SGS Economics & Planning

ECONOMIC IMPACT ASSESSMENT OF LAND USE OPPORTUNITIES AT MANCHESTER ROAD, AUBURN

FINAL REPORT
NOVEMBER 2017

Prepared for
PAYCE

Independent insight.

SGS Economics and Planning Pty Ltd
ACN 007 437 729
www.sgsep.com.au
Offices in Canberra, Hobart, Melbourne, Sydney

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Project description

SGS Economics and Planning has been engaged by PAYCE to undertake an assessment of economic impacts from the proposed development concept at Manchester Road, Auburn in the Clyburn industrial precinct adjacent to the Duck River.

The site is currently zoned IN1 and is home to a Bluescope Steel warehousing operation and a large warehouse storing furniture. Approximately half of the site is currently vacant.

Land immediately to the north and north-west of the site is owned by NSW State Rail / Sydney Trains and hosts rail operational and related activities. A new five storey office building has been developed in this area for rail-related activities.

PAYCE is proposing to redevelop its site with significant employment, residential and related retail and community floorspace.

1.2 Project brief

SGS has been asked to consider the economic impact of the development. In response SGS has prepared both an Economic Impact Assessment (EIA) and Net Community Benefit (NCB) test of the redevelopment project. Accordingly, this report:

- Estimates the expected employment and value-added generation throughout the construction and operational phases of the proposed project; and
- Identifies the costs and benefits as a result of the project.

This report should be read in conjunction with the SGS economic opportunities report.

1.3 Key concepts

Economic impact analysis

An economic impact analysis (EIA) measures the degree to which the economic stimulus associated with a development project accumulates in total economic activity levels (incomes, jobs), i.e. after measuring the cumulative impact of all the buyer/ supplier transactions that are triggered in the local region.

That is, it does not assess if a project is worth doing, but measures how project implementation impacts on overall economic activity levels.

Net community benefit test

The NCB test assesses the merit of a development project to assess whether it is worth doing from a broad societal perspective.

Using a Cost-Benefit Analysis (CBA) framework and principles, the NCB test contrasts the project's economic, social and environmental benefits with its costs, compared to a base or business as usual case, to establish if the benefits outweigh the costs. Where the project's benefits in sum are considered to outweigh the costs of the project, then it is considered worth doing from a broad community welfare (or economic efficiency) perspective.

The NCB test has been undertaken from a New South Wales perspective.

Importantly, the results of the EIA and NCB are not additive. They answer separate questions and must be interpreted accordingly.

2. DEVELOPMENT CONTEXT

As per the conventions of an economic appraisal, both the EIA and NCB have been conducted on a marginal basis. That is, the development project outcomes are tested in comparison to the outcomes that would be generated under a base case (also known as the business as usual scenario), that is, without the project.

Moreover, real values have been utilised throughout. This means that dollar prices have not been escalated for inflation over time during the analysis period.

Finally, the analysis has been conducted over a 30-year period, aligning with the standard, expected long term life of capital works.

2.1 Future employment growth

Before considering the project case against the base case, it is important that the LGA's employment growth be established up front to provide context for the assessment process.

Employment growth in the Cumberland LGA between 2016 and 2036 is expected to grow from 80,300 to 101,450 across all industries (26%). Industrial-specific jobs are expected to grow by 11% to 33,150 while Urban Services[1] are expected to grow by 17% to 26,476. (Table 1).

TABLE 1: EMPLOYMENT GROWTH IN CUMBERLAND LGA – 2016-2036

Employment type	Jobs 2016	Jobs 2036	Jobs Change	% change (16-36)
All jobs	80,285	101,454	21,169	26%
Industrial*	30,000	33,167	3,167	11%
Urban Services	22,703	26,476	3,773	17%

Source: TfNSW TPA, 2016, SGS industry categorisation, 2017

*Industrial jobs include some Urban Service jobs

The relative strength of Urban Services over the broader industrial category is reflective of it having some retail functions and therefore more closely linked to population growth. However, it also provides an opportunity to accommodate a cluster of industries that are needed to support local population and businesses.

As projections are measured in jobs by industry, it is important that this growth is reflected in what is required on the ground. Both the ANZSIC categories themselves and the measure of jobs do not adequately provide information as to the land use requirement by floorspace type.

SGS has undertaken an extensive number of land audits across Greater Sydney have developed a land use and built form classification system referred to as Broad Land-use categories. These serve to better articulate the type of floorspace required to meet future job growth. Through the audit process, SGS has captured data through both the ANSCIC and BLC classifications, enabling the conversion of jobs to floorspace. This audit process has also captured the floorspace in sqm per job at a BLC and ANZSIC level to provide an ability to estimate how much floorspace will be required to meet the projected jobs growth outlined in Table 1. The BLCs and the average jobs to floorspace ratios are provided in Appendix 2.

[1] Urban Services have been formally defined in Appendix 1 and are consistent with the Greater Sydney Commission's definition

When floorspace to job ratios are applied to the employment projections, over 1million sqm of additional employment floorspace is projected to be required in the Cumberland LGA over the next 20 years (Table 2). As previously noted, this method does not factor in current vacancies[2] or floorspace inefficiencies but reflects the net increase in jobs assuming that the current industrial employment floorspace in the LGA is in optimally utilised.[3]

TABLE 2: 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 BLCs, 2017

*Industrial jobs include some Urban Service jobs

2.2 Base case

The base case is a continuation of the existing facilities at Manchester Road without any major investments.

The limited set of economic activities on the site would be expected to remain operational in the short term, but based on the recent history of this site, significant growth is not expected in the long term.

Business activity on the site is expected to remain confined to the operations of 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 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 business, so by applying an expected industrial employment growth rate of 11%[4] across 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) it is unlikely that standalone development across the site of an industrial-only nature is unlikely.

The recently released draft report on Cumberland LGA's Employment Lands[5] 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 million[6]) 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.

[2] 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.

[3] 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.

[4] Source: TfNSW TPA, 2016

[5] AEC, 2017, Draft Employment and Innovation Lands Strategy

[6] 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.

2.3 Hybrid scenario (Project scenario)

Under the proposed project case, PAYCE would make significant investments to the site. The planned activities include four hectares redeveloped for industrial and economic activity (between 30,000 to 40,000sqm of floorspace), a residential development as well as a local town and community centre. Additional details are set out below. It has been estimated by PAYCE that the development will cost in the order of $91.65 million and that 650 workers will be directly employed onsite during the construction phase.

Four hectare Employment precinct

Employment floorspace composition

As outlined in the SGS economic opportunities report, such an employment precinct in this location is best placed to accommodate 'urban services' industrial land use. This is a mix that is defined by industries that, collectively, allow the city to operate. PAYCE is proposing to provide between 30,000 and 40,000 sqm of floorspace for these uses.

While the exact composition of tenancies is subject to market demand, in order to build a coherent baseline for the EIA, SGS considered the Urban Services market as a logical tenancy mix for the industrial and employment precinct to the north of the site. Table 3 identifies these uses and, based on the relative of their growth as a proportion of al Urban Serviced-defined industries in the Cumberland LGA have made assumptions about the possible split of floorspace by industry. This method applies this proportional growth to the proposed floorspace quantum (under both a 30,000sqm and 40,000sqm scenario).

TABLE 3 ESTIMATED COMPOSITION OF LAND USE AT MANCHESTER ROAD

Sub-industry classification	Net floorspace increase across LGA 2016-36 (sqm)	Proportion of LGA wide increase of urban service floorspace	Possible floorspace demand at Manchester Rd[7] @ 30,000sqm	Possible floorspace demand at Manchester Rd[8] @ 40,000sqm
Construction Services	24,855	18%	5,400	7,200
Repair and Maintenance	21,721	16%	4,700	6,400
Printing	21,022	15%	4,500	6,000
Building Cleaning, Pest Control	15,718	11%	3,400	4,400
Hardware and Building Supplies Retailing	9,799	7%	2,100	2,800
Motor Vehicle and Motor Vehicle Parts Retailing	9,630	7%	2,100	2,800
Waste Collection, Treatment and Disposal Services	7,781	6%	1,700	2,400
Basic Material Wholesaling	7,159	5%	1,500	2,000
Rental and Hiring Services (except Real Estate)	7,016	5%	1,500	2,000
Building Construction	5,499	4%	1,200	1,600
Electricity Supply	2,873	2%	600	800
Water Supply, Sewerage and Drainage Services	2,431	2%	500	800
Heavy and Civil Engineering Construction	2,131	2%	500	800
Gas Supply	766	1%	200	400
Garden Supplies Retailing	221	0%	100	200

[7] Floorspace figures rounded to the nearest hundred to simplify economic modelling and comprehension.
[8] Floorspace figures rounded to the nearest hundred to simplify economic modelling and comprehension.

The proposed inclusion of between 30,000-40,000sqm of industrial or urban services floorspace (at an average FSR of between 0.75:1 and 1:1) 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 29% and 39% of the LGA's future Urban Services requirements or between 10%-13% of the industrial demand (Table 4).

TABLE 4: COMPARISON OF MANCHESTER ROAD PROPOSAL AGAINST FUTURE CUMBERLAND LGA DEMAND

	Future floorspace demand (sqm)	Manchester Road proportion of total demand @ 30,000sqm	Manchester Road proportion of total demand @ 40,000sqm
Urban services floorspace demand (2016-36)	102,835	29%	39%
Industrial floorspace demand (2016-36)	297,565	10%	13%

Source: SGS, Payce, 2017

Employment composition

At a relatively conservative Cumberland LGA average range of 64-73 sqm per industrial or urban service job, the employment outcome from the floorspace yield in Table 3 is expected to be a minimum range of 413-472 jobs under a 30,000sqm provision scenario and a minimum range of 551 to 630 jobs under a 40,000sqm scenario.

TABLE 5: EMPLOYMENT FLOORSPACE (SQM) GROWTH IN CUMBERLAND LGA – 2016-2036

Current floorspace (sqm)	Current jobs	Proposed floorspace (sqm)	Ave. floorspace: jobs ratio (sqm)	Estimated jobs (project case)	%age change in jobs (project case vs base case)
28,090	50	30,000 - 40,000	64 - 73	413 - 630	726% - 1,000%

Source: SGS, 2017

This would see a significant increase in the number of urban services or industrial-related jobs on site (between 726 and 1,000% above the current 50 jobs)

The residential precinct

The ten-hectare residential precinct primarily consists of approximately 1,800 dwellings - a mix of studio, one bedroom, two bedroom and three bedroom units as well as three bedroom terraces.

A small local centre is also proposed. This local centre is expected to contain the following floorspace composition:

- 5,500sqm of retail and commercial floorspace, including a small 2,500sqm supermarket/grocer
- 1,500sqm specialty shops
- 500sqm gym
- 500sqm childcare centre
- 500sqm medical centre
- 2,000sqm community centre

Based on a standard retail and community facility floorspace to employment ratio of 25 sqm per job, the local centre can be expected to yield approximately 520 jobs (comprising 400 retail jobs and 120 community service related employment). These are in addition to those identified in the employment area at the north of the precinct.

Therefore, the two areas combined could yield approximately 1,000 new permanent full-time jobs.

2.4 Residential scenario

An alternative, hypothetical full residential scenario has also considered. Under this scenario, the entire site is rezoned to residential use, with a slightly larger centre to service the increased population yields and associated retail and community needs.

The purpose of this scenario is not to detail exactly what community or retail needs would be generated by a full residential outcome, but rather to understand and test the economic impacts that such a scenario would have.

Under this scenario, there would be a yield of 2,500 dwellings across 14 hectares.

- 7,700sqm of retail and commercial floorspace, including a 3,500sqm supermarket/grocer
- 2,100sqm specialty shops
- 700sqm gym
- 700sqm childcare centre
- 700sqm medical centre
- 2,800sqm community centre

Based on a standard retail and community facility floorspace to employment ratio of 25 sqm per job, the local centre can be expected to yield approximately 728 jobs (comprising 560 retail jobs and 168 community service related employment).

Under this hypothetical scenario, there would be no floorspace provided for urban services or industrial uses.

3. ECONOMIC IMPACT ASSESSMENT

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.

The basic steps in undertaking an EIA include:

1. Isolating how the project stimulates the regional economy[9] (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.

3.1 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 (Table 11).

[9] 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.

TABLE 6: TOP OCCUPATIONS OF CUMBERLAND CITY LGA RESIDENTS (2016)

	Cumberland LGA	NSW	Australia
Professionals	18.9%	23.6%	22.2%
Technicians and Trades Workers	15.4%	12.7%	13.5%
Clerical and Administrative Workers	14.2%	13.8%	13.6%
Labourers	12.1%	8.8%	9.5%
Community and Personal Service Workers	9.7%	10.4%	10.8%
Sales Workers	9.3%	9.2%	9.4%
Managers	8.9%	13.5%	13.0%
Machinery Operators and Drivers	8.4%	6.1%	6.3%

Source: ABS, 2017

3.2 Definition of regional multipliers

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,[10] 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.

3.3 Assessed economic impacts – Base Case

This scenario assumes that no additional floorspace will be delivered.

Job creation

Construction phase

It is assumed that the project employment growth on this site will not necessitate construction of new employment floorspace.

Operational phase

Based on growth rates for the Cumberland LGA assumed by NSW TPA employment forecasts, the existing presence of 50 jobs on site is likely to grow organically at 11% by 2036 and reach 56 jobs on site. The employment economic impacts will be:

- Direct 6 additional FTE jobs
- Indirect 7 additional FTE jobs[11]
- Total 13 additional FTE jobs.

[10] Particularly the Australian Input-Output Tables (ABS Cat. No. 5209.0).
[11] Based on an Iron and Steel Manufacturing Type-2B employment multiplier of 1.170 and a Wholesaling Type-2B employment multiplier of 1.033

Value added (contributions to GDP)

Construction phase

No construction activity.

Operational phase

Based on the six additional jobs on site identified above, the improved economic output will be:

- Direct $1.12 million
- Indirect $0.95 million[12]
- Total $2.07 million.

3.4 Assessed economic impacts – Hybrid Scenario

This scenario assumes the conservative provision of 30,000sqm of industrial and employment land, along with residential dwellings and a town centre.

Job creation

Construction phase

During construction, which is assumed to be spread across Years 1 and 2, the project is expected to generate the following additional full time equivalent jobs:

- Direct 1,398 additional FTE jobs[13]
- Indirect 3,153 additional FTE jobs
- Total 4,551 additional FTE jobs.

This reflects direct construction jobs and retail jobs that are supported during construction works, and indirect jobs that will be generated, for example, by suppliers of construction materials.

Operational phase

After putting the floorspace to market and generating land use yields, i.e. from Year 2 onwards, the project is expected to generate the following employment benefits on an average annual basis (see Table 7 for details):

- Direct 992 additional FTE jobs
- Indirect 672 additional FTE jobs
- Total 1,664 additional FTE jobs.

[12] Based on an Iron and Steel Manufacturing Type-2B value added multiplier of 0.787 and a Wholesaling Type-2B value added multiplier of 0.922

[13] Based on a composition of similar past projects

TABLE 7 TOTAL EMPLOYMENT GENERATED BY PROPOSED DEVELOPMENT AT PAYCE SITE

Sub-industry classification	Direct Jobs	Type 2B Multiplier	Indirect[14] Jobs	Total Jobs
Construction Services	85	1.071	91	176
Repair and Maintenance	74	0.290	21	95
Printing (including the Reproduction of Recorded Media)	71	0.504	36	106
Building Cleaning, Pest Control and Other Support Services	53	0.437	23	77
Hardware and Building Supplies Retailing	33	0.459	15	48
Motor Vehicle and Motor Vehicle Parts Retailing	33	0.459	15	48
Waste Collection, Treatment and Disposal Services	27	0.643	17	44
Basic Material Wholesaling	24	1.033	24	48
Rental and Hiring Services (except Real Estate)	24	2.267	53	77
Building Construction	19	2.255	43	61
Electricity Supply	9	4.615	44	53
Water Supply, Sewerage and Drainage Services	8	1.077	8	16
Heavy and Civil Engineering Construction	8	5.809	46	54
Gas Supply	3	0.892	3	6
Garden Supplies Retailing	2	0.459	1	2
Total urban services	472		440	912
Retail centre	400	0.459	184	584
Community services	120	0.399	48	168
Total jobs	**992**		**672**	**1,664**

Value added (contributions to GDP)

Construction phase

During construction, which is assumed to be spread across Years 1 and 2, the project is expected to generate:

- Direct $491.00 million[15]
- Indirect $1,501.98 million
- Total $1,992.98 million.

This reflects direct construction jobs and retail jobs that are supported during construction works, and indirect jobs that will be generated, for example, by suppliers of construction materials.

Operational phase

After putting the floorspace to market and generating land use yields, i.e. from Year 2 onwards, the project is expected to generate the following GVA benefits on an average annual basis (see Table 8 for details):

- Direct $237.66 million
- Indirect $258.95 million
- Total $496.61 million.

[14] This column needs to be interpreted with care. It refers to the extra number of persons employed in all industries in the economy due to the stimulus – not just the industry which the initial stimulus (direct employment) belonged to. This figure is calculated off a Type-2B multiplier.
[15] QS estimation. $982million over two years.

TABLE 8 TOTAL VALUE ADDED GENERATED BY PROPOSED DEVELOPMENT AT PAYCE SITE ($ MILLION)

Sub-industry classification	Direct Value Added	Type 2B Multiplier	Indirect Value Added	Total Value Added
Construction Services	$44.38	1.604	$71.18	$115.56
Repair and Maintenance	$3.87	0.870	$3.37	$7.24
Printing (including the Reproduction of Recorded Media)	$20.56	0.928	$19.08	$39.65
Building Cleaning, Pest Control and Other Support Services	$3.12	1.177	$3.67	$6.79
Hardware and Building Supplies Retailing	$6.39	0.751	$4.80	$11.19
Motor Vehicle and Motor Vehicle Parts Retailing	$6.39	0.751	$4.80	$11.19
Waste Collection, Treatment and Disposal Services	$0.32	0.495	$0.16	$0.48
Basic Material Wholesaling	$8.57	0.922	$7.90	$16.47
Rental and Hiring Services (except Real Estate)	$4.90	1.508	$7.38	$12.28
Building Construction	$15.50	2.520	$39.06	$54.56
Electricity Supply	$0.39	1.085	$0.42	$0.81
Water Supply, Sewerage and Drainage Services	$0.12	0.547	$0.07	$0.19
Heavy and Civil Engineering Construction	$13.51	1.422	$19.21	$32.72
Gas Supply	$0.04	0.764	$0.03	$0.08
Garden Supplies Retailing	$0.30	0.751	$0.23	$0.53
Total urban services	$128.37		$181.37	$309.74
Retail centre	$77.45	0.751	$58.16	$135.61
Community services	$31.84	0.610	$19.43	$51.27
Total GVA	**$237.66**		**$258.95**	**$496.61**

Value added includes the sum of wages paid out to employees and Gross Operating Surpluses retained by firms, net of input or material costs. In other words, value added measures labour and business surpluses retained within a local region. It does not include taxes paid to government.

From a job creation perspective:

- During construction (Year 1 and 2), the local area will benefit from the creation of 2,116 FTE jobs (650 direct and 1,466 indirect).
- Post development, (Year 2 and onwards), an annual average of 1,664 FTE jobs will be supported (992 directly supported, 672 indirectly supported).

From a value added or contribution to Gross Product perspective:

- During construction (Year 1 and 2), the local area will benefit from the generation of $322.61 million in value added ($91.65 million direct, and $230.96 million indirect).
- Post development, (Year 2 and onwards), the local area will generate an annual average of $497 million in total value added ($238 million directly, $259 million indirectly).

3.5 Assessed economic impacts – Residential Scenario

Job creation

Construction phase

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

- Direct 1,398 additional FTE jobs
- Indirect 2,766 additional FTE jobs
- Total 4,164 additional FTE jobs.

This reflects direct construction jobs and retail jobs that are supported during construction works, and indirect jobs that will be generated, for example, by suppliers of construction materials.

Operational phase

After putting the dwellings and floorspace to market and generating land use yields, i.e. from Years 5 to 7 onwards, the project is expected to generate the following employment benefits on an average annual basis (all of which is confined to the local town centre) (see Table 9 for details):

- Direct 728 additional FTE jobs
- Indirect 324 additional FTE jobs
- Total 1,052 additional FTE jobs

TABLE 9 TOTAL EMPLOYMENT GENERATED BY PURE RESIDENTIAL AT PAYCE SITE

Sub-industry classification	Direct Jobs	Type 2B Multiplier	Indirect Jobs	Total Jobs
Retail centre	560	0.459	257	817
Community services	168	0.399	67	235
Total jobs	**728**		**324**	**1,052**

Value added (contributions to GDP)

Construction phase

During construction, which is assumed to be spread across Years 1 and 2, the project is expected to generate:

- Direct $491.00 million[16]
- Indirect $1,237.33 million
- Total $1,728.33 million.

This reflects direct construction jobs and retail jobs that are supported during construction works, and indirect jobs that will be generated, for example, by suppliers of construction materials.

[16] This is an assumption whilst exact costs are being measured by the QS team

Operational phase

After putting the dwellings and local centre floorspace to market and generating land use yields, i.e. from Years 5 to 7 onwards, the project is expected to generate the following GVA benefits on an average annual basis (see Table 10 for details):

- Direct $106.16 million
- Indirect $75.23 million
- Total $181.39 million.

TABLE 10 TOTAL EMPLOYMENT GENERATED BY PURE RESIDENTIAL AT PAYCE SITE ($ MILLION)

Sub-industry classification	Direct Value Added (m)	Type 2B Multiplier	Indirect Value Added	Total Value Added (m)
Retail centre	$74.31	0.751	$55.81	$130.12
Community services	$31.84	0.610	$19.42	$51.27
Total jobs	**$106.16**		**$75.23**	**$181.39**

From a job creation perspective:

- During construction (Year 1 and 2), the local area will benefit from the creation of 1,052 FTE jobs (728 direct and 324 indirect).
- Post development, (Year 2 and onwards), an annual average of 1,664 FTE jobs will be supported (992 directly supported, 672 indirectly supported).

From a value added or contribution to Gross Product perspective:

- During construction (Year 1 and 2), the local area will benefit from the generation of $322.61 million in value added ($91.65 million direct, and $230.96 million indirect).
- Post development, (Year 2 and onwards), the local area will generate an annual average of $181.39 million in total value added ($106.16 million directly, $75.23 million indirectly).

3.6 Comparison of economic impacts

The economic impact modelling of all three scenarios is summarised below. The project case that PAYCE has proposed (mixed use) produces the greatest employment and value-added outcomes. This includes both the construction phase of development as well as post-development when the tenants begin to occupy the floorspace.

TABLE 11 COMPARISON OF ECONOMIC IMPACTS ACROSS THREE SCENARIOS

Total Economic Impact	Base Case	Hybrid	Residential Only
Employment – construction (jobs)	-	**4,551**	4,164
Employment – operation (jobs)	13	**1,664**	1,052
Value Added - construction	-	**$1,992.98 million**	$1,728.33 million
Value Added - operation	$2.07 million	**$496.61 million**	$181.39 million

3.7 Limitations to analysis

Input-output modelling has some limitations as a tool for measuring economic impacts, as follows, but is a cost-effective technique, recognising that the only feasible alternative is to utilise partial or general equilibrium econometric models. Having said this, general equilibrium models require an annual stimulus of over $100 million before the impacts start to be measurable across the economy.

Other key assumptions include:

- The input output (econometric) model assumes relationships between industries are static over the forecast period. That is, productivity improvements are not factored in and historic relationships are assumed to hold. For example, panel beaters are not forecast to suddenly become more profitable businesses.

- The input output (econometric) model derives relationships between industries using total production estimates. Consequently, the relationships are 'average', whereas the stimulus used as an input is 'marginal'. Such an approach does not account for any 'underutilised capacity' at the industry level or additional economies of scale that might ensue, as production expands from its existing base.

- All of the stimuli (direct impacts) are assumed to be 'new' economic activities for the local region's economy. That is, crowding out or industry substitution effects are assumed to be negligible, meaning that key economic inputs such as labour and capital are assumed to be unconstrained, i.e. there is sufficient slack in the economy to service these stimuli without transferring significant resources from other productive uses. It also means that the activities that are promoted by the subject project do not adversely affect operations elsewhere.

4. NET COMMUNITY BENEFIT ASSESSMENT

4.1 Purpose and method

This chapter sets out 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 the proposed development versus 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.

4.2 Base case and alternatives

The assessment considers three scenarios for comparison. These are described in more detail in Section 2 and summarised below:

- The base case or 'business as usual' scenario whereby the existing industrial activity on site experiences marginal growth in line with broader economic projections.
- A Hybrid scenario where in which the site supports approximately 1,800 dwellings, 30,000sqm of employment and urban services floorspace, and a range of community infrastructure.
- A Residential scenario whereby all 14 hectares of the site are zoned residential, delivering 2,500 dwellings along with the community infrastructure.

The alternative scenarios would see employment floor space (Hybrid scenario) and dwellings (both scenarios) provided on the site that would otherwise be developed in alternative locations in metropolitan Sydney.

In the case of the Urban Services employment that the mixed use scenario is intended to support, it is assumed these businesses would locate in more remote locations, where land values are lower. The provision of housing on the site will, via vacancy chain effects, reduce the demand for housing in other, less accessible locations, ultimately reducing demand for housing at the urban fringe.

The net effect would be a redistribution of business and households to this more accessible location, relative to the base case where the whole site retains its current industrial zoning and uses.

4.3 Marginal costs and benefits

The suite of potential costs and benefits from either of the alternative scenarios relative to the base case, are listed in the table below and described in more detail in the following sections.

TABLE 12 MARGINAL COSTS AND BENEFITS

Marginal costs	Marginal benefits
1. Infrastructure costs to support higher intensity of land uses on the site (roads, drainage, utilities)	1. Infrastructure cost savings from developing in an infill location compared to development on the urban fringe
2. Cost of open space provision	2. Creation of additional development capacity via a rezoning which facilitates additional floorspace (for employment, housing or both)
3. Nuisance and disturbance for neighbours and others during the construction period	3. Efficiencies for urban services businesses able to satisfy latent market demand (Hybrid scenario only)
4. Relocation costs for existing businesses displaced by new development	4. Improved 'housing services' from dwellings provided in a more accessible location
5. Loss of full option value of industrial land	5. Reductions in vehicle kilometres (VKT) for urban services businesses being closer to customers and suppliers, due to less 'dead running' (mixed use scenario only)
	6. Reductions in vehicle kilometres (VKT) for workers and residents from being in a more accessible location
	7. Health benefits for residents and workers as a result of increased active transport activity (walking and cycling)
	8. Amenity improvements for residents and workers from open space provision
	9. Improved access to and value from open space for residents in the broader precinct
	10. Option value of remaining industrial land
	11. Additional value of mixed use urban environment
	12. Additional community facilities

4.4 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 dwelling[17]. 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.

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.

4.5 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 Bilsborogh[18] 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

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

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

Hamilton and Kellet[19] and the InfraPlan report referenced earlier[20] 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.

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 below).

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

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

TABLE 13: ASSUMPTIONS USED TO MONETISE EXTERNALITY IMPACTS OF REDUCED TRAVEL

Externality[21]	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.

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.

[21] 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.

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 year[22]) 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 14 shows.

TABLE 14: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
Total cost of vehicle wear and tear	*$208,125*
Value of time/ hour	$13.91
Time Spent at the facility per Person	30 minutes
Total value of time spent	*$34,775*
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

[22] https://en.wikipedia.org/wiki/Auburn_Botanic_Gardens

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.

Qualitative assessment

The marginal costs and benefits generated from moving from the Base Case (retain industrial zoning across the whole site) to the two Project Case scenarios are described qualitatively in the table below.

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 Hybrid scenario would generate two moderate costs, two moderate benefits, and the Hybrid benefits, which are likely to be significant in magnitude. The residential scenario would generate three moderate costs and two moderate benefits, but lacks the Hybrid benefits.

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 Hybrid scenario has more benefits than the residential scenario and is therefore likely to generate a higher benefit cost ratio. More detailed quantitate analysis could be undertaken to further explore this question, however, given the challenge of measuring the magnitude of the option value costs and mixed-use benefits in particular, it is difficult to say whether such analysis would be any more conclusive than this qualitative review.

TABLE 15: PERFORMANCE MEASURE NOTES

Impacts	Hybrid scenario (Project Case 1) Anticipated scale of marginal impacts vs Base Case	Residential Scenario (Project Case 2) 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	Moderate
Nuisance and disturbance for neighbours and others during construction period	Minor	Minor
Cost for existing industrial businesses to relocate	Minor	Minor
Loss of future option value	Minor	Moderate
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) (mixed use scenario only)	Small	(No benefit in this scenario)
Improved 'housing services'	Small	Small
Reductions in vehicle kilometres (VKT) for urban services business due to less 'dead running' (mixed use scenario only)	Small	(No benefit in this scenario)
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	Small	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	Small	Small

Source: SGS Economics and Planning

5. CONCLUSION

PAYCE proposes to transform the Manchester Road site from an existing, under-utilised industrial site to a mixed-use precinct that retains and intensifies industrial or urban services floorspace *in addition to* providing new homes and community facilities.

The conversion of industrial lands is always a sensitive topic and there is a need to ensure that future demand for this land is able to be met throughout the city. The Manchester Road site presents a unique case in the Eastern and Central Cities (as described by the Greater Sydney Commission). While the site is large, very little of it is developed for industrial use and even less of it can be usefully re-purposed without significant cost (due to the specialised nature of the Bluescope operations).

This lack of existing site infrastructure, development and buildings makes the provision of new industrial floorspace for future demand more expensive and therefore more difficult, particularly with other sites of similar sizes being located in lower-value and more accessible areas such as WSEA.

The proposed development unlocks the industrial floorspace potential of the site, creating an opportunity to significantly increase the employment density of these jobs and increase the floorspace above current and anticipated provision. Achieving this requires a higher-value land use to act as a 'feasibility lever' and provide sufficient returns to deliver new, fit-for-purpose industrial and urban services floorspace.

In support of this, this Economic Impact Assessment looks beyond the job creation arguments alone and compare the proposal to two other development scenarios – a Base Case where limited development occurs and an alternative option that provides residential only.

SGS has assessed the Hybrid (project) and residential scenarios in terms of their marginal benefits in relation to the base case, through different lenses:

- A standard Economic Impact Assessment
- A Net Community Benefit Test

This approach allows the proposal to be considered both from its straight economic impact as well as a wider community impact.

Economic Impact Assessment findings

The Economic Impact Assessment component indicates that the Hybrid scenario (the project case) will provide a higher number of jobs and value-add during the construction phase than either the base case or the residential-only scenarios (a combined 3,780 related jobs and $869 million in value added compared with the next strongest option – residential only – at 2,988 jobs and $504 million value-added).

In addition, the amount of industrial or urban services type employment that the proposed quantum of floorspace could accommodate is estimated to be over 700% higher than the base case scenario (413-630 jobs versus 50 jobs currently).

Combined, the proposed development enables the site to realise its industrial or urban services employment potential and establishes a stronger economic output than the current site use.

Net Community Benefit findings

Separate to the EIA, the Net Community Benefit (NCB) test suggests that the Hybrid 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.

The NCB suggests that compared with the Base Case, both the proposed Hybrid scenario and a residential only scenario would deliver a higher net community benefit than the current use or Base Case scenario. However, the Hybrid scenario or project case retains a future use 'option' value by including an employment area, and also adds to the resilience of the urban environment by contributing a mixed use rather than homogeneous development. These values will be difficult to quantify on a precinct basis, but the qualitative review suggests are likely to be significant such that the mixed use or project scenario is preferred.

Summary

It is noted that Council's position, through both the 2015 and Draft 2017 Industrial land use studies, indicate that the whole Clyburn precinct be retained for future industrial use, with residential development to be 'complimentary' (ELS 2015) or 'restricted' (Draft EILS 2017).

What these studies do not factor in is that the delivery of additional industrial *floorspace* on this site will be relatively high cost and provide low returns due to the operating factors of industrial and urban services uses.

To realise the industrial floorspace intensification potential that the project case presents, there needs to be a 'feasibility lever' to deliver it. While the site is 14 hectares in size, a significant portion of this is undeveloped (and always has been) or relevant only to highly specialised industries such as steel manufacturing that are transitioning out of these areas. It is therefore only industrial in theory, with the realisation of this zoning manifesting in the current 28,090sqm of storage sheds and steel works and the related 50 jobs.

The undeveloped portion of the land is faced with several challenges that strategic, LGA-wide reports such as the 2015 and 2017 AEC reports aren't necessarily able to consider:

- The feasibility of delivering new industrial land on undeveloped sites is likely to be marginal. Revenues from traditionally lower value uses (from a lease revenue perspective) are unlikely to cover the site acquisition and development costs in a central location. This would deliver a negative Residual Land Value (RLV) and therefore not be attractive for investment in the short-medium term. [23] It also has the benefit of bringing forward the delivery of this floorspace as it would be delivered as part of a residential development.
- The land-use conflict with existing residential development along the southern boundary of Manchester Road
- The poor vehicular accessibility along local roads and access to major motorways
- There is strong competition from newer industrial precincts in Western Sydney Priority Growth Area (such as Eastern Creek and Erskine Park) that provide this scale of site with stronger multi-modal freight links, lower per sqm land costs and minimal land use conflict

[23] SGS has undertaken previous feasibility threshold analysis for other inner-city councils in Sydney to test the land-use mix required to increase industrial floorspace in existing precincts. This found that the delivery of industrial alone would not typically be commercially viable. In these cases, only when residential was introduced as a higher-value land use did the feasibility equation provide a positive RLV.

The inclusion of residential and associated community and retail uses provides the feasibility lever to deliver between 30,000 and 40,000sqm of industrial or urban services floorspace with the possibility of some associated office floorspace in the vein of industrial strata units with incorporated office functions. Without this, it is unlikely that the demand for unbuilt floorspace of that scale will drive industrial-only development, particularly in the short to medium term. In this circumstance, the precinct will therefore continue to under-perform from an industrial effectiveness perspective.

Given local and metropolitan policy aspirations as well as the employment value that a Hybrid scenario delivers, the proposed use would enable the site to best meet the competing demands on the site, given its location and surrounding land use. Unlike a residential-only option, the site would not only retain industrial uses but significantly increase the intensity and appropriateness of the industrial or urban services provision adjacent to the rail yards. This can only be delivered through the co-development of residential given the cost and return of such facilities.

This residential use however also enables Cumberland Council to meet its housing targets in an area of high public transport accessibility and contribute to affordable housing delivery. It also enables a highly degraded section of the Duck River – formerly a 'back fence to two LGAs' and now a significant Green Corridor for the Central city – to be revitalised.

The location of 30-40,000sqm of urban service floorspace is ideal to the north of the site as the uses may have synergies with established rail uses.

APPENDIX 1 – URBAN SERVICES

SGS has defined Urban Services as the following mix of industries.

TABLE 16: URBAN SERVICES – ANZSIC INDUSTRY CLASSIFICATION

ANZSIC Code	ANZSIC Code description
66	Rental and Hiring Services (except Real Estate)
73	Building Cleaning, Pest Control and Other Support Services
42	Other Store Based Retailing (restricted to the following 4 digit codes)
4230	*Hardware, Building and Garden Supplies Retailing, nfd*
4231	*Hardware and Building Supplies Retailing*
4232	*Garden Supplies Retailing*
39	Motor Vehicle and Motor Vehicle Parts Retailing
94	Repair and Maintenance
16	Printing (including the Reproduction of Recorded Media)
26	Electricity Supply
27	Gas Supply
28	Water Supply, Sewerage and Drainage Services
29	Waste Collection, Treatment and Disposal Services
33	Basic Material Wholesaling
46	Road Transport
51	Postal and Courier Pick-up and Delivery Services
52	Transport Support Services
53	Warehousing and Storage Services
30	Building Construction
31	Heavy and Civil Engineering Construction
32	Construction Services

Source: SGS, ABS 2011

APPENDIX 2 – BROAD LAND-USE CATEGORIES

Broad Land-use Categories (BLCs)

SGS has developed Broad Land-use Categories through our extensive land use audit process. These are defined in the table below.

TABLE 17: SGS BROAD LAND-USE CATEGORIES

BLC Description
Agriculture and Mining
Accommodation Short Term
Business Park
Dispersed
Freight and Logistics
Local Light
Manufacturing Heavy
Manufacturing Light
Office
Other
Retail Big-box
Retail Bulky Goods
Retail Main street
Special
Urban Services

Urban Service floorspace to job ratios

TABLE 18 IDENTIFIED ANZSIC JOB TO FLOORSPACE RATIOS (2 AND 4-DIGIT) FOR URBAN SERVICES

Industry category	Identified jobs to floorspace ratio (sqm)
Printing (including the Reproduction of Recorded Media)	66
Electricity Supply	94
Gas Supply	94
Water Supply, Sewerage and Drainage Services	89
Waste Collection, Treatment and Disposal Services	91
Building Construction	9
Heavy and Civil Engineering Construction	9
Construction Services	19
Basic Material Wholesaling	92
Motor Vehicle and Motor Vehicle Parts Retailing	48
Hardware, Building and Garden Supplies Retailing, nfd	47
Hardware and Building Supplies Retailing	47
Garden Supplies Retailing	47
Road Transport	93
Postal and Courier Pick-up and Delivery Services	94
Transport Support Services	94
Warehousing and Storage Services	96
Rental and Hiring Services (except Real Estate)	54
Building Cleaning, Pest Control and Other Support Services	41
Average	**64**
Average (excluding construction jobs)	**73**

Source: SGS land audit data

SGS Economics & Planning

Contact us

CANBERRA
Level 2, 28-36 Ainslie Place
Canberra ACT 2601
+61 2 6257 4525
sgsact@sgsep.com.au

HOBART
PO Box 123
Franklin TAS 7113
+61 421 372 940
sgstas@sgsep.com.au

MELBOURNE
Level 14, 222 Exhibition St
Melbourne VIC 3000
+61 3 8616 0331
sgsvic@sgsep.com.au

SYDNEY
209/50 Holt St
Surry Hills NSW 2010
+61 2 8307 0121
sgsnsw@sgsep.com.au

PARRAMATTA
Level 7, 91 Phillip Street
Parramatta NSW 2150
+61 2 8307 0121
sgsnsw@sgsep.com.au