE
Professional fees	10% of costs and contingency	PAYCE
Developer contributions	\$20,000,000	PAYCE
Interest rate	6%	PAYCE
Revenues		
Residential unit sale prices:		PAYCE
▪ Studio	▪ \$425,000	
▪ 1-bedroom	▪ \$530,000	
▪ 2-bedroom	▪ \$665,000	
▪ 3-bedroom	▪ \$830,000	
Rents (capitalised to sales values)		PAYCE
▪ Retail	▪ \$7,857/sqm	
▪ Commercial office	▪ \$3,667/sqm	
▪ Industrial (med/large)	▪ \$1,923/sqm	
▪ Industrial (small/US)	▪ \$2,231/sqm	

Source: SGS Economics and Planning, 2018.

Two site acquisition costs have been used to inform the current land value.

Under the two scenarios where PAYCE develop the site, the price paid by PAYCE to acquire the site (\$50 million) has been used. In the scenario where it is developed by another developer, an estimated land value of \$82.5 million has been used to reflect the increase in land value since the site was acquired.

4.2 Results

Table 4 **Error! Reference source not found.** below shows the results of the feasibility modelling.

A feasible scenario is one that has revenues in excess of all costs related to construction. These include demolition, remediation, construction costs as well as professional fees and financing costs. The feasibility assessment assumes a standard profit margin. If, after all these costs are factored in and compared with revenues, the site has a positive Residual Land Value (RLV), that is, the value of the land is equal to or in excess of the costs, the development is considered feasible. The RLV is what the site is theoretically worth.

When site acquisition costs are factored in, a site will deliver a positive or negative feasibility ratio. A positive feasibility ratio (>1) means that the RLV is greater than the site acquisition costs.

The table below also considers the feasibility of each scenario in terms of a 20% development margin. This takes the overall revenues minus development costs (excluding profit margin and land acquisition) as a proportion of development costs. A proportion of 20% or more indicates that development would be feasible.

TABLE 4: FEASIBILITY MODELLING RESULTS

	Component	Project case (PAYCE)	Industrial build out case	Industrial build out by other developer
Development costs	Retail	\$2,739,250	\$0	\$0
	Commercial office	\$18,975,000	\$0	\$0
	Industrial	\$63,975,000	\$110,050,000	\$110,050,000
	Community	\$1,360,000	\$0	\$0
	Open space (sqm)	\$20,000,000	\$0	\$0
	Residential	\$282,633,076	\$0	\$0
	Parking	\$86,037,000	\$5,358,444	\$5,358,444
	<i>Total development costs (incl. fees etc.)</i>	<i>\$829,376,874</i>	<i>\$287,194,067</i>	<i>\$287,194,067</i>
Revenues	Retail	\$7,071,429	\$0	\$0
	Commercial office	\$24,750,000	\$0	\$0
	Industrial	\$141,403,846	\$300,930,769	\$300,930,769
	Residential	\$747,320,000	\$0	\$0
	<i>Total revenues (incl. sales expenses)</i>	<i>\$867,789,420</i>	<i>\$283,684,621</i>	<i>\$283,684,621</i>
	Residual Land Value (RLV)	\$38,412,546	-\$3,509,446	-\$3,509,446
	Land/acquisition costs	\$50,000,000	\$50,000,000	\$82,500,000
	Feasibility Ratio	0.77	-0.07	-0.04
	Development margin (feasible if >20%)	16%	-5%	-16%
Land use mix		100%	100%	100%
	<ul style="list-style-type: none"> ■ Community ■ Residential, commercial, retail ■ Industrial 			

Source: SGS Economics and Planning, 2018.

The analysis indicates that the Project case delivers a positive RLV (+\$38 million) but a marginally unfeasible feasibility ratio of 0.77. The development margin result is 16%, slightly below the 20% that would suggest the development is feasible.

The Industrial build out scenario by PAYCE delivers a negative RLV (-\$3 million) and a negative feasibility ratio of -0.07. It also gives a development margin result of -5%, well below the 20% for feasibility.

The option where the site is bought and developed for industrial uses by another developer similarly, has a negative RLV, with a feasibility ratio of -0.04⁵ when factoring in the additional cost of land acquisition. The development margin for this scenario is significantly less feasible than the other two scenarios, at -16%.

These results suggest that the development of the subject site under its current planning controls, for industrial uses only, may not be economically feasible for a developer. This is particularly the case if the developer was one other than PAYCE, given the significant additional costs associated with acquiring the site. For the purposes of this study, it demonstrates that the inclusion of a wider variety of land uses – residential, commercial, retail – alongside industrial would make the development is much more likely to be feasible than a full industrial build out.

Sensitivity testing

It should be noted that the RLV modelling is highly dependent on the cost and revenue assumptions used, and different estimates may generate very different feasibility results. For example, a higher rent per square metre, or lower construction costs, could improve the RLV of the industrial-only option, and potentially make the scenario marginally feasible.

Sensitivity testing of the model demonstrates how changes to some of the assumptions for the industrial components could affect the overall RLV of the Industrial only option. This is illustrated below in Table 5. If rents were \$150 per square metre rather than the \$145 rate assumed in the model, this would generate a positive RLV of around \$4 million for the Industrial build out scenario. Similarly, if construction costs for industrial development were reduced from the assumed \$775 to \$750 per square metre, this would result in a positive (though more marginal) RLV of around \$600,000. However, for the type of product required to attract emerging industries, it is likely that construction costs would likely need to *increase* rather than decrease. This may also result in a higher per sqm rent.

TABLE 5: SENSITIVITY TESTING OF INDUSTRIAL BUILD OUT SCENARIO

	Assumption in model	RLV	Sensitivity test value	RLV
Industrial rents (non-capitalised) (\$/sqm)	\$145	-\$3,509,446	\$150	\$4,075,201
Industrial construction cost (\$/sqm)	\$775	-\$3,509,446	\$750	\$595,683

Source: SGS Economics and Planning, 2018.

Reductions in the assumed costs for elements such as demolition or open space would also improve the RLV of the Industrial build out.

⁵ The feasibility ratio counterintuitively suggests that this scenario is more feasible than the PAYCE industrial build out scenario. This is due to the mathematics of the calculation of the ratio, where the denominator (land value) in the non-PAYCE scenario is larger, delivering a smaller resulting value. For this reason, the measure of feasibility in terms of the 20% developer margin has been included in the analysis to compare across the scenarios.

4.3 Summary of findings

Feasibility of development scenarios

The Project case delivers a positive RLV, of around \$38 million, while the Industrial build out case delivers a negative RLV, of around \$3.5 million. This suggests that the Project case and inclusion of a mix of land uses is likely to be more feasible than developing the site solely for industrial uses.

The addition of acquisition costs for the site for another developer would likely further disincentivise the development of the site solely for industrial uses. The resulting feasibility ratio under this scenario is -0.04, indicating that this option would likely be financially unfeasible for another developer to purchase the site and undertake a full industrial build out.

Sensitivity testing

The sensitivity testing of the modelling results suggests that the Industrial build out scenario may be marginally feasible using slightly different assumptions. Slightly reduced construction costs per square metre, or slightly higher rents per square metre generate a positive RLV for the industrial-only option. This suggests that the development could be feasible if construction costs could be reduced or higher rents obtained.

5. ECONOMIC IMPACTS

This section outlines the likely economic impact of the proposal and potential costs and benefits to the community, considering the potential demand for different land uses in the Cumberland LGA.

5.1 Employment growth

Forecast employment

The NSW Government's 2016 land use forecasts (LU16) project growth and distribution of jobs by industry over the next 10-20 years⁶. This data set has been used as the basis for this study.

Table 6 below shows the current employment forecast for the Cumberland LGA from LU16 out to 2036. All industries are forecast increase employment, with the exception of Agriculture, Forestry and Fishing (very small magnitude) and Transport, Postal and Warehousing, likely due to this industry seeking sites in Western Sydney.

Despite declining recently, Manufacturing is forecast to grow through to 2036.

Other industries with the highest percentage and quantum of growth are:

- Retail trade,
- Accommodation and Food Services,
- Professional, Scientific and Technical Services,
- Public Administration and Safety,
- Education and Training, and
- Health Care and Social Assistance.

The overall modest growth of 3% across Cumberland reflects the lack of a major commercial centre in the LGA.

⁶ The LU16 and Census data are collected and allocated via different methods, therefore there are differences in the quantum and share of employment between two datasets. The overall magnitude of the two datasets is comparable and both illustrate a similar pattern of employment.

TABLE 6: CUMBERLAND LGA EMPLOYMENT FORECAST (2016 – 2036)

ANSZIC 1 digit	2016	2021	2026	2031	2036	CAGR%
Agriculture, Forestry and Fishing	104	102	97	96	95	-2%
Mining	55	56	58	59	60	2%
Manufacturing	14,036	15,174	15,517	15,915	16,391	3%
Electricity, Gas, Water and Waste Services	485	552	613	677	722	8%
Construction	8,149	8,814	9,245	9,852	10,464	5%
Wholesale Trade	6,413	6,469	6,744	7,028	7,253	2%
Retail Trade	8,717	9,444	10,240	11,266	11,987	7%
Accommodation and Food Services	3,920	4,354	4,633	5,030	5,413	7%
Transport, Postal and Warehousing	8,907	8,930	8,946	8,449	8,647	-1%
Information Media and Telecommunications	838	865	873	914	941	2%
Financial and Insurance Services	1,369	982	1,037	1,107	1,173	-3%
Rental, Hiring and Real Estate Services	1,091	1,177	1,196	1,297	1,376	5%
Professional, Scientific and Technical Services	3,352	3,715	4,382	4,824	5,258	9%
Administrative and Support Services	2,168	2,253	2,568	2,727	2,826	5%
Public Administration and Safety	2,831	3,178	3,331	3,586	3,904	7%
Education and Training	6,121	6,939	7,372	8,019	8,677	7%
Health Care and Social Assistance	6,851	7,835	8,576	9,412	10,308	9%
Arts and Recreation Services	899	989	1,083	1,182	1,286	7%
Other Services	3,979	4,201	4,277	4,454	4,675	3%
Inadequately described and Not Stated	-	-	-	-	-	-
Total	80,285	86,030	90,789	95,893	101,454	3%
% Industrial Jobs (including some Urban Services)	37%	36%	35%	34%	33%	-

Source: TfNSW TPA, 2016.

Table 7 below shows how the industry ranking by share of employment changes with the LU16 forecast. There is minimal change in the bottom half of the rankings, with the major change being the fall in Transport, Postal and Warehousing (from 2nd to 6th) and the rise of Education and Training into the top five.

TABLE 7: CUMBERLAND LGA EMPLOYMENT BY INDUSTRY RANKING BY SHARE

ANZSIC 1 digit	2016 Rank	2026 Rank	2036 Rank	Shift
Manufacturing	1	1	1	-
Retail Trade	3	2	2	1
Construction	4	3	3	1
Health Care and Social Assistance	5	5	4	1
Education and Training	7	6	5	2
Transport, Postal and Warehousing	2	4	6	-4
Wholesale Trade	6	7	7	-1
Accommodation and Food Services	9	8	8	1
Professional, Scientific and Technical Services	10	9	9	1
Other Services	8	10	10	-2
Public Administration and Safety	11	11	11	-
Administrative and Support Services	12	12	12	-
Rental, Hiring and Real Estate Services	14	13	13	1
Arts and Recreation Services	15	14	14	1
Financial and Insurance Services	13	15	15	-2
Information Media and Telecommunications	16	16	16	-
Electricity, Gas, Water and Waste Services	17	17	17	-
Agriculture, Forestry and Fishing	18	18	18	-
Mining	19	19	19	-

Source: TfNSW TPA, 2016.

Note: The categories T and & (Inadequately described and Not Stated) have not been included in the rankings).

While Transport, Postal and Warehousing is projected to fall in the rankings, the quantum of jobs remains constant in the forecast to 2036 with an overall decrease in growth. While there is no apparent growth in the number of jobs in this area, this industry is experiencing a shift towards automation. Therefore, while job growth is projected to be stagnant the demand for floorspace will not necessarily reduce.

Industrial jobs growth

Cumberland's projected employment growth will be distributed throughout a number of employment centres. Some will locate in local centres, others in industrial precincts. With respect to the future role of Manchester Road, this study focuses on the role the precinct can play in supporting future industrial growth. This is an important distinction because of the project's proposal to significantly increase industrial floorspace in the precinct.

This study targets industrial jobs as well as a specific sub-set – Urban Services – that locate in industrial precincts. These are certain groupings of ANZSIC job categories. Table 8 below identifies the various industries that make up both the Industrial and Urban Services definitions.

TABLE 8: URBAN SERVICE AND INDUSTRIAL DEFINITIONS

Industrial industries (1-digit ANZSIC)	Urban Services industries (2 and 4-digit ANSIC)
Agriculture, Forestry and Fishing	Printing (incl. the Reproduction of Recorded Media)
Mining	Electricity Supply
Manufacturing	Gas Supply
Electricity, Gas, Water and Waste Services	Water Supply, Sewerage and Drainage Services
Wholesale Trade	Waste Collection, Treatment and Disposal Services
Transport, Postal and Warehousing	Building Construction
Agriculture, Forestry and Fishing	Heavy and Civil Engineering Construction
	Construction Services
	Basic Material Wholesaling
	Motor Vehicle and Motor Vehicle Parts Retailing
	Hardware, Building and Garden Supplies Retailing, nfd
	Hardware and Building Supplies Retailing
	Garden Supplies Retailing
	Road Transport
	Postal and Courier Pick-up and Delivery Services
	Transport Support Services
	Warehousing and Storage Services
	Rental and Hiring Services (except Real Estate)
	Building Cleaning, Pest Control and Other Support Services
	Printing (including the Reproduction of Recorded Media)
	Electricity Supply
	Gas Supply

Source: SGS Economics and Planning, Greater Sydney Commission, 2018.

(note it does not include Construction as this is considered a population-serving industry given its footloose nature)

Table 9 below shows the forecast growth in urban services and industrial jobs in the LGA between 2016 and 2036. Despite this growth, the proportion of these categories to the total number of jobs is projected to decrease slightly over time, as other industries are experiencing stronger growth.

TABLE 9: CUMBERLAND LGA URBAN SERVICE AND INDUSTRIAL JOBS GROWTH

Cumberland LGA	2016	2021	2026	2031	2036
Urban Services jobs	22,703				26,476
<i>Growth</i>					17%
Industrial-related jobs*	30,000	31,284	31,975	32,222	33,167
<i>Cumulative Growth</i>		4%	7%	7%	11%
Total employment (all industries)	80,285	86,030	90,789	95,893	101,454
<i>Cumulative Growth</i>		7%	13%	19%	26%
Industrial % of Total Jobs	37%	36%	35%	34%	33%

*Includes some Urban Services categories

Source: TfNSW TPA, 2016.

Jobs to floorspace conversion

Jobs have a range of locational requirements. Some locate in high density commercial towers. Others require large amounts of warehouse floorspace to operate. Census data captures the jobs by the industry they are in but not their land use or floorspace requirements.

In order to better understand what these employment projections mean in terms of future land and floorspace demands, SGS has converted jobs currently captured by the ABS's ANZSIC categories to Broad Land-use categories (BLCs). These BLCs, and their relationship to ANZSIC categories, have been developed by SGS through extensive lot-by-lot auditing of Sydney's industrial precincts. This process aligns the jobs captured during this process and the amount of floorspace per job they occupy. This allows SGS to then identify the floorspace to job ratios back at an ANZSIC level to ascertain the estimated floorspace required to meet future job growth.

Based on the BLC work undertaken previously by SGS, 15 categories of land use and their proportional distribution by industry have been calculated, and these can be applied to the industry floorspace projections. Table 10 shows these categories.

TABLE 10: BROAD LAND USE CATEGORIES DESCRIPTION

BLC Name
Agriculture and mining
Accommodation - short term
Business Park
Dispersed
Freight and logistics
Local Light (industrial)
Manufacturing heavy
Manufacturing light
Office
Other
Retail - big box
Retail - bulky goods
Retail - Mainstreet
Special
Urban services

Source: SGS Economics and Planning land audit data.

The amount of floorspace a job takes up depends on its operations. An office job, for instance, would take up less than a job in a warehouse due to the amount of space needed for a warehouse operation and the relatively low job density that such a job requires. It is noted that as these are captured from audits of industrial precincts, and not commercial centres, they reflect the observations of jobs in these precincts.

This means that certain industries that locate in industrial precincts as well as commercial centres may have different ratios. For instance, office jobs in industrial precincts have a typical footprint of 49 square metres per job, while in commercial centres, this may range from 10-25 square metres per job⁷.

The jobs to floorspace ratios used in this conversion process, are identified in Table 11.

TABLE 11: IDENTIFIED 1-DIGIT ANZSIC JOB TO FLOORSFACE RATIOS

Industry category	Identified jobs to floorspace ratio (sqm)
Agriculture, Forestry and Fishing	95
Mining	79
Manufacturing	95
Electricity, Gas, Water and Waste Services	93
Construction	71
Wholesale Trade	92
Retail Trade	43
Accommodation and Food Services	37
Transport, Postal and Warehousing	94
Information Media and Telecommunications	77
Financial and Insurance Services	35
Rental, Hiring and Real Estate Services	54
Professional, Scientific and Technical Services	49
Administrative and Support Services	55
Public Administration and Safety	48
Education and Training	45
Health Care and Social Assistance	44
Arts and Recreation Services	49
Other Services	53
Inadequately described and Not Stated	72
Average	64
Average (excluding construction jobs)	73

Source: SGS Economics and Planning land audit data.

⁷ Much of the data used by SGS is captured from land use audits undertaken by SGS. The Professional, Scientific and Technical Services jobs for instance therefore have a different job to floorspace ratio than may be observed in commercial centres, where ratios may get as low as 10sqm per job.

Cumberland LGA projected floorspace demand

Floorspace growth by ANZSIC

When floorspace to job ratios are applied to the employment projections, over 1 million square metres of additional employment floorspace is projected to be required in the Cumberland LGA between 2016 and 2036, as shown below in Table 12.

Key growth industries (1-digit ANZSIC) in terms of floorspace demand are likely to be:

- Manufacturing,
- Retail Trade,
- Professional, scientific and technical services,
- Education and training, and
- Health Care and Social Assistance.

TABLE 12: EMPLOYMENT FLOORSPACE (SQM) GROWTH IN CUMBERLAND LGA BY INDUSTRY – 2016-2036

Description	2016	2026	2036	Net Increase 2016-2036	%Growth
Agriculture, Forestry and Fishing	9,848	9,207	8,972	(875)	-9%
Mining	4,349	4,554	4,749	400	9%
Manufacturing	1,331,279	1,471,760	1,554,686	223,407	17%
Electricity, Gas, Water and Waste Services	44,999	56,793	66,893	21,894	49%
Construction	576,139	653,653	739,827	163,687	28%
Wholesale Trade	589,325	619,800	666,544	77,218	13%
Retail Trade	377,896	443,909	519,618	141,722	38%
Accommodation and Food Services	144,637	170,958	199,730	55,094	38%
Transport, Postal and Warehousing	836,824	840,485	812,344	(24,480)	-3%
Information Media and Telecommunications	64,684	67,378	72,580	7,896	12%
Financial and Insurance Services	47,434	35,939	40,631	(6,803)	-14%
Rental, Hiring and Real Estate Services	59,200	64,902	74,626	15,425	26%
Professional, Scientific and Technical Services	164,063	214,484	257,394	93,331	57%
Administrative and Support Services	119,000	141,009	155,124	36,124	30%
Public Administration and Safety	136,037	160,047	187,609	51,572	38%
Education and Training	275,149	331,384	390,049	114,900	42%
Health Care and Social Assistance	299,716	375,178	450,962	151,246	50%
Arts and Recreation Services	43,685	52,639	62,495	18,811	43%
Other Services	210,495	226,238	247,283	36,788	17%
Total	5,334,759	5,940,318	6,512,118	1,177,359	22%

Source: TfNSW TPA, 2016, SGS Economics and Planning BLCs, 2017.

Floorspace growth by Broad Land-Use Category

This floorspace demand can also be expressed in terms of Broad Land Use (BLC) floorspace type, as illustrated in Table 13 below, which shows the projected changes in floorspace types to 2036. There will be requirements for increased floorspace in:

- Freight and logistics,
- Local light industrial,
- Light manufacturing,
- Retail (all types),
- Special, and
- Urban Services.

TABLE 13: EMPLOYMENT FLOORSPACE (SQM) GROWTH IN CUMBERLAND LGA BY TYPE – 2016-2036

BLC	2016	2026	2036	Net Increase 2016-2036	% Growth
Agriculture and mining	469	438	427	(42)	-9%
Accommodation - short term	36,066	42,602	49,763	13,698	38%
Business Park	132,331	150,744	171,701	39,370	30%
Dispersed	142,027	174,754	207,258	65,231	46%
Freight and logistics	1,723,558	1,812,358	1,886,299	162,741	9%
Local Light (industrial)	599,394	676,466	758,144	158,749	26%
Manufacturing heavy	474,431	523,962	553,846	79,414	17%
Manufacturing light	815,972	904,868	966,446	150,474	18%
Office	117,221	132,739	152,081	34,860	30%
Other	-	-	-	-	-
Retail - big box	242,591	285,765	333,408	90,817	37%
Retail - bulky goods	139,085	162,719	189,382	50,297	36%
Retail - Mainstreet	292,833	343,096	401,884	109,050	37%
Special	282,568	339,714	397,612	115,044	41%
Urban services	336,213	390,093	443,868	107,654	32%
Total	5,334,759	5,940,318	6,512,118	1,177,359	22%

Source: TfNSW TPA, 2016, SGS Economics and Planning BLCs, 2017.

Summary of projected floorspace demand in Cumberland LGA

As identified above, over 1 million square metres of additional employment floorspace is projected to be required in the Cumberland LGA over the next 20 years. Of this, a total of 297,565 square metres is projected to be required for industrial-related use, as shown in Table 14 below.

This method of calculation does not factor in current vacancies⁸ or floorspace inefficiencies, but reflects the net increase in jobs assuming that the current industrial employment floorspace in the LGA is in optimally utilised.⁹

⁸ The 2017 Draft AEC report does indicative relatively high vacancies on across the Clyburn precinct (~10%) (p26) and lower vacancies in the LGA's other industrial precincts. In practice, some of this additional demand would be absorbed here first which would reduce the total amount of additional floorspace required.

⁹ To fully comprehend the supply-demand gap, a detailed LGA-wide audit would need to be undertaken of all employment lands. The AEC reports do not undertake this study. Therefore, SGS has had to assume that the system is in balance for the purposes of calculating future need.

TABLE 14: NET EMPLOYMENT FLOORSPACE (SQM) GROWTH IN CUMBERLAND LGA – 2016-2036

Employment type	Floorspace (sqm) 2016	Floorspace (sqm) 2036	Floorspace (sqm) Change	% change (16-36)
All jobs	5,334,759	6,512,118	1,177,359	22%
Industrial*	2,816,623	3,114,188	297,565	11%
Urban Services	1,241,525	1,344,360	102,835	8%

Source: TfNSW TPA, 2016, SGS Economics and Planning BLCs, 2017.

*Industrial jobs include some Urban Service jobs.

5.2 Employment scenario comparison

Assumptions

The following compares the potential employment resulting from both the PAYCE project case and Industrial build out case against the base case. This comparison has used the following assumptions:

- Employment floorspace numbers consistent with each scenario described in Section 1.2.
- For the Industrial build out scenario, it has been assumed that development will take up 84% of the site, to account for roads and servicing.
- Jobs have been calculated using an average floorspace to job ratio range of 64 to 73 square metres per job, as identified above in Section 5.1.
- Gross floorspace is used because it considered that the floorspace of the Bluescope steel facility is so specialised that it could not be re-appropriated by another use.

Employment floorspace provision

Site capacity

The site's fourteen hectares currently provides approximately 50 jobs¹⁰ across 28,090 square metres of floorspace.

Under the PAYCE project case, the proposed quantum of industrial or urban services floorspace would accommodate a net increase of approximately 977 – 1,122 jobs.

Under the industrial build out scenario, the proposed quantum of industrial or urban services floorspace would accommodate a net increase of approximately 1,584, – 1,814 jobs. Table 15 summarises these comparisons.

TABLE 15: INDUSTRIAL EMPLOYMENT FLOORSPACE (SQM) GROWTH IN MANCHESTER ROAD SITE – 2016-2036

Scenario	Current Jobs	Proposed floorspace (gross) (sqm)	Ave. floorspace: jobs ratio (sqm)	Employment increase (net)	% change in jobs (project case vs base case)
Base case	50	28,090	N/A	0	0%
PAYCE project case scenario	50	75,000	64 - 73	977 - 1,122	1,955% - 2,224%
Industrial build out scenario	50	119,280	64 - 73	1,584 – 1,814	3,168% - 3,628%

Source: SGS Economics and Planning, 2018.

Note: There is assumed to be no net increase in jobs on site under the base case because although jobs may increase in the warehouse, this is likely to be offset by the closure of the Bluescope site in 2020.

¹⁰ With no site-specific data, this has come via PAYCE and other consultants who have been in discussions with current tenants on site.

The project case would therefore deliver an increase of between 1,955% to 2,224% in industrial or urban services jobs, compared to the current on-site situation, depending on the final usage mix, with an on-site floorspace increase of 167% above the current floorspace. A full industrial build out would deliver between approximately 600 and 700 additional net new industrial jobs above the PAYCE project case.

Accommodating Cumberland’s future demand

The proposed inclusion of between 75,000 square metres of industrial or urban services floorspace (at an average FSR of between 1:1 and 1.5:1) to the northern end of the precinct is significant in the context of the Cumberland LGA’s future growth. The site alone could accommodate between 73% and 116% of the LGA’s future Urban Services requirements or between 25%-40% of the industrial demand, as illustrated in Table 16. It is noted that if the retention of the current warehouse floorspace is retained, then the total net floorspace for both scenarios would accommodate slightly less of the total LGA demand.

TABLE 16: COMPARISON OF PAYCE PROPOSED SCENARIO AGAINST FUTURE CUMBERLAND LGA DEMAND

	Future LGA floorspace demand (sqm)	Development scenarios	Manchester Road proportion of total LGA demand
Urban services floorspace demand (2016-36)	102,835	PAYCE project case	73%
		Industrial build out case	116%
Industrial floorspace demand (2016-36)	297,565	PAYCE project case	25%
		Industrial build out case	40%

The PAYCE project case also proposes 7,500 square metres of commercial floorspace. Applying a more general jobs to floorspace ratio of 25 square metres per job to this floorspace could accommodate approximate 300 office-based jobs. This would accommodate around 16% of Cumberland’s future demand for Professional, Scientific and Technical Services jobs expected in the LGA by 2036, as shown in Table 17.

TABLE 17: COMMERCIAL FLOORSPACE PROVISION – SCENARIO COMPARISON

Scenario	Proposed floorspace (sqm)	Floorspace to jobs ratio	Total jobs	Expected demand (net) 2016-36	Percentage of future demand accommodated
PAYCE proposal	7,500	25	300	1,906	16%
Full industrial scenario	0	25	0	1,906	0%

Floorspace summary

In both the PAYCE and industrial build out scenarios, the Manchester Road can contribute significantly to the accommodation of Cumberland's future floorspace demand. Redevelopment of the site to include a significant amount of industrial or urban services floorspace will therefore not only increase the industrial job density on site, it will also play a significant role in meeting future demand across the LGA. The addition of commercial floorspace in the PAYCE proposal slightly offset the discrepancy between the two scenarios, with a gap of approximately 400 jobs.

TABLE 18: TOTAL EMPLOYMENT FLOORSPACE (SQM) GROWTH IN MANCHESTER ROAD SITE – 2016-2036

Scenario	Current Jobs	Proposed industrial floorspace (sqm)	Proposed commercial floorspace (sqm)	Proposed industrial jobs (net)	Proposed commercial jobs (net)	Total net jobs (industrial + commercial)
Base case	50	28,090	0	0	0	0
PAYCE project case scenario	50	75,000	7,500	<1,122	300	<1,422
Industrial build out scenario	50	119,280	0	<1,814	0	<1,814

5.3 Economic impacts

EIA method

An Economic Impact Assessment (EIA) measures the degree to which the economic stimulus associated with a project accumulates in total economic activity levels of a defined region, i.e. after measuring the cumulative impact of all the buyer/ supplier transactions that are induced in the region. This separate from the projection of additional jobs that the site is likely to accommodate in both development scenarios.

The basic steps in undertaking an EIA include:

1. Isolating how the project stimulates the regional economy¹¹ (direct impacts).
2. Generating region specific econometric models and subsequently deriving economic multipliers for major regional industry groups.
3. Applying these multipliers (by relevant industry group) to the direct impacts to estimate total regional impacts in terms of regional (output) value added and employment.

Economic stimuli (direct impacts)

The economic stimuli include:

- Capital (construction) activity which will directly impact on the Construction industry, and
- Ongoing employment outcomes on the site based on employment land uses which are proposed.

SGS has assumed that the construction contract for the project will be awarded to a business originating from the local area, although it is expected that the contractors will use inputs and materials from outside of the 'old' Auburn LGA area. This assumption is supported by recent 2016 Census data that indicates a relatively high number of people within Cumberland are employed in trades, labouring and machine operation, relative to both NSW and Australia.

Definition of regional multipliers

¹¹ For this purpose of this project, the local area was defined as the Auburn Local Government Area, as reconfiguring the Input Output Model for the new Cumberland LGA geography is beyond the scope of this report.

To calculate the indirect impacts associated with the direct impacts outlined above, SGS has used regional economic multipliers generated by its internal econometric modelling techniques.

In essence, SGS takes the inter-industry relationships (buyer–supplier transaction) that are measured by the Australian Bureau of Statistics in the National Accounts,¹² and scales these relationships down to a state level initially and then subsequently a regional level using available datasets and accepted mathematical techniques.

The results of this scaling process are a set of regional industry specific multipliers which estimate how spending in a specific regional industry, via the assessed direct impacts (stimuli), flows through to total regional value added (or contribution to GRP net of taxes), and full time equivalent employment levels.

Project case assessed economic impacts

Each of the scenarios identified in Section 1.2 have been assessed using the EIA method above. The results of this are discussed below.

Construction phase employment

During construction, which is assumed to be spread across a seven-year timeframe, the project is expected to generate the following additional full time equivalent jobs:

- **Direct** – 1,017 additional FTE jobs per year for seven years (based on a direct multiplier of 8.34 jobs per million dollars of construction spending.¹³
- **Indirect** – 2,295 additional FTE jobs per year for seven years.
- **Total** – 3,312 additional FTE jobs per year for seven years.

Construction phase Gross Value Added (GVA)

During construction, which is assumed to be spread across a seven-year timeframe, the project is expected to generate:

- **Direct** – \$854.00 million in total spread across a seven-year period.¹⁴
- **Indirect** – \$2,612.41 million in total spread across a seven-year period.
- **Total** – \$3,466.41 million in total spread across a seven-year period.

¹² Particularly the Australian Input-Output Tables (ABS Cat. No. 5209.0).

¹³ Based on PAYCE and IMPLAN

¹⁴ Based on PAYCE and IMPLAN.

Operational phase employment

Economic Impact modelling of FTE job figures for the operational phase of the proposal require a single figure from which to base the indirect calculations. SGS has used an estimate of urban services jobs as its basis for this and based the proportion on the observed split I the Cumberland LGA. As such ,the figure used (1,038 jobs) sits in between the range of jobs identified in Section 5.2.

TABLE 19: TOTAL EMPLOYMENT GENERATED BY PROJECT CASE

Sub-industry classification	Direct Jobs	Type 2B Multiplier	Indirect Jobs	Total Jobs
Construction Services	185	1.071	198	383
Repair and Maintenance	164	0.290	48	212
Printing (including the Reproduction of Recorded Media)	154	0.504	78	232
Building Cleaning, Pest Control and Other Support Services	113	0.437	49	162
Hardware and Building Supplies Retailing	72	0.459	33	105
Motor Vehicle and Motor Vehicle Parts Retailing	72	0.459	33	105
Waste Collection, Treatment and Disposal Services	62	0.643	40	101
Basic Material Wholesaling	51	1.033	53	104
Rental and Hiring Services (except Real Estate)	51	2.267	116	168
Building Construction	41	2.255	93	134
Electricity Supply	21	4.615	95	115
Water Supply, Sewerage and Drainage Services	21	1.077	22	43
Heavy and Civil Engineering Construction	21	5.809	119	140
Gas Supply	10	0.892	9	19
Garden Supplies Retailing	0	0.459	0	0
Professional, technical and scientific services	300	0.959	288	588
Total jobs	1,338		1274	2,612

Source: SGS, 2018.

Operational phase GVA (\$million)

TABLE 20: TOTAL VALUE ADDED GENERATED BY PROJECT CASE (\$ MILLION)

Sub-industry classification	Direct Value Added	Type 2B Multiplier	Indirect Value Added	Total Value Added
Construction Services	\$113.99	1.604	\$182.84	\$296.83
Repair and Maintenance	\$10.10	0.870	\$8.79	\$18.88
Printing (including the Reproduction of Recorded Media)	\$52.81	0.928	\$49.01	\$101.81
Building Cleaning, Pest Control and Other Support Services	\$7.84	1.177	\$9.22	\$17.06
Hardware and Building Supplies Retailing	\$16.41	0.751	\$12.33	\$28.74
Motor Vehicle and Motor Vehicle Parts Retailing	\$16.41	0.751	\$12.33	\$28.74
Waste Collection, Treatment and Disposal Services	\$0.86	0.495	\$0.42	\$1.28
Basic Material Wholesaling	\$22.01	0.922	\$20.30	\$42.31
Rental and Hiring Services (except Real Estate)	\$12.59	1.508	\$18.98	\$31.56
Building Construction	\$39.81	2.520	\$100.33	\$140.14
Electricity Supply	\$1.00	1.085	\$1.09	\$2.09
Water Supply, Sewerage and Drainage Services	\$0.35	0.547	\$0.19	\$0.54
Heavy and Civil Engineering Construction	\$39.66	1.422	\$56.39	\$96.05
Gas Supply	\$0.14	0.764	\$0.10	\$0.24
Garden Supplies Retailing	\$0.00	0.751	\$0.00	\$0.00
Professional, technical and scientific services	\$41.18	0.912	\$37.56	\$78.74
Total urban services	\$375.16		\$509.87	\$885.02

Source: SGS, 2018.

Industrial build out assessed economic impacts

Construction phase employment

During construction, which is assumed to be spread across a two-year timeframe, the project is expected to generate the following additional full time equivalent jobs:

- **Direct** – 723 additional FTE jobs per year for 2 years (based on a direct multiplier of 8.34 jobs per million dollars of construction spending.¹⁵
- **Indirect** – 748 additional FTE jobs per year for 2 years.
- **Total** - 1,471 additional FTE jobs per year for 2 years.

Construction phase Gross Value Added (GVA)

During construction, which is assumed to be spread across a two-year timeframe, the project is expected to generate:

- **Direct** – \$173.45 million in total spread across a two-year period.¹⁶
- **Indirect** – \$530.59 million in total spread across a two-year period
- **Total** – \$704.04 million in total spread across a two-year period.

¹⁵ Based on PAYCE and IMPLAN.

¹⁶ Based on assumption of 142,000 square metres of combined industrial, showroom and office floorspace, from Rawlinsons.

Operational phase employment

TABLE 21: TOTAL EMPLOYMENT GENERATED BY INDUSTRIAL BUILD OUT SCENARIO

Sub-industry classification	Direct Jobs	Type 2B Multiplier	Indirect Jobs	Total Jobs
Construction Services	294	1.071	315	609
Repair and Maintenance	261	0.290	76	337
Printing (including the Reproduction of Recorded Media)	245	0.504	124	369
Building Cleaning, Pest Control and Other Support Services	180	0.437	79	258
Hardware and Building Supplies Retailing	114	0.459	52	167
Motor Vehicle and Motor Vehicle Parts Retailing	114	0.459	52	167
Waste Collection, Treatment and Disposal Services	98	0.643	63	161
Basic Material Wholesaling	82	1.033	84	166
Rental and Hiring Services (except Real Estate)	82	2.267	185	267
Building Construction	65	2.255	147	213
Electricity Supply	33	4.615	151	183
Water Supply, Sewerage and Drainage Services	33	1.077	35	68
Heavy and Civil Engineering Construction	33	5.809	190	223
Gas Supply	16	0.892	15	31
Total jobs	1,650		1,568	3,219

Source: SGS, 2018

Operational phase GVA (\$million)

TABLE 22: TOTAL VALUE ADDED GENERATED BY INDUSTRIAL BUILD OUT SCENARIO (\$ MILLION)

Sub-industry classification	Direct Value Added	Type 2B Multiplier	Indirect Value Added	Total Value Added
Construction Services	\$181.29	1.604	\$290.79	\$472.08
Repair and Maintenance	\$16.06	0.870	\$13.97	\$30.03
Printing (including the Reproduction of Recorded Media)	\$83.99	0.928	\$77.94	\$161.93
Building Cleaning, Pest Control and Other Support Services	\$12.46	1.177	\$14.67	\$27.13
Hardware and Building Supplies Retailing	\$26.10	0.751	\$19.60	\$45.71
Motor Vehicle and Motor Vehicle Parts Retailing	\$26.10	0.751	\$19.60	\$45.71
Waste Collection, Treatment and Disposal Services	\$1.36	0.495	\$0.68	\$2.04
Basic Material Wholesaling	\$35.01	0.922	\$32.28	\$67.29
Rental and Hiring Services (except Real Estate)	\$20.02	1.508	\$30.18	\$50.20
Building Construction	\$63.32	2.520	\$159.56	\$222.87
Electricity Supply	\$1.59	1.085	\$1.73	\$3.32
Water Supply, Sewerage and Drainage Services	\$0.56	0.547	\$0.31	\$0.87
Heavy and Civil Engineering Construction	\$63.07	1.422	\$89.69	\$152.76
Gas Supply	\$0.22	0.764	\$0.17	\$0.38
Total urban services	\$531.15		\$751.16	\$1,282.31

Source: SGS, 2018.

EIA findings

The Economic Impact Assessment component indicates that while both scenarios deliver a significant number of direct and indirect jobs, the higher provision of floorspace under the Full build out case delivers slightly higher job and GVA projections. This is expected given the significant larger amount of floorspace under that proposal.

TABLE 23: SUMMARY OF ECONOMIC IMPACTS: PROJECT CASE VS FULL INDUSTRIAL CASE

Scenario	Jobs (FTE)			Gross Value Added (\$m)		
	Direct Jobs	Indirect Jobs	Total Jobs	Direct Value Added	Indirect Value Added	Total Value Added
PAYCE project case						
Construction*	1,017	2,295	3,312	\$854	\$2,612	\$3,466
Operation	1,338	1,274	2,612	\$375	\$510	\$885
Industrial build out case						
Construction**	723	748	1471	\$173	\$531	\$704
Operation	1,650	1,568	3,219	\$531	\$751	\$1,282

Source: SGS, 2018

*Assumed to be each year for 7 years

** Assumed to be each year for 2 years

5.4 Summary of findings

Demand for urban service and industrial land

The highest rates of growth in employment in the Cumberland LGA are expected in non-industrial sectors. These include Retail Trade, Accommodation and Food Services, Professional, Scientific and Technical Services, Public Administration and Safety, Education and Training, and Health Care and Social Assistance. Manufacturing is forecast to grow to 2036.

However, industrial and urban services jobs are expected to make up a significant proportion of Cumberland's economy. Though the forecasts suggest that there will be smaller increases in these sectors to 2036 compared to others, industrial related industries will account for around 33,000 jobs, and urban services, 26,000 jobs in 2036. This represents growth of 11% and 17% respectively from 2016 levels, and will account for 33% of total jobs in the LGA.

Despite shifts towards other industries, there will still be demand for industrial floorspace in Cumberland to service expected jobs growth. Over 1 million square metres of additional employment floorspace will be required in the Cumberland LGA by 2036. Of this growth, over 297,000 square metres will be needed for industrial-related uses. The key land use categories expected to accommodate this floorspace include freight and logistics, local light industrial, light manufacturing, and urban services.

Employment floorspace potential at the site

Both the Project case and Industrial build out scenario will deliver a significant increase in employment at the site. Compared to the base case, the Project case is expected to deliver a net increase of between 977 and 1,122 jobs (or between 1,955% and 2,224%) and an additional 300 commercial jobs. The Industrial build out could deliver between 1,584 and 1,814 jobs (or an increase of between 3,168% and 3,628%).

Either scenario has the potential to deliver a significant proportion of the Cumberland LGA's floorspace demand. The Project case could deliver approximately 25% of the LGA's industrial floorspace demand, and 75% of urban services demand. The Industrial build out scenario has the potential to deliver around 40% of the industrial floorspace demand, and 116% of floorspace demand for urban services.

Job creation and value add

The Project case is likely to generate a higher number of jobs and value-add during construction. The Project case will deliver a higher number of jobs and create more Gross Value-Added than the full industrial scenario due to the greater complexity of residential versus industrial construction

The Industrial build out case is likely to generate a higher number of jobs and value-add during construction. The Full industrial build-out will deliver a higher number of jobs and create more Gross Value-Added during operations compared to the PAYCE scenario. However his, does not take into consideration the other social benefits that the PAYCE scheme will deliver (discussed in the following chapter).

6. SOCIAL IMPACTS

This chapter outlines the likely social impacts of the proposal, including need for new community and recreation facilities as part of the development.

To understand the likely social impact of the proposal on its surrounding area, SGS has undertaken a Social Impact Assessment (SIA). This considers the existing context of the site, the potential future population and housing types under the Project scenario, and existing levels of provision of community and recreation facilities. This was used to identify the likely need for new facilities required as part of the development, and potential impacts on residential areas surrounding the site.

6.1 Anticipated dwellings and population profile of residents

As identified above, the Project case is expected to include approximately 1,150 new dwellings on the subject site, which will be delivered in the form of apartments, with a maximum building height of 12 storeys.

Assumed average household size

Based on an average household size of 2.8 people per apartment in the Cumberland LGA as of the 2016 Census,¹⁷ the estimated total population of these dwellings is around 3,381. SGS notes that in 2016 the suburb of Auburn (in which the site is located) had an even higher average number of people per dwelling, as 3.4 per unit.¹⁸ Lower population estimates based on average household sizes for central Sydney or Newington (developed in the last 15 years) of 2.4 could be used to identify potential social impacts, however, the higher estimate has been assumed to ensure that all potential impacts can be adequately addressed.

Estimated age profile

The 2016 Census shows that around 45% of all units in the suburb of Auburn¹⁹ were occupied by families with children, of whom had an average of 2.1 children per family. Using these assumptions, 518 of the 1,150 proposed new units are assumed to be occupied by families with children aged 17 and under, with the total number of children estimated to be around 1,087. The age profile of these children is assumed to be the same as the existing population of children in Auburn, giving the age profile shown below in Table 24.

¹⁷ ABS Census, Community Profile Cumberland LGA, Table G32, 2016, and SGS calculations.

¹⁸ ABS Census, Community Profile Auburn State Suburb, Table G32, 2016, and SGS calculations.

¹⁹ State Suburb – 'Auburn SSC'.

TABLE 24: CHILDREN IN NEW DEVELOPMENT BY AGE (ESTIMATE)

Age in years	Auburn (SSC)	% of all children in Auburn	Estimated number of children under Project case
0	561	6.6%	72
1	628	7.4%	81
2	592	7.0%	76
3	537	6.4%	69
4	556	6.6%	72
0-4 years	2,885	34.1%	371
5	525	6.2%	67
6	522	6.2%	67
7	472	5.6%	61
8	432	5.1%	56
9	425	5.0%	55
5-9 years	2,382	28.2%	306
10	425	5.0%	55
11	390	4.6%	50
12	412	4.9%	53
13	365	4.3%	47
14	397	4.7%	51
10-14 years	1,983	23.5%	255
15	375	4.4%	48
16	388	4.6%	50
17	440	5.2%	57
Total Children (aged 17 and under)	8,453	100.0%	1,087

Source: ABS Census 2016, Community Profile Auburn State Suburb and SGS Economics and Planning calculations.

6.2 Assessment of need for community and recreation facilities

Benchmarks for provision

The estimated population and profile has been used to assess additional demand for community and recreation facilities generated by the proposal, using the benchmarks for social infrastructure and open space planning in NSW shown in Table 25 and Table 26 below.

TABLE 25: SOCIAL INFRASTRUCTURE BENCHMARKS

Infrastructure type	Benchmark standard	Source
<i>Halls and centres</i>		
Youth centre	1:10-30,000 people	Draft Development Contributions Guidelines (2009)
Multi-purpose community/neighbourhood centres	Small – 1:3,500-6,000 people	Draft Development Contributions Guidelines (2009)
	Large – 1:15-20,000 people	
Meeting halls	Small – 1:10,000 people	Draft Development Contributions Guidelines (2009)
	Large – 1:20-30,000 people	
Community Service Centre	1:60,000	Growth Centres Development Code
Local Community Centre	1:6,000 people	Growth Centres Development Code
District Community Centre	1:20,000 people	Growth Centres Development Code
<i>Libraries</i>		
Library - Branch	Branch – 1:10,000 people	Draft Development Contributions Guidelines (2009)
	1:33,000 people	Growth Centres Development Code
Library - Central	Central - 1:20-35,000 people	Draft Development Contributions Guidelines (2009)
	District - 1:40,000 people	Growth Centres Development Code
<i>Arts and cultural centres</i>		
Performing Arts/Cultural Centre	1:30,000 people	Growth Centres Development Code
<i>Child care and education</i>		
Long day care centres	1:320 children aged 0-5 years	Draft Development Contributions Guidelines (2009)
Occasional care centres	1:12-15,000 people	Draft Development Contributions Guidelines (2009)
	Outside of school hours care	1:4-6,000 people
Pre-school	1:4-6,000 people	Draft Development Contributions Guidelines (2009)
Primary school	1 school : 2,000-2,500 new dwellings (i.e.: for greenfield sites)	Department of Education and Communities' Planning Advisory Guidelines
	1:1,500 new dwellings	Growth Centres Development Code
Secondary school	1 school: 6,000-7,500 new dwellings	Department of Education and Communities' Planning Advisory Guidelines
Public high school	1:4,500 dwellings	Growth Centres Development Code
<i>Health</i>		
Hospital	2 beds:1000 people	Growth Centres Development Code
Community Health Centre	1:20,000 people	Growth Centres Development Code
<i>Emergency services</i>		
Ambulance	Size: To accommodate 12 ambulances	Growth Centres Development Code
Fire Station	Size: 2,000 sqm min	Growth Centres Development Code
Police Station	Size: 4,000 sqm (for first 10 yrs)	Growth Centres Development Code

Source: NSW DP & E Sydenham to Bankstown Draft Social Infrastructure Study, Sept 2015.

TABLE 26: DEFAULT STANDARDS FOR OPEN SPACE PLANNING IN NSW

	Hierarchy level	Size	Distance from most dwellings	Share of non-industrial land	Locally specific alternatives to meeting this standard
Parks	Local	0.5-2 ha	400m	2.6%	Civic spaces, plazas, pocket parks, portion of a regional park or quarantined area of a conservation or landscape area
	District	2-5 ha	2 km	0.6%	Beach and river foreshore areas, or quarantined area of a conservation or landscape area
Linear and Linkage	Local	up to 1 km	n/a	0.9%	Local primary schools, portion of a district park
	District	1-5 km	n/a	0.1%	Secondary schools, portion of a regional park
Sub-total (Parks/Linear and Linkage)				4.2%	
Outdoor sport	Local	5 ha	1 km	2.0%	Local primary schools, portion of a district park
	District	5-10 ha	2 km	2.6%	Secondary schools, portion of a regional park
Sub-total (Outdoor Sport)				4.6%	
Total (Local/District)				8.8% Say 9%	Could be reduced through shared areas using above alternatives
Parks	Regional	5+ ha	5-10 km	2.3%	
Linear and Linkage	Regional	5+ km	5-10 km	0.7%	
Outdoor Sport	Regional	10 +ha	5-10 km	2.9%	
Total (Regional)				5.9% Say 6%	
Grand Total				14.7% Say 15%	

Source: Recreation and Open Space Planning Guidelines for Local Government, NSW Planning Department, 2011.

Additional on-site facilities

Table 27 below summarises the estimated needs of the incoming population under the Project case. With the expected 1,150 dwellings, and as shown in Table 24 above, this may include:

- Around 369 children aged 0-4,
- Around 463 children aged 5-12 (primary school age), and
- Around 253 children aged 13-17 (secondary school age).

TABLE 27: SUMMARY OF COMMUNITY AND OPEN SPACE NEEDS AND PROVISION

Infrastructure, facility or service	Estimated need generated by development	Off-site provision or capacity	On-site response
Primary Schools	<ul style="list-style-type: none"> Approx. 463 places (301 in government, 56 in Catholic, 106 in other non-government) 	<ul style="list-style-type: none"> Auburn Public School is closest to the site and has some capacity, but may not cater to all demand.²⁰ Existing capacity amongst nearest 5-6 schools. 	<ul style="list-style-type: none"> Stronger community would be developed if some primary school provision included on site. Opportunity for innovation, e.g. in providing a K-2 facility, or a special needs school for around 100 students.
Secondary Schools	<ul style="list-style-type: none"> 253 places (approx. 170 in government, 35 in Catholic and 48 in other non-government). 	<ul style="list-style-type: none"> Likely to be capacity in existing schools to accommodate additional students. 	<ul style="list-style-type: none"> Not required.
Pre-schools	<ul style="list-style-type: none"> 1 pre-school 	<ul style="list-style-type: none"> May be existing capacity in nearby facilities. 	<ul style="list-style-type: none"> Est. population less than benchmark but provision of 1 pre-school could be meet wider demand and contribute to community facilities development. On-site provision more convenient for residents.
Child Care	<ul style="list-style-type: none"> 1-2 long day care centres. 	<ul style="list-style-type: none"> Good spread of facilities located nearby. 	<ul style="list-style-type: none"> Could be included in proposed retail component within residential area
Community Halls, Centres or Hubs	<ul style="list-style-type: none"> 1 multi-purpose neighbourhood centre 	<ul style="list-style-type: none"> Residents would have access to existing hubs and libraries in Cumberland LGA. 	<ul style="list-style-type: none"> Included as part of 1,000 square metre community centre Subsidised office space could be included as part of development.
Health Facilities	<ul style="list-style-type: none"> Population will not reach threshold for a community health centre, though may be demand for smaller facilities 	<ul style="list-style-type: none"> Many existing facilities nearby. 	<ul style="list-style-type: none"> Retail component of development could include space for medical practitioners
Parks, Open Space and Sportsgrounds	<ul style="list-style-type: none"> Target of 15% of non-industrial land under guidelines 	<ul style="list-style-type: none"> Access to higher level sporting facilities nearby e.g. SOP. Regional level parkland also nearby e.g. Bicentennial Park. 	<ul style="list-style-type: none"> Approx. 20,000 square metres of open space included in proposal (approx. 28% of non-industrial land on site), with mix of outdoor recreation facilities

Source: SGS Economics and Planning, 2018.

The table shows that demand for primary school, secondary school and pre-school places would need to be satisfied 'off-site', though provision of a pre-school / early years school facility could be included as part of the development. Otherwise, most community needs for the incoming population could be met on-site within the retail and community centre components of the proposal. The open space provision is in line with the standard for the share of land devoted to open space, and in terms of access.

²⁰ This was confirmed in telephone conversations with staff at the relevant schools in 2017.

6.3 Social impacts and benefits

Additional facilities for the existing 'host' community

The provision of new community and recreation facilities under the Project case will provide convenient access to services, an attractive living environment for residents and workers, and encourage social interaction between residents. In addition, the facilities provide a new walkable focus of community life for residents in the 'host' community within a 5-10 minute walk of the proposed community centre. A new community of around 5,700 people (including the estimated future population at the site) will be created.

Existing residents in the area will have access to different facilities as well as new employment opportunities and additional open space, which are currently not provided in the immediate area. It may save them travelling further to access employment, shops and services elsewhere in Auburn or surrounding suburbs.

Residents from surrounding areas, as well as future residents at the site will be able to access benefits associated with the new River Park and the two hectares of open space. The location of the proposed site close to the Clyde and Auburn Railway stations will also provide the opportunity for the new facilities and services to be conveniently utilised by residents of both the site and adjacent areas on their way to or from the railway stations.

Impact of new dwellings

The *Central City District Plan* included a target of 53,500 additional dwellings in the whole Central City District between 2016 and 2021. Of this increase it is anticipated that 9,350 additional dwellings will be provided in the Cumberland LGA.

The new dwellings proposed under the Project case (1,150) will provide a significant contribution to the achievement of this target. In addition, the site is within walking distance of two railway stations, providing easy access to employment and higher education opportunities in the Sydney CBD and the Parramatta Town Centre. There will be a productivity dividend from new workers having this access to opportunities. The site also has good access to existing schools and health services, and will support the vitality of the Auburn Town Centre.

As noted previously, a minimum of around 58 new affordable housing units will be included as part of the new development. There is a growing waiting time for social housing in the area, with the wait for social housing at least five years and often as much as 10 years or more. These additional dwellings will thus provide a substantial benefit to households currently waiting for social housing and paying more than 30% of income in rent in the private market.

Other social benefits

The proposed new development will provide broader benefits and opportunities for people in the suburb of Auburn, including more housing opportunities. The suburb is currently home to people from a diverse range of cultural and language groups, with relatively low household incomes, a relatively high number of people per dwelling, and a relatively high proportion of TAFE and university students.

Nearly all students at the Auburn Public School come from Non-English speaking backgrounds, and speak a total of 35 different languages. A significant number are from families with refugee status. It is very important for these families to have access to conveniently located support services, to be able to live close to their community networks, and to be able to access employment opportunities.

A relatively high proportion of the employed population of Auburn is employed in the retail, hospitality, and social service industries. The Project case, through the retention of 75,000 square metres of industrial floorspace alongside 7,500 of commercial office space, will provide nearby job opportunities for this labour force.

The relatively convenient and quick public transport access from Auburn to the CBD and to Parramatta is likely to increase the attractiveness of Auburn as a residential location for employees in the retail, hospitality and social service sectors. Employees in these industries may not work standard hours and could thus have difficulty accessing employment if they live in Sydney's outer suburbs and need to rely on public transport.

University and TAFE students living in Auburn will also generally find it convenient to use public transport to access higher education facilities located in the Sydney CBD or Parramatta.

Given that many of the current residents of the suburb of Auburn are low income households, access to free or low-cost opportunities for active recreation and social engagement will also provide physical and mental health benefits.

6.4 Summary of findings

Need for facilities

The Project case would likely generate demand for primary and secondary school places, though this would likely be able to be accommodated in existing schools. Based on current demographics for Auburn, approximately 460 primary and 250 secondary school places would be needed, with some of these accommodated at non-government schools.

There would likely be demand for 1 to 2 child care centres, and potentially for a pre-school at the site. A child care centre could be included in the proposed commercial/retail component. The expected population of the development does not reach the benchmark for a new pre-school, but provision of such a facility would be convenient for residents and could meet wider demand in the area.

There is likely to be a need for a community meeting place within the site, and there may also be demand for health facilities. A 1,000 square metre community centre is included in the proposal, which would satisfy this demand. The commercial/retail component of the site could include space for medical practitioners.

The expected provision of open space and recreation facilities as part of the proposal would likely satisfy the requirements under the guidelines. Approximately 20,000 square metres of open space is included in the proposal, and the Auburn area also has access to higher order and regional sport and recreation facilities nearby.

Social impacts and benefits

The provision of new facilities as part of the development will deliver benefits for the existing community around the site. This will include access to services, employment opportunities, and improved public open space.

The Project case would provide a significant contribution to the Cumberland LGA's dwelling target under the Central City District Plan. The Project case is expected to deliver 1,150 new dwellings, a significant portion of the 9,350 dwellings target under the Plan. This will also include affordable housing, and helping to alleviate pressures on social housing and households experiencing housing stress in the Auburn area.

The development has the potential to deliver benefits and opportunities for both residents and those currently living in the Auburn area. This may include new employment opportunities, access to new facilities, and opportunities for recreation and social engagement.

7. STRATEGIC ASSESSMENT

This chapter outlines the strategic justification for the Manchester Road proposal, including in relation to the Greater Sydney Region Plan. It uses a Net Community Benefit (NCB) test to compare the marginal costs and benefits of each development scenario. It also uses a Multi-Criteria Analysis (MCA) framework, based on the GSC's Ten Directions, to compare both options from a strategic planning perspective.

7.1 Net Community Benefit (NCB) test

Method

The NCB test aims to answer two questions:

- What wider community impacts are likely to arise from the proposed development at Manchester Road compared to what might be expected to happen in a business as usual scenario under the existing land use arrangements?
- To what extent would the external community benefits arising from the development outweigh the costs associated with this urban development?

In answering these two questions a Cost Benefit Analysis (CBA) framework is adopted, with the following elements:

- Identification of the marginal costs and benefits that would be generated by both the PAYCE proposal and a build out under current controls, compared to a business as usual scenario
- Considering both traded effects (e.g. costs of construction) and non-traded externalities (e.g. value of open space), and
- A qualitative assessment of the likely order of magnitude of the marginal costs and benefits.

The suite of potential costs and benefits from either of the development scenarios relative to the base case are listed in the Table 28. These form the framework for the NCB and the qualitative assessment of both scenarios. A detailed explanation of each of the Marginal Costs and benefits is included in Appendix 1.

TABLE 28: MARGINAL COSTS AND BENEFITS

Marginal costs	Marginal benefits
Infrastructure costs to support higher intensity of land uses on the site (roads, drainage, utilities)	Infrastructure cost savings from developing in an infill location compared to development on the urban fringe
Cost of open space provision	Creation of additional development capacity via a rezoning which facilitates additional floorspace (for employment, housing or both)
Nuisance and disturbance for neighbours and others during the construction period	Efficiencies for urban services businesses able to satisfy latent market demand (Hybrid scenario only)
Relocation costs for existing businesses displaced by new development	Improved 'housing services' from dwellings provided in a more accessible location
Loss of full option value of industrial land	Reductions in vehicle kilometres (VKT) for urban services businesses being closer to customers and suppliers, due to less 'dead running' (mixed use scenario only)
	Reductions in vehicle kilometres (VKT) for workers and residents from being in a more accessible location
	Health benefits for residents and workers as a result of increased active transport activity (walking and cycling)
	Amenity improvements for residents and workers from open space provision
	Improved access to and value from open space for residents in the broader precinct
	Option value of remaining industrial land
	Additional value of mixed use urban environment
	Additional community facilities

Source: SGS Economics and Planning, 2017.

Qualitative assessment

The marginal costs and benefits generated from moving from the Base Case to the two Project Case scenarios are described qualitatively in

Table 29.

Each marginal cost or benefit is described as being Large, Moderate, Small or Minor (where the latter means inconsequential). Those costs and benefits that are considered Moderate or Large are most likely to influence the overall findings of a cost benefit analysis to determine which scenario will deliver the greatest net community benefit.

The assessment finds that the PAYCE Project case scenario would generate two moderate costs, three moderate benefits, and seven moderate benefits, which are likely to be significant in magnitude. The full industrial scenario would generate one moderate cost and four moderate benefits. The full industrial scenario lack the diversity of benefits that the PAYCE project case provides.

TABLE 29: PERFORMANCE MEASURE NOTES

Impacts	PAYCE Project case Anticipated scale of marginal impacts vs Base Case	Full industrial build out scenario Anticipated scale of marginal impacts vs Base Case
COSTS		
Infrastructure costs to support higher intensity of land uses on the site (roads, drainage, utilities)	Moderate	Moderate
Cost of open space provision	Moderate	Minor
Nuisance and disturbance for neighbours and others during construction period	Small	Minor
Cost for existing industrial businesses to relocate	Minor	Minor
Loss of future option value	Moderate	Minor
BENEFITS		
Infrastructure cost saving relative development at the urban fringe	Moderate	Moderate
Creation of additional development capacity (for employment, housing or both)	Moderate	Moderate
Efficiencies for urban service business (latent demand)	Moderate	Moderate
Improved 'housing services'	Moderate	(No benefit in this scenario)
Reductions in vehicle kilometres (VKT) for urban services business due to less 'dead running'	Moderate	Moderate
Reductions in vehicle kilometres (VKT) for workers and residents	Small	Small
Health benefits for residents and workers as a result of more walking and cycling	Small	Small
Improved access to open space for residents in the broader precinct	Moderate	Small
Amenity improvements from open space provision	Small	Small
Value from mixed use urban environment	Moderate to Large	(No benefit in this scenario)
Additional community facilities	Moderate	Small

Source: SGS Economics and Planning, 2018.

Net Community Benefit findings

The Net Community Benefit (NCB) test suggests that the mixed use option proposed by PAYCE is likely to deliver an increase in wider benefits compared to the Base Case, including, for example:

- The provision of accessible new homes and employment,
- Infrastructure cost savings compared to an alternative greenfields development,
- Increased open space values given the proposed River Park in the Duck River Corridor,
- More efficient provision of urban services activities, nearer to customers,
- A higher value mixed use urban environment.

Based on this qualitative review, it is assumed that both alternative scenarios would generate a net community benefit relative to a business as usual scenario.

However, the PAYCE project scenario has more benefits than the residential scenario and although this is a qualitative assessment of costs and benefits, is likely to generate a higher benefit cost ratio than a full industrial build out.

7.2 Strategic Planning Multi-Criteria Analysis

Method

In addition to a consideration of the costs and benefits of the two development scenarios, it is important to compare with Greater Sydney's strategic objectives. The Manchester Road's designation under Objective 23 of the Greater Sydney Region Plan places its industrial zoning under a 'Review and Manage' status. This indicates the importance of the precinct and the need to carefully plan its future land use. But unlike the 'Retain and manage' status of many of the LGA's to the east and north of Cumberland, the 'Review and Manage' status permits the consideration of alternative land use scenarios.

As discussed in previous chapters, although the PAYCE proposal reduces the industrial *land*, it actually significantly increases the industrial *floorspace*. However, to ensure that the 'Review and Manage' status is considered, this report uses the Greater Sydney Region Plan's 10 Directions and 38 Objectives to consider how the proposal addresses the full spectrum of strategic planning objectives.

Both the PAYCE Project case and the alternative full industrial build out scenario have been tested. This process provides a qualitative scoring process that compares the relative merits of each scenario to the base case AND relative to one another.

Table 30 identifies the scoring method.

TABLE 30: ABILITY OF PROPOSAL TO CONTRIBUTE TO PLANNING STRATEGY

Strong (and/or relatively higher than the other scenario)	+2
Moderate (and/or relatively lower than the other scenario)	+1
Not applicable/ negligible	0

Summary of results

A summary of the scores for both scenarios against each objective is provided in Table 31. An explanation for each score is provided in Appendix 2.

TABLE 31: SUMMARY OF STRATEGIC PLANNING ASSESSMENT MATRIX

GSC DIRECTION / Objective	PAYCE Project Scenario score	Alternative industrial build out score
COMMUNITY AND OPEN SPACE NEEDS AND PROVISION		
Infrastructure supports the three cities	0	0
Infrastructure aligns with forecast growth	0	0
Infrastructure adapts to meet future needs	0	0
Infrastructure use is optimised	1	0
	1	0
A COLLABORATIVE CITY		
Benefits of growth realised by collaboration of governments, community and business	0	0
	0	0
A CITY FOR PEOPLE		
Services and infrastructure meet communities' changing needs.	2	1
Communities are healthy, resilient and socially connected	2	0
Greater Sydney's communities are culturally rich with diverse neighbourhoods	1	0
Greater Sydney celebrates the arts and supports creative industries and innovation	2	2
	7	3
HOUSING THE CITY		
Greater housing supply	2	0
Housing is more diverse and affordable	1	0
	3	0
A CITY OF GREAT PLACES		
Great places that bring people together	2	0
Environmental heritage is identified, conserved and enhanced	1	0
	3	0
A WELL-CONNECTED CITY		
A metropolis of Three Cities- integrated land use & transport creates walkable & 30-min cities	2	1
The Eastern, GOP & Western Economic Corridors are better connected & more competitive	1	2
Freight and logistics network is competitive and efficient	1	2
Regional connectivity is enhanced	0	0
	4	5

DIRECTION / Objective	PAYCE Project Scenario score	Alternative industrial build out score
JOBS AND SKILLS FOR THE CITY		
Harbour CBD is stronger and more competitive	0	0
Greater Parramatta is stronger and better connected	1	2
Western Sydney Airport and Badgerys Creek Aerotropolis are economic catalysts for Western Parkland City	0	0
Internationally competitive health, education, research and innovation precincts	1	1
Investment and business activity in centres	1	2
Industrial and urban services land is planned, retained and managed	0	2
Economic sectors are targeted for success	1	2
	4	9
A CITY IN ITS LANDSCAPE		
The coast and waterways are protected and healthier	2	0
A cool and green parkland city in the South Creek corridor	0	0
Biodiversity is protected, urban bushland and remnant vegetation is enhanced	2	0
Scenic and cultural landscapes are protected	1	0
Environmental, social & economic values in rural areas are protected & enhanced	0	0
Urban tree canopy cover is increased	1	0
Public open space is accessible, protected and enhanced	2	0
The Green Grid links parks, open spaces, bushland and walking and cycling paths	2	0
	10	0
AN EFFICIENT CITY		
A low-carbon city contributes to net-zero emissions by 2050 & mitigates climate change	1	0
Energy and water flows are captured, used and re-used	0	0
More waste is re-used & recycled to support the development of a circular economy	0	0
	1	0
A RESILIENT CITY		
People and places adapt to climate change and future shocks and stresses	0	0
Exposure to natural and urban hazards is reduced	0	0
Heatwaves and extreme heat are managed	1	0
	1	0
TOTAL	34	17

It is evident from the MCA that the PAYCE project case meets more of the GSC’s Directions and Objectives than a full industrial build out scenario.

To account for the different number of objectives under each direction, Table 32 normalises each of the scores out of 10 to compare the relative marginal performance of each of the scenarios more evenly.

TABLE 32: MCA SCORE COMPARISON: ACTUAL VS NORMALISED

GSC Direction	Actual score		Normalised score	
	PAYCE Project Scenario	Industrial build out	PAYCE Project Scenario	Industrial build out
A CITY SUPPORTED BY INFRASTRUCTURE	1	0	1	0
A COLLABORATIVE CITY	0	0	0	0
A CITY FOR PEOPLE	7	3	9	4
HOUSING THE CITY	3	0	8	0
A CITY OF GREAT PLACES	3	0	8	0
A WELL-CONNECTED CITY	4	5	5	6
JOBS AND SKILLS FOR THE CITY	4	9	3	6
A CITY IN ITS LANDSCAPE	10	0	6	0
AN EFFICIENT CITY	1	0	2	0
A RESILIENT CITY	1	0	2	0
TOTAL	34 / 76	17 / 76	42 / 100	16 / 100

Source: SGS Economics and Planning, 2018.

7.3 Summary of findings

Net Community Benefit test

The NCB suggests that the Project case is likely to deliver an increase in wider benefits compared to the base case and a wider variety of benefits than the full industrial case. This includes in terms of providing more accessible homes and employment, infrastructure cost savings (compared to greenfield development), increased open space values, more efficient provision of urban services, and a higher value mixed use urban environment.

Strategic Planning MCA

The Project case meets more of the GSC’s Directions and Objectives compared to the Industrial build out scenario. SGS’ review of the scenarios against the Greater Sydney Region Plan’s 10 Directions and 38 Objectives identified that the Project case was more aligned with these principles than the Industrial build out scenario, including when the scores were normalised.

8. SUMMARY OF FINDINGS

This report considers the proposed development from several perspectives: strategic policy context; economic impacts; social impacts and overall community benefits. To ensure that viable alternative uses are also compared, the project case is compared with a scenario that builds the site out to an anticipated full capacity under the current IN1 – General Industry – planning controls. As with any planning proposal, the onus is on the proponent to justify that the impact of the change is outweighed by the benefits that the proposed development provides. This section brings together the findings from the various elements of this report.

Circumstance

The site has a ‘Review and Manage’ designation. This designation by the GSC under the Central City District Plan allows for industrial and urban services land to be identified for retention, or allowed to transition to higher order employment activities to maximise business and employment outcomes, reflective of the changing nature of industry in the area.

There is continued demand for industrial floorspace in LGA. While some industries traditionally associated with industrial precincts are projected to see slowed growth or even decline, there are other established and emerging industries that will continue to demand industrial floorspace in Cumberland. There are few opportunities to increase industrial floorspace in the Cumberland LGA to meet this future demand.

The Manchester Road site has unrealised potential. The site provides over 14 hectares of industrially-zoned land, however only 28,000sqm of it are developed and it supports only 50 jobs. The Bluescope steel site is highly specialised and it is unlikely that when their tenancy expires, the facility could be re-appropriated by another business without significant cost or demolition.

Full industrial redevelopment is unlikely to be feasible. While the site could potentially provide nearly 120,000 square metres of industrial floorspace, remediation and redevelopment costs are high. Remediation costs, demolition of the steel works and site acquisition make a full build out of industrial unlikely to be feasible. While a full industrial build out would deliver more industrial and urban services jobs, it is unlikely to occur due to the costs of delivery exceeding expected returns.

Outcome

The site therefore presents an opportunity to leverage its strategic location to deliver a development that delivers a significant increase (167%) in industrial floorspace on site AS WELL AS meeting a number of other strategic objectives that a site of its size and location can do.

The scheme proposed by PAYCE would:

- Realise the employment and industrial potential of the Manchester Road site, increasing on-site industrial floorspace by around 167%.
- Accommodate approximately 25% and 75% of Cumberland’s future growth of industrial and urban services jobs respectively, providing new and flexible building stock to support emerging industries such as advanced manufacturing, local business growth and urban services that support the LGA’s growing population.
- Accommodate jobs and locations for local businesses that align with the workforce skills of the Cumberland LGA.

- Aligns employment type with resident workforce skills and potential to support industry training for local population, particularly as 41% have no formal education beyond secondary school.
- Provides opportunity to support maturation of the Parramatta CBD by providing new employment floorspace for businesses that require proximity to commercial centres but require the floorspace flexibility of industrial precincts.

But beyond simply the employment potential that the proposed development provides, its innovative mix of industrial, residential and commercial would also:

- Maximise the site's strategic location by putting 1,150 new homes within walking distance of Auburn train station and the vibrant Auburn town centre.
- Provide two hectares of new open space for the community of Auburn and Cumberland. It's location adjacent the Duck River Parklands also enables it to add a significant amount of open space to this important Green corridor, designated as a major piece of Green Grid infrastructure by the GSC.
- Invest in the upgrade to a highly degraded stretch of the Duck River and contribute to the refocus onto the Duck River as an important community asset for the Central City.
- Provide additional community facilities and services, such as a child care centre and medical practices, able to be used by both future residents and the surrounding existing community.
- Directly and indirectly create around 5,900 new jobs in the construction and operational phases of the project.
- Deliver new affordable housing, and contribute to the achievement of housing targets set by the GSC.

It is a unique situation that the site finds itself in. The proposal by PAYCE acknowledges the loss of the full industrial capacity. However due to the expected costs of remediation and acquisition, the realistic delivery of a full build out is impractical. The site therefore runs the risk of remaining industrial in zoning only, without being able to deliver the facilities to support the growth of new industries seeking to locate in Cumberland.

PAYCE's proposal realises significant industrial floorspace and maximises the strategic merit of the site. But it also proposes a number of other land-uses that mean that from a wider community benefit perspective, the proposal can contribute positively to 23 of the Greater Sydney Region Plan's 38 objectives.

APPENDIX 1: MARGINAL COSTS AND BENEFITS

Introduction

This appendix provides greater detail relating to the definition and explanation of the marginal costs and benefits used in the Net Community Benefit (NCB) test in Section 7.1.

Marginal costs

Infrastructure to support higher intensity of land uses on the site

New infrastructure will be required on the site – roads, drainage, utilities, remediation, works and so on – to support higher intensity land uses. The cost of infrastructure for infill development varies significantly depending on the site and context. A South Australian study found the median cost per infill dwelling to be \$20,000, with a range of \$10,000 to \$45,000 per dwelling²¹. PAYCE estimates this could be up to \$80million in costs.

Cost of open space provision

The provision of over two hectares of open space on the site will be a further cost that, if the development did not take place, might be avoided.

Option value of industrial land

The conversion of employment land to residential is usually a permanent change: it is rarely 'reversed'. Residential re-zoning therefore constitutes a permanent loss of the opportunity for the land to host anything other than residential uses (and perhaps home-based business). This is one of the reasons that proposals to convert employment land to housing are heavily scrutinised by planning authorities.

Retaining land with non-residential zonings provides future opportunities for alternative and unanticipated activities and land uses, but might be required to support an area's growth and change in the longer term. Another way to think of this option value is in terms of the opportunity cost of developing the site: once developed for residential use any opportunity for an alternative future use is lost.

Retaining a significant amount of employment land at the Manchester Road site as proposed in the project case maintains a share of the future option value, and therefore represents a lesser cost compared to the base case on this indicator, compared to the full residential scenario.

Nuisance and disturbance for neighbours and others during construction period

Construction projects in established urban areas cause nuisance and disturbance for existing residents and businesses due to construction traffic and noise associated with demolition, remediation and building works. The 'cost' of this nuisance and disturbance, while intense in the short term for those affected, are generally quite modest given the longer term and broader perspective that economic assessments adopt. Given the site is relatively isolated from existing sensitive land uses, these impacts are likely to be inconsequential.

²¹ infraPlan (2013) Urban Infill vs Greenfield Development: A review of economic benefits and costs for Adelaide

Note that existing industrial uses on site also produces some degree of noise and nuisance for neighbours.

Cost for existing industrial businesses to relocate

The existing industrial businesses would need to relocate from the site, if redeveloped for alternative uses. This would be an additional cost to these businesses. PAYCE understands that Bluescope have already commenced relocation to Erskine Park.

Marginal benefits

Infrastructure cost saving relative development at the urban fringe

Although new infrastructure will be required to support the infill development, its cost is likely to be lower than that of infrastructure required to support a similar quantum of development at the urban fringe. A commonly cited paper for this proposition is that by Trubka, Newman and Bilsborough²² which finds that infrastructure costs in infill locations are, on average, lower than greenfield locations, using Perth data. They suggest the difference is as much as \$86,000 per dwelling though this figure has been challenged. More recent research by Hamilton and Kellett²³ and the InfraPlan report referenced earlier²⁴ have found that infrastructure costs for infill development are cheaper than greenfield development though InfraPlan finds the difference might be in the order of \$50,000 per dwelling.

Creation of additional development capacity

Rezoning the site will effectively create new capacity for employment, housing or both, that is not available in the Base Case. The value of this increase in capacity will be reflected in the residual land value of the additional development opportunities created, at the end of the designated evaluation period (typically 20 years) discounted to present values. The magnitude of this benefit is likely to be significant. The land value per dwelling will be in the order of \$100,000 per dwelling (undiscounted) for the residential component. In other words, the benefits of additional development capacity can be valued at the net increase in underlying land value of the development scenario compared to the base case.

Efficiencies for urban service business (latent demand)

Consultation with agents undertaken on behalf of PAYCE has found that there is significant latent demand for Urban Service employment floorspace in the Cumberland LGA, however the capital investment associated with constructing the suitable facilities is a barrier to the realisation of the development.

Latent demand for land from local Urban Services suggests existing business are operating in a constrained environment and some might be 'over trading' relative to the land and facilities currently available to them. With more appropriate sites and facilities, businesses would be better positioned to meet market demand and they would be more efficient and productive. By committing to deliver at least 30,000sqm of Urban Service employment floorspace in the form of industrial buildings and units, storage and warehouse areas, and ancillary offices, the proposal will increase the efficiency and productivity of urban service businesses.

²² For example, Trubka, R. Newman, P. and Bilsborough, D. (2010) 'The Costs of Urban Sprawl – Infrastructure and Transportation', *Environment Design Guide*, April,

²³ Hamilton, C. & Kellett, J. (2017). [Cost comparison of infrastructure on greenfield and infill sites](#). *Urban Policy and Research*, 35, 3, 248-260

²⁴ infraPlan (2013) *Urban Infill vs Greenfield Development: A review of economic benefits and costs for Adelaide*

Improved 'housing services'

In both project cases, more housing will be provided in an accessible location where under the Base Case, this housing would be provided on the urban fringe. Housing provided in 'live-work' accessible locations provides a higher level of 'housing services' relative to housing on the urban fringe. This is reflected in the sale values or rents paid for housing products in each location. This net increase in housing services is a benefit to the community.

Employment related VKT Reduction (Hybrid scenario only)

Concentration of employment at the Manchester Road site reduces Vehicle Kilometres Travelled (VKT) due to these jobs being in an area with good public transport connections, thereby making it easier for the local and regional workforce to access their jobs by non-car modes.

The value of reduced car travel can be monetised by accounting for the various externalities avoided. The total suite of externality savings and operating costs can be valued at \$0.80 per kilometre (based on *Principles and Guidelines for Economic Appraisal of Transport Investment and Initiatives* published by Transport for NSW, see Table 33 below).

TABLE 33: ASSUMPTIONS USED TO MONETISE EXTERNALITY IMPACTS OF REDUCED TRAVEL

Externality ²⁵	Subset	Monetisation unit (\$ per VKT)
Environmental impacts	Air pollution	0.0316
	GHG Emissions	0.0249
	Noise	0.0103
	Water Pollution	0.0048
	Nature and Landscape	0.0006
	Urban Separation	0.0073
Reduced vehicle operating costs		0.3330
Congestion cost		0.3600
Road damage cost		0.0411
Total externalities		0.8136

Source: Transport for NSW *Principles and Guidelines for Economic Appraisal of Transport Investment and Initiatives*.

Housing related VKT Reduction

Similarly, the provision of medium to high density housing at the Manchester Road site also reduces Vehicle Kilometres Travelled (VKT) due to more people living in an area with strong public transport connections, thereby making it easier for them to access their jobs (and other trips destinations) by non-car modes.

Reductions in vehicle kilometres for urban services businesses due to reduced 'dead running'

To some extent urban service activities by definition service local or district customers or residents, rather than metropolitan wide or export markets. In the course of this business activity trips from customers and between businesses will be ideally contained to the 'local' area, if the businesses are able to locate close to their residential customers, or business suppliers and buyers. However, if businesses are further away from their customer base, the result will be more 'dead running' – time spent travelling to access the business – which will also increase VKT, relative to the Base Case.

²⁵ Other externalities which are occasionally included in transport CBAs include accident costs, major injury and loss of life. However these are large numbers, so for the sake of conservatism have not been quantified in this CBA.

Health benefits from more walking and cycling

Higher density living allows for improved walkability and cyclability. High density areas, particularly those with a mix of residential, commercial and retail in the same area, designed with safe and pleasant spaces for walking and cycling, promote more active transport to local spaces such as shops and recreation. Proximity to good public transport further helps promote this, as public transport use necessitates walking from home to the station, the station to work, and so forth – which involves more walking than taking the car.

There are a number of studies showing the following features associated with higher levels of physical activity and active transport:

- Public open space
- Mixed use developments (varying)
- Higher residential density
- Density of public transport stops

The 2013 monetary value of the health benefits of walking is \$2.77 per km for Australian adults aged 18 years and older.

Amenity improvements for workers and residents from open space provision

PAYCE proposes to create over two hectares of dedicated open space (in addition to pocket parks). This will provide benefits to the wider community (see below) but also improve the amenity for residents and workers on the site. Typically, this would be capitalised into a higher residual land value compared to a similar development without such open space.

Access to open space

Residents from surrounding areas, as well as residents of the new development will be able to access benefits associated with the new open space. There are a number of studies that associate the closer proximity to open spaces such as parks and recreation areas with various recreational and health benefits such as increased physical activity, increased mental health, and reduced childhood obesity.

The value of open space can be quantified by the value of time people spend travelling to and in the parks and the cost of vehicle wear and tear in travelling to the open space. Although this approach does not consider the recreational and health benefits open space may provide, it does provide a useful indicator of people's 'willingness to pay' for natural, green space amenities.

In this scenario, assuming the open space receives a modest total of 10,000 visits per year (noting it is suggested the Auburn Botanic Gardens receive 200,000 - 250,000 visits per year²⁶) from both adults and children within about five kilometres from the park, the annual value could be in the order of \$250,000 as Table 34 shows.

²⁶ https://en.wikipedia.org/wiki/Auburn_Botanic_Gardens

TABLE 34: BENEFIT OF OPEN SPACE

Description of Benefit	Value
Number of total visitors	10,000 visitors
- Number of children	5,000 children
- Number of adults	5,000 adults
Average number of km travelled per household	2.5 km
Proportion of visitors driving	50%
Total Number of kms travelled	6,250 km
Cost of vehicle wear and tear	33.3 cents per kilometre
<i>Total cost of vehicle wear and tear</i>	<i>\$208,125</i>
Value of time/ hour	\$13.91
Time Spent at the facility per Person	30 minutes
<i>Total value of time spent</i>	<i>\$34,775</i>
Total Value of Open Space	\$242,900

Source: SGS Economics and Planning; Transport for NSW, 2016.

Note: Assumes vehicles are medium sized cars travelling 60km/hour,
Assumes no value on children's time,
Assumes visitors spend 30 minutes at the open space,
Assumes 50% of households' drive.

Enhanced value from a mix of land uses

Mixed inner urban environments (with diverse housing, services and shopping, and a range of businesses) have emerged as high value, desirable and 'resilient' locations given the economic geography of contemporary cities. On average, where the mix 'works', such environments now probably have a higher value (on a square metre of land basis) than homogeneous residential precincts, even where these are considered highly desirable.

Putting a value on the enhanced resilience of a precinct, suburb of city, as a result of the mix of land use zones would be difficult, although not impossible. One approach would be to tally the total land value for a precinct with a limited range of uses (or zones) and compare this to the total land value of a precinct that hosts a greater diversity of land uses and zones but is otherwise similar (i.e. in total area, location, transport accessibility, etc.).

Additional community facilities

In addition to open space, the proposed development is likely to provide a marginal net benefit in terms of community facilities.

The scale of the development proposed enables the provision of community spaces including a child care centre as well as a 2,000sqm community centre. In the base case it is assumed that incremental infill is unlikely to make such provision, or it might as part of section 94 contributions if these are applied, but then probably with a 'lag' in terms of the timing of provision.

Benefits from earlier provision of child care and community facilities might relate to enhanced social cohesion and wellbeing, increased (particularly female) participation in the workforce and saved health costs from increased community recreation activities.

APPENDIX 2: MULTI-CRITERIA ANALYSIS FRAMEWORK

This appendix provides the detailed Multi-Criteria Analysis (MCA) assessment framework. A separate MCA has been undertaken for each of the two development scenarios:

- PAYCE's project case
- Alternative full-industrial build out under current planning controls

TABLE 35: GREATER SYDNEY REGION PLAN DIRECTIONS AND OBJECTIVE ALIGNMENT ASSESSMENT MATRIX – PROJECT CASE

DIRECTIONS										
A CITY SUPPORTED BY INFRASTRUCTURE	A COLLABORATIVE CITY	A CITY FOR PEOPLE	HOUSING THE CITY	A CITY OF GREAT PLACES	A WELL-CONNECTED CITY	JOBS AND SKILLS FOR THE CITY	A CITY IN ITS LANDSCAPE	AN EFFICIENT CITY	A RESILIENT CITY	
Infrastructure supports the three cities <i>Not applicable (0)</i>	Benefits of growth realised by collaboration of governments, community and business <i>Not applicable (0)</i>	Services and infrastructure meet communities' changing needs. <i>Provision of community services and vocational training potential supports changing community needs (+2)</i>	Greater housing supply <i>Contribute 1,150 net new homes (+2)</i>	Great places that bring people together <i>Investment in Duck River parklands – part of the Greater Sydney Green Grid and provision of 2 hectares of open space (+2)</i>	A metropolis of Three Cities-integrated land use and transport creates walkable and 30-minute cities <i>Provides new homes and new employment close to public transport(+2)</i>	Harbour CBD is stronger and more competitive <i>Not applicable (0)</i>	The coast and waterways are protected and healthier <i>Invests in improvement to riverbank of Duck River, a tributary of the Parramatta River and Sydney Harbour (+2)</i>	A low-carbon city contributes to net-zero emissions by 2050 and mitigates climate change <i>Provides 1,150 new homes near to public transport (+1)</i>	People and places adapt to climate change and future shocks and stresses <i>Not applicable (0)</i>	
Infrastructure aligns with forecast growth <i>Not applicable (0)</i>		Communities are healthy, resilient and socially connected <i>investment in open space and community space (+2)</i>	Housing is more diverse and affordable <i>Provision of 57 (5%) new affordable housing units (+1)</i>	Environmental heritage is identified, conserved and enhanced <i>Investment in Duck River parklands – part of the Greater Sydney Green Grid (+1)</i>	The Eastern, GOP and Western Economic Corridors are better connected and more competitive <i>Provides up to 1,122 new jobs adjacent GOP corridor (+1)</i>	Greater Parramatta is stronger and better connected <i>Provides 75,000sqm of employment floorspace close to Parramatta (+1)</i>	A cool and green parkland city in the South Creek corridor <i>Not applicable (0)</i>	Energy and water flows are captured, used and re-used <i>Not applicable (0)</i>	Exposure to natural and urban hazards is reduced <i>Not applicable (0)</i>	
Infrastructure adapts to meet future needs <i>Not applicable (0)</i>		Greater Sydney's communities are culturally rich with diverse neighbourhoods <i>Provides new homes in a culturally diverse neighbourhood (+1)</i>			Freight and logistics network is competitive and efficient <i>Provides opportunities for distribution facilities (+1)</i>	Western Sydney Airport and Badgerys Creek Aerotropolis are economic catalysts for Western Parkland City <i>Not applicable (0)</i>	Biodiversity is protected, urban bushland and remnant vegetation is enhanced <i>Invests in improvement to riverbank of Duck River (+2)</i>	More waste is re-used and recycled to support the development of a circular economy <i>Not applicable (0)</i>	Heatwaves and extreme heat are managed <i>Provision of 2 hectares of open space can provide opportunities for cooling (+1)</i>	
Infrastructure use is optimised <i>increase residential population near train stations (+1)</i>		Greater Sydney celebrates the arts and supports creative industries and innovation <i>provides space for emerging businesses and creative uses through flexible employment floorspace (+2)</i>			Regional connectivity is enhanced <i>Not applicable (0)</i>	Internationally competitive health, education, research and innovation precincts <i>Provides employment floorspace that could support innovative new jobs (+1)</i>	Scenic and cultural landscapes are protected <i>Rehabilitation of Duck river, an important historic waterway in Sydney (+1)</i>			
						Investment and business activity in centres <i>Increase in employment floorspace adjacent to Auburn and Granville centres (+1)</i>	Environmental, social and economic values in rural areas are protected and enhanced <i>Not applicable (0)</i>			
						Industrial and urban services land is planned, retained and managed <i>Increases industrial floorspace in the precinct by 160% (+1)</i> <i>Reduces industrial land in the precinct by 89% (-1)</i>	Urban tree canopy cover is increased <i>Provision of 2 hectares of open space and improvements to Duck River (+1)</i>			
						Economic sectors are targeted for success <i>Provides 75,000 sqm of new employment floorspace that provide for future demand in urban services jobs (+1)</i>	Public open space is accessible, protected and enhanced <i>Provision of 2 hectares of open space and improvements to Duck River as well as improved connectivity to Duck river Parklands (+2)</i>			
							The Green Grid links parks, open spaces, bushland and walking and cycling paths <i>Provision of 2 hectares of open space and improvements to Duck River as well as improved connectivity to Duck river Parklands (+2)</i>			
SCORE	1	0	7	3	3	4	4	10	1	1
										34

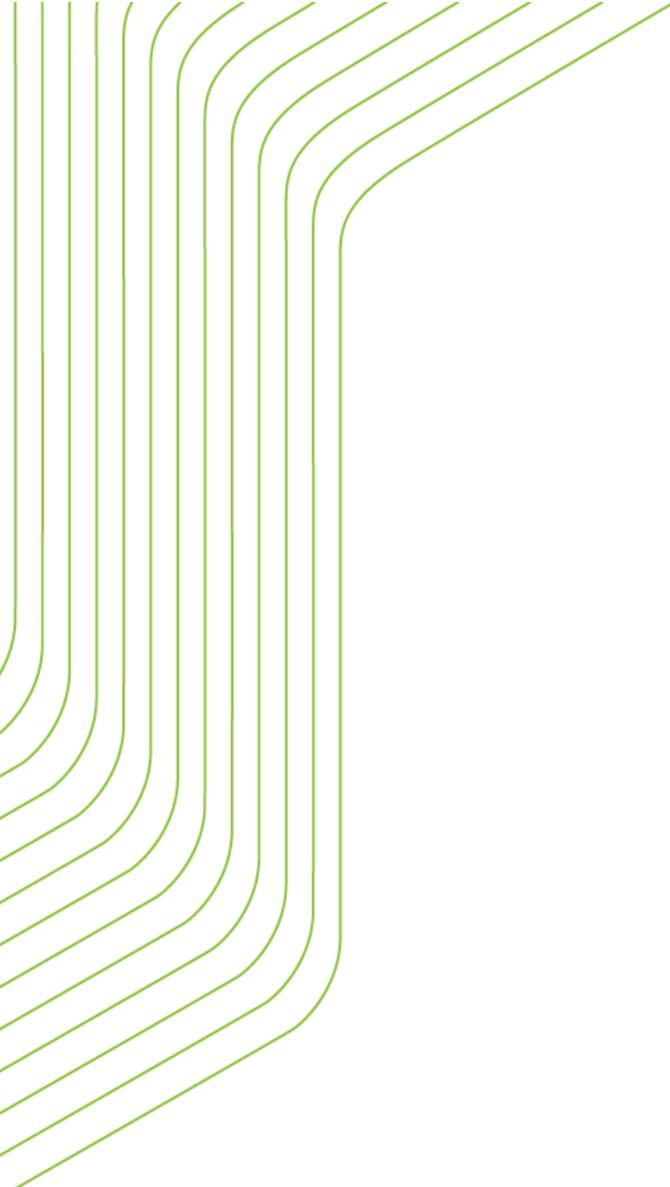
OBJECTIVES

SCORE

TABLE 36: GREATER SYDNEY REGION PLAN DIRECTIONS AND OBJECTIVE ALIGNMENT ASSESSMENT MATRIX – FULL INDUSTRIAL CASE

OBJECTIVES	DIRECTIONS									
	A CITY SUPPORTED BY INFRASTRUCTURE	A COLLABORATIVE CITY	A CITY FOR PEOPLE	HOUSING THE CITY	A CITY OF GREAT PLACES	A WELL-CONNECTED CITY	JOBS AND SKILLS FOR THE CITY	A CITY IN ITS LANDSCAPE	AN EFFICIENT CITY	A RESILIENT CITY
Infrastructure supports the three cities <i>Not applicable (0)</i>	Benefits of growth realised by collaboration of governments, community and business <i>Not applicable (0)</i>	Services and infrastructure meet communities' changing needs. <i>Provision of 150,000sqm of industrial floorspace will meet some of the urban services needs of the local population (+1)</i>	Greater housing supply <i>No marginal improvement on current scenario (0)</i>	Great places that bring people together <i>No marginal improvement on current scenario (0)</i>	A metropolis of Three Cities-integrated land use and transport creates walkable and 30-minute cities <i>Provides new employment close to public transport (+1)</i>	Harbour CBD is stronger and more competitive <i>Not applicable (0)</i>	The coast and waterways are protected and healthier <i>No marginal improvement on current scenario (0)</i>	A low-carbon city contributes to net-zero emissions by 2050 and mitigates climate change <i>No marginal improvement on current scenario (0)</i>	People and places adapt to climate change and future shocks and stresses <i>Not applicable (0)</i>	
Infrastructure aligns with forecast growth <i>Not applicable (0)</i>		Communities are healthy, resilient and socially connected <i>No marginal improvement on current scenario (0)</i>	Housing is more diverse and affordable <i>No marginal improvement on current scenario (0)</i>	Environmental heritage is identified, conserved and enhanced <i>No marginal improvement on current scenario (0)</i>	The Eastern, GOP and Western Economic Corridors are better connected and more competitive <i>Provides up to 1,814 new jobs adjacent GOP corridor (+2)</i>	Greater Parramatta is stronger and better connected <i>Provides 150,000sqm of employment floorspace close to Parramatta (+2)</i>	A cool and green parkland city in the South Creek corridor <i>No marginal improvement on current scenario (0)</i>	Energy and water flows are captured, used and re-used <i>Not applicable (0)</i>	Exposure to natural and urban hazards is reduced <i>Not applicable (0)</i>	
Infrastructure adapts to meet future needs <i>Not applicable (0)</i>		Greater Sydney's communities are culturally rich with diverse neighbourhoods <i>No marginal improvement on current scenario (0)</i>			Freight and logistics network is competitive and efficient <i>Provides opportunities for distribution facilities (+2)</i>	Western Sydney Airport and Badgerys Creek Aerotropolis are economic catalysts for Western Parkland City <i>Not applicable (0)</i>	Biodiversity is protected, urban bushland and remnant vegetation is enhanced <i>No marginal improvement on current scenario (0)</i>	More waste is re-used and recycled to support the development of a circular economy <i>Not applicable (0)</i>	Heatwaves and extreme heat are managed <i>No marginal improvement on current scenario (0)</i>	
Infrastructure use is optimised <i>Not applicable (0)</i>		Greater Sydney celebrates the arts and supports creative industries and innovation <i>provides space for emerging businesses and creative uses through flexible employment floorspace (+2)</i>			Regional connectivity is enhanced <i>Not applicable (0)</i>	Internationally competitive health, education, research and innovation precincts <i>Provides employment floorspace that could support innovative new jobs (+1)</i>	Scenic and cultural landscapes are protected <i>No marginal improvement on current scenario (0)</i>			
						Investment and business activity in centres <i>Increase in employment floorspace adjacent to Auburn and Granville centres (+2)</i>	Environmental, social and economic values in rural areas are protected and enhanced <i>Not applicable (0)</i>			
						Industrial and urban services land is planned, retained and managed <i>Retains industrial land and increases industrial floorspace in the precinct by 167% (+2)</i>	Urban tree canopy cover is increased <i>No marginal improvement on current scenario (0)</i>			
						Economic sectors are targeted for success <i>Provides 150,000 sqm of new employment floorspace that provide for future demand in urban services jobs (+2)</i>	Public open space is accessible, protected and enhanced <i>No marginal improvement on current scenario (0)</i>			
							The Green Grid links parks, open spaces, bushland and walking and cycling paths <i>No marginal improvement on current scenario (0)</i>			
RAW SCORE	0	0	3	0	0	5	9	0	0	0

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