

North East Link Project:

Bulleen Industrial Precinct Economic Analysis

Expert Witness Statement of Brian Haratsis for the North East Link Project Environmental Effects Statement

PREPARED FOR MANNINGHAM CITY COUNCIL

July 2019

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Expert witness details

Name and address of expert

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Expert's qualifications and experience

- Master of Science, London School of Economics, London University
- Bachelor of Town and Regional Planning, University of Melbourne; and
- Bachelor of Commerce, University of Melbourne.

I have extensive experience in the field of economics and strategic planning gained over the past 35 years, having provided independent advice on hundreds of development projects and proposals throughout all parts of Australia, to a broad range of clients. This experience includes extensive previous work undertaken in and around the City of Manningham. My Curriculum Vitae is attached as Appendix 1.

Expert's area of expertise

My area of expertise covers economics and strategic planning. In particular, I have extensive experience in regard to economics, economics impact assessments, socio-economic analysis and net community benefit assessment.

Details of other contributors

In preparing this expert witness statement, I was assisted by Daniel Parker, General Manager – Gold Coast. Daniel has assisting me in reviewing the exhibition documents and preparing the Economic Impact Assessment for the Bulleen Industrial Precinct. Daniel's Curriculum Vitae is also attached in Appendix 1.

Details that defined the scope of the statement

I have been asked by City of Manningham to prepare the following in respect of the Bulleen Industrial Precinct:

1. Analysis of business case
2. Impact assessment
3. Risk assessment
4. Mitigation
5. Mitigation strategy

Disclosure

Macroplan has prepared two reports which I rely on this evidence. They are:

- An Employment Land Planning Study (2019) on behalf of City of Manningham and NELP.
- North East Link Bulleen Industrial Precinct Social and Economic Opportunities Analysis (2019).

The reports are appended.

Declaration

I have made all the enquiries that I believe are desirable and appropriate and no matters of significance that I regard as relevant have, to my knowledge, been withheld from the IAC.



Brian Haratsis

Executive Chairman

Macroplan

15 July 2019

Summary and recommendations

The IAC makes recommendations and/or specific measures that it considers necessary and appropriate to prevent, mitigate or offset adverse environmental effects of projects.

Seven hundred and seventy jobs will be directly be lost and up to a further 1,200 jobs will be put at risk. I have analysed the Environmental Performance Requirements and I have identified that

- there is a need for Environmental Performance Requirements in respect to the workforce – a transitional plan
- there is a need for an Environmental Performance Requirements in relation to managing the industrial zone issue and controlling the residual land at the BIP once construction is complete.

I conclude that recommendations by the IAC should be made in respect of the following matters:

The North East Link project poses major issues for Bulleen Industrial Precinct. First, in relation to the workforce, there is no program to investigate the effects on the workforce. The workforce are not stakeholders and should be stakeholders. Their vulnerability is acknowledged yet there are no Environmental Performance Requirements to address this issue.

We suggest a Very High/Major planned consequences risk rating for workforce disruption.

We suggest that

- i. Recommendations should be made in relation to the rezoning of the Council Depot at Websters Road to allow for the creation of new industrial land.
- ii. This is necessary step because Manningham will have virtually no industrial land following the acquisition of the BIP.
- iii. This would involve moving the Depot, subdivisional works and redeveloping the land for industrial purposes.
- iv. It would be reasonable NELP would pay for this.
- v. It may be possible to locate the relocated Depot outside the UGB, but greater clarity is needed.
- vi. The IAC could recommend a fast track rezoning and the provision of funding for the resolution of the rezoning and UGB issues.

We suggest an EPR based on Manningham managing the industrial zone issue and controlling the residual land because it is planned major impact, including:

- the impacts on the BIP and the secondary economic impacts
- the time taken for the project

the fact that only small percentage of the impacts will be absorbed, noting that 770 direct people will be displaced from their jobs and up to 1,200 people could be displaced. This impact on output is \$219 million in respect of the 770 jobs and \$310 million in respect of the 1,200 jobs in Manningham.

1 Introduction

The North East Link Inquiry and Advisory Committee (the IAC) was appointed to inquire into, and report on, the North East Link Project (Project) in accordance with the terms of reference.

The IAC is appointed pursuant to both:

- section 9(10) of the Environment Effects Act 1978 (EE Act) as an inquiry; and
- part 7, section 151 of the Planning and Environment Act 1987 (P&E Act) as an advisory committee.

The IAC is appointed by the Minister for Planning under section 9(1) of the EE Act to hold an inquiry into the environmental effects of the Project. This report refers to 'any measures it considers necessary to avoid, mitigate or manage the environmental effects of the project'.

The report addresses:

- recommendations as to any feasible modifications to the alignment or design of the Project that would offer beneficial outcomes;
- recommendations and/or specific measures that it considers necessary and appropriate to prevent, mitigate or offset adverse environmental effects having regard to legislation, policy, best practice, and the principles and objectives of ecologically sustainable development; and
- recommendations that I consider necessary.

2 Existing conditions

The North East Link Environmental Effects Statement (NEL EES) selected 200 metres from the project alignment as the business study area boundary. It argued that it would capture most of the likely project impacts on business such as land acquisition, access as well as amenity impacts. The study area is shown in Figure 1. Clearly all of the economic impacts are not accounted for in this analysis. In the case of the Bulleen Industrial Precinct (BIP) many economic linkages are apparent both within the precinct and outside of the precinct.

The EES study comprised of:

- Desktop review of relevant State and Local Government legislation and policy and other documentation to establish the context and requirements for the business impact assessment. This involved a review of relevant publicly available information including Australian Bureau of Statistics (ABS) data from the 2016 Census as well as Council-held data.
- Site visits to confirm business identification, complete information gaps and understand likely employee, customer and delivery vehicle access routes to business areas.
- Interviews with and surveys of businesses in Bulleen, Heidelberg, Watsonia Village and along Greensborough Road to understand their operations.
- Consultation with the Watsonia Traders Association, Heidelberg Centre Management, Balwyn North Traders Association, Kew Traders Association, Eltham Traders Association, Warringal Centre Management and the Banyule, Boroondara, Manningham, Whitehorse and Yarra City Councils.
- Assessment of the potential business impacts during construction and operation of the project, including:
 - Impacts on businesses due to uncertainties of the project before the finalisation of its design and timing.
 - Impacts on businesses due to land acquisition and temporary occupation and associated loss of employment as well as indirect impacts on businesses not subject to acquisition or occupation.
 - Impacts on businesses due to changes in the road network, access and traffic conditions during construction and operation.
- Development of Environment Performance Requirements (EPRs) to address risks to businesses. The residual risk ratings and the assessment of impacts presented in this chapter assume implantation of the EPRs.

Importantly, the EES study did not consider impacts on the BIP workforce or the implications for the BIP residual land.

2 Existing conditions

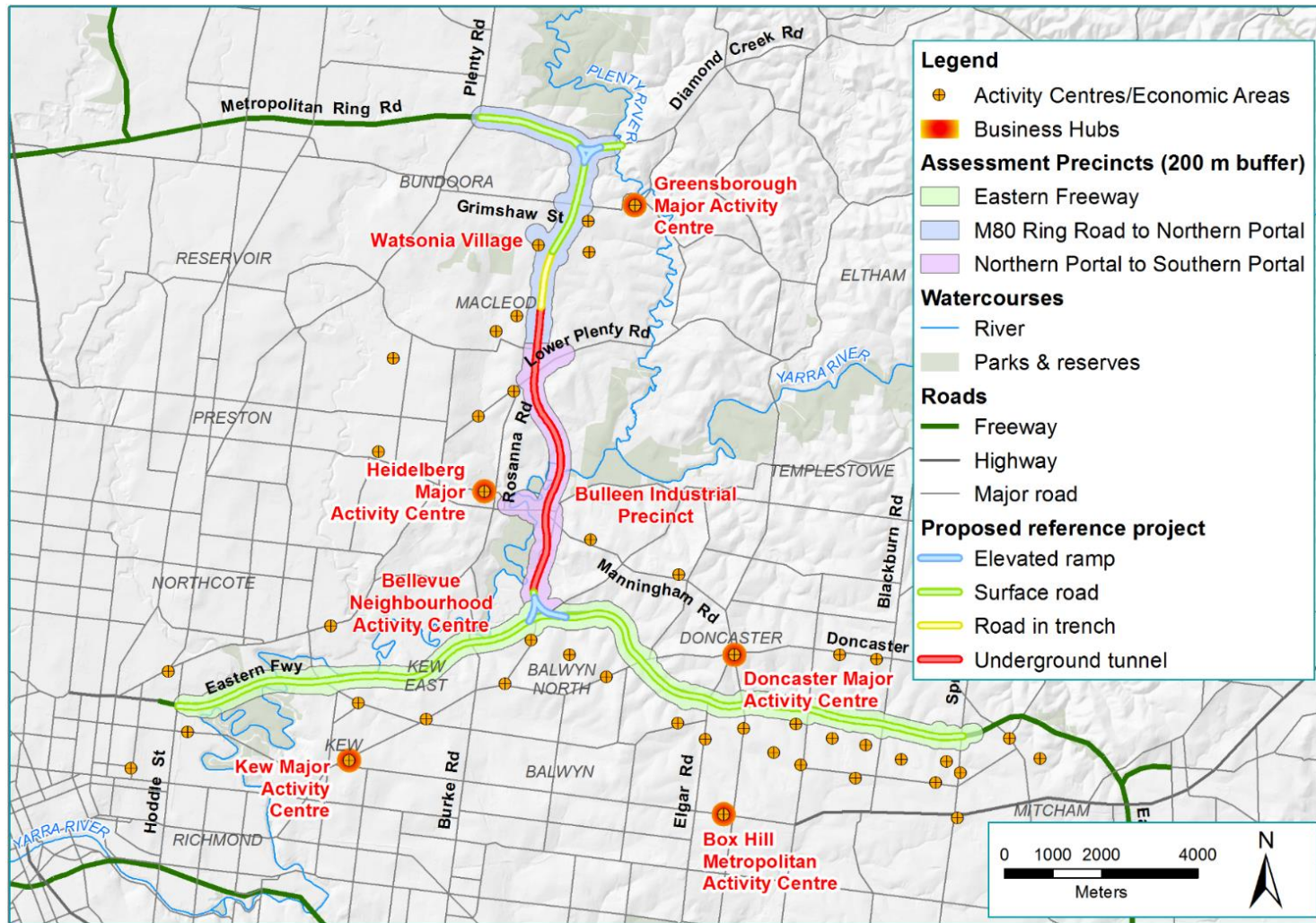


Figure 14-1 Business study area

Source: EES Chapter 14 Business, page 14-3

Business profile

The EES states that businesses adjacent to the NEL alignment are dominated by consumer services and are largely focused on local markets (EES, page 14-5), but this does not apply to BIP because of the focus on a construction hub and on automotive hub.

For each of the North East Link precincts the division of businesses was stated as (EES, page 14-5):

- 81 businesses along the M80 Ring Road to northern portal precinct
- 118 businesses along the northern portal to southern portal precinct
- 61 businesses in the Eastern Freeway precinct

Bulleen Industrial Precinct

The EES states that

The Bulleen Industrial Precinct includes the businesses along Bridge Street, Templestowe Road and Manningham Road to the east of the intersection with Bulleen Road. Based on business surveys and estimates, the Bulleen Industrial Precinct comprises approximately 110 businesses estimated to provide direct employment for 960 to 1,000 people who mainly live in surrounding suburbs in the Manningham and Banyule municipalities.

The Bulleen Industrial Precinct has evolved over the decades and consequently has resulted in a formation of clustered automotive and construction businesses. Clusters are considered to support productivity and enable companies to better compete regionally.

In addition to the automotive cluster, other business types in the Bulleen Industrial Precinct include garden nursery retail businesses, a museum, eateries, dry cleaning services, fitness centres and industrial material retailers. A large pre-mixed concrete business involves a significant logistics operation (and benefits from close proximity to a truck servicing business), while eateries have an established business customer base within the precinct.

The Bulleen Industrial Precinct has been established at the intersection since the 1950s. Many businesses have been established there a long time and there has been a low rate of change in tenancies in the area compared with the benchmark rate of change in business in data provided by Business Victoria. One business providing laundry services to surrounding businesses has been operating for more than 70 years. At least 15 other businesses have been established in the precinct for over 30 years, which has led to the development of the business cluster and the evolution of the precinct's characteristics. (EES, pages 14-7 – 14-8)

The BIP is an important part of social and economic fabric of the City of Manningham. The mitigation of the impacts is of critical significance.

Bulleen Employment Precinct (BEP) Workforce Survey

The City of Manningham was given a copy of a workforce study prepared for the Bulleen Industrial Group by Simon Welsh from Chorus Consulting. The date of the report is March 2019 and the survey was undertaken on 14 – 28 February 2019. All businesses were surveyed within the BEP and the survey questionnaire is appended. The results are presented below.

An online survey was undertaken to provide insight on the profile of the BEP workforce. Data was obtained for 190 employees. While the survey is skewed towards employees with the literacies and computer access needed to complete such a survey (i.e. it over-represents professional/managerial employees), the results still highlight the vulnerable nature of the BEP workforce.

The following text and figures are extracted from the Chorus Consulting workforce study, concluding with Figure 14 on page 15 of this statement.

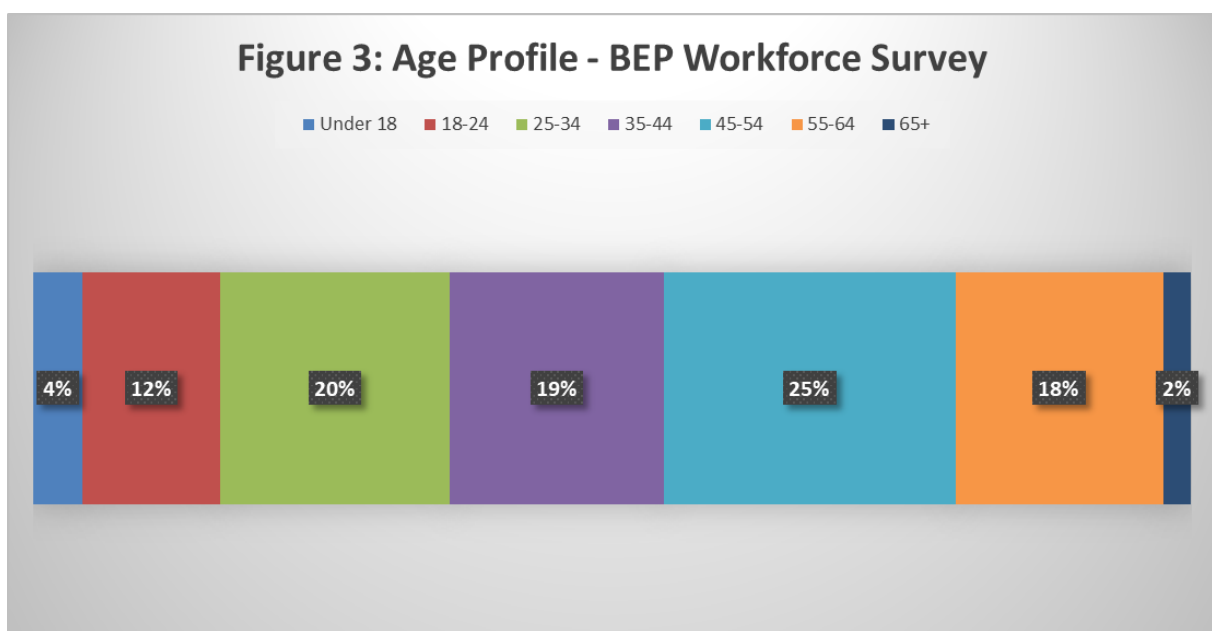
The BEP workforce is characterised by three unemployment risk factors:

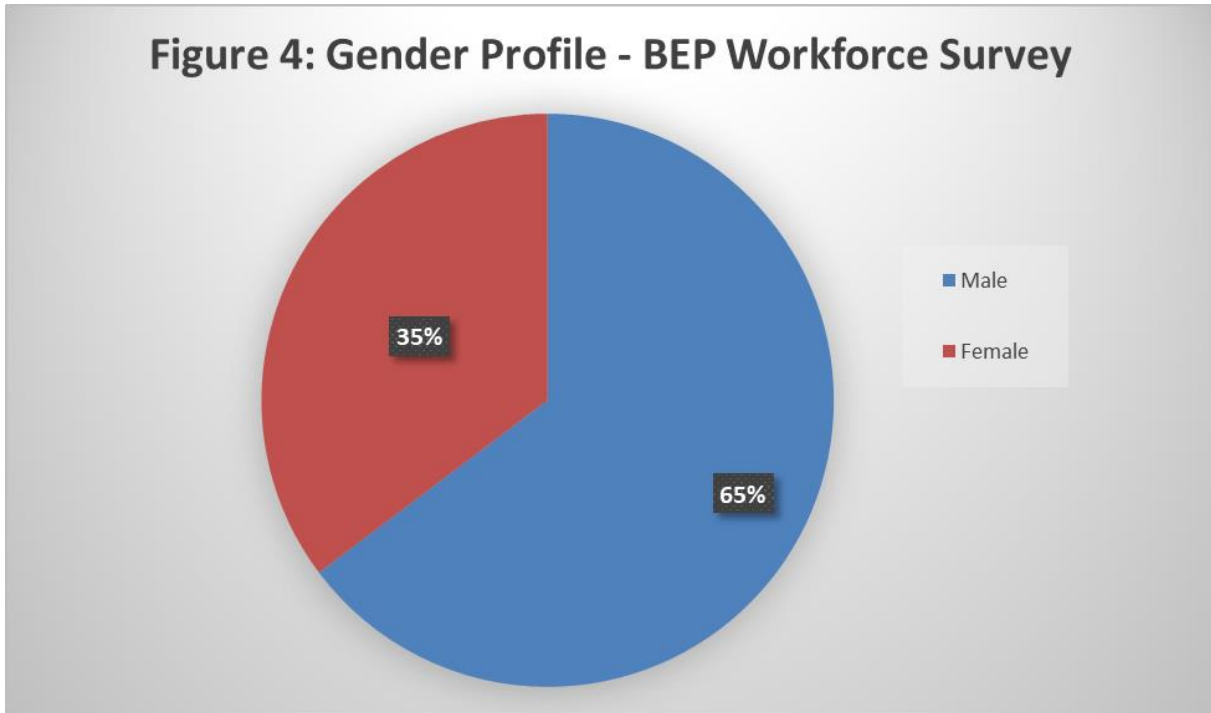
1. Demographics
2. Economic status
3. Sensitivity to unemployment

Demographics

The combination of age (45+ yo) and gender (predominantly male) characteristics creates significant vulnerability for much of the BEP workforce.

- Approximately 45% of the workforce is aged 45 years or more (see Figure 3). ACOSS notes in its 2018 report, *Faces of Unemployment*, that 43% of people receiving unemployment benefits are aged over 45 years and this share is *growing*. This proportion increases to 49% if looking specifically at long-term unemployment. Being unemployed and aged over 45 years is a significant risk factor to facing *long-term* unemployment.
- Around two-thirds of the workforce is male (see Figure 4). ABS statistics shows that over the 5 years from 2011 to 2016, the unemployment rate among men increased more than the rate among women.





Economic status

The BEP supports a largely blue-collar workforce with comparatively low wages/wealth and education levels. This group is very vulnerable to economic stress (e.g. periods of unemployment) and, for many, their competitiveness in the job market is problematic. The concentration of blue-collar jobs in the eastern suburbs is unusual, make the BIP something of a rarity form a labour-force perspective.

- Over 40% of the workforce is renting (see Figure 5), giving reduced housing security and asset wealth to leverage if they find themselves with no income for a period.
- The majority of workers live in households with an annual income of less than \$100,000 (see Figure 6), placing most below the median for household income in Victoria. Indeed, *the most prevalent category (30%) was a household income of less than \$50,000pa*. Consistent with this, around a third of the workers live in sole-income households, while a further 46% live in dual-income households (see Figure 7). Even these dual-income households, given the relatively low overall income, are particularly vulnerable to unemployment for one of the earners.
- Around a quarter of the workforce has some or completed High School as the highest level of educational attainment. The labour market competitiveness of such workers is extremely problematic. A further third of workers, approx., have a vocational qualification as their highest educational attainment (see Figure 8). Consistent with the educational profile of the workforce, over 40% of employees work in general/unskilled labour, retail or hospitality roles. Around 30% work in skilled labour, trade or administration jobs (see Figure 9).

Figure 5: Housing Profile - BEP Workforce Survey

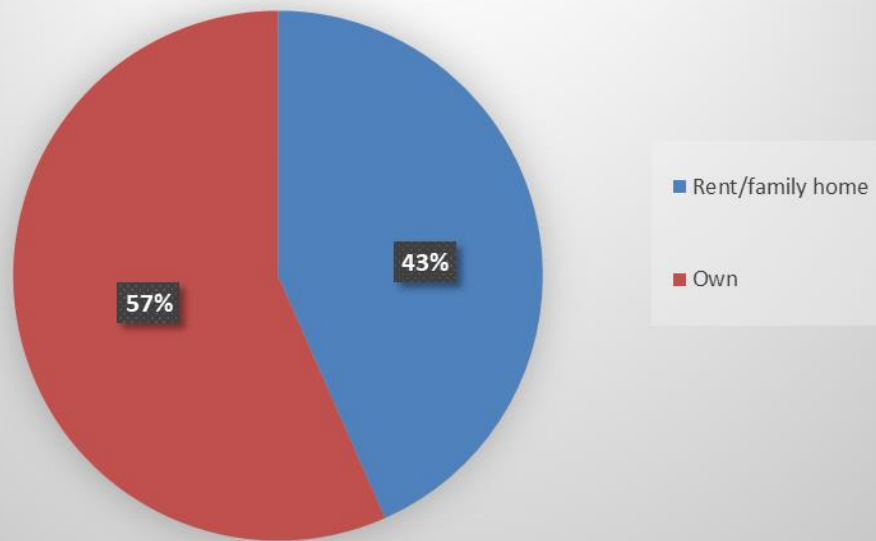


Figure 6: Household Income Profile - BEP Workforce Survey

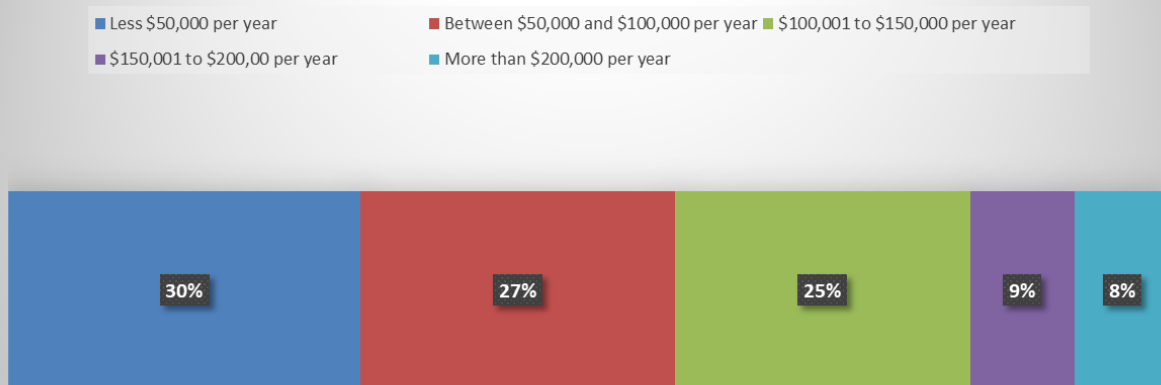


Figure 7: Number of Working Adults in Household - BEP Workforce Survey

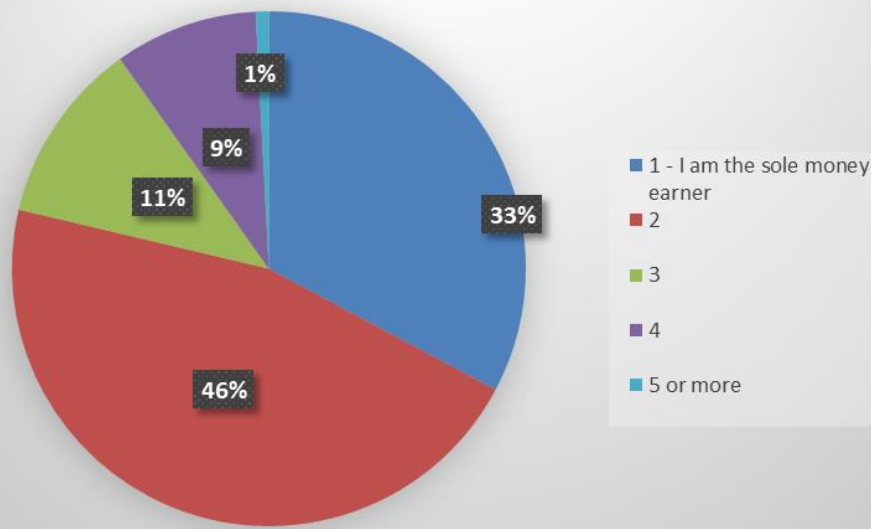
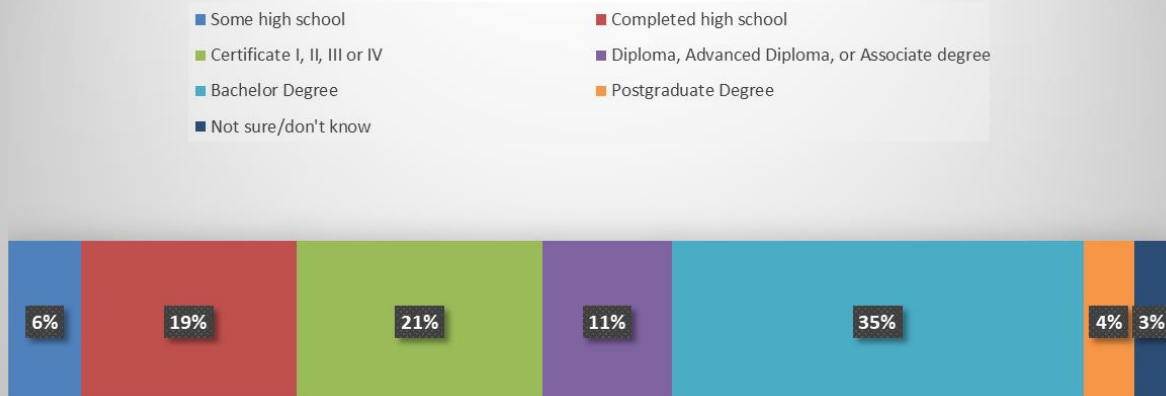
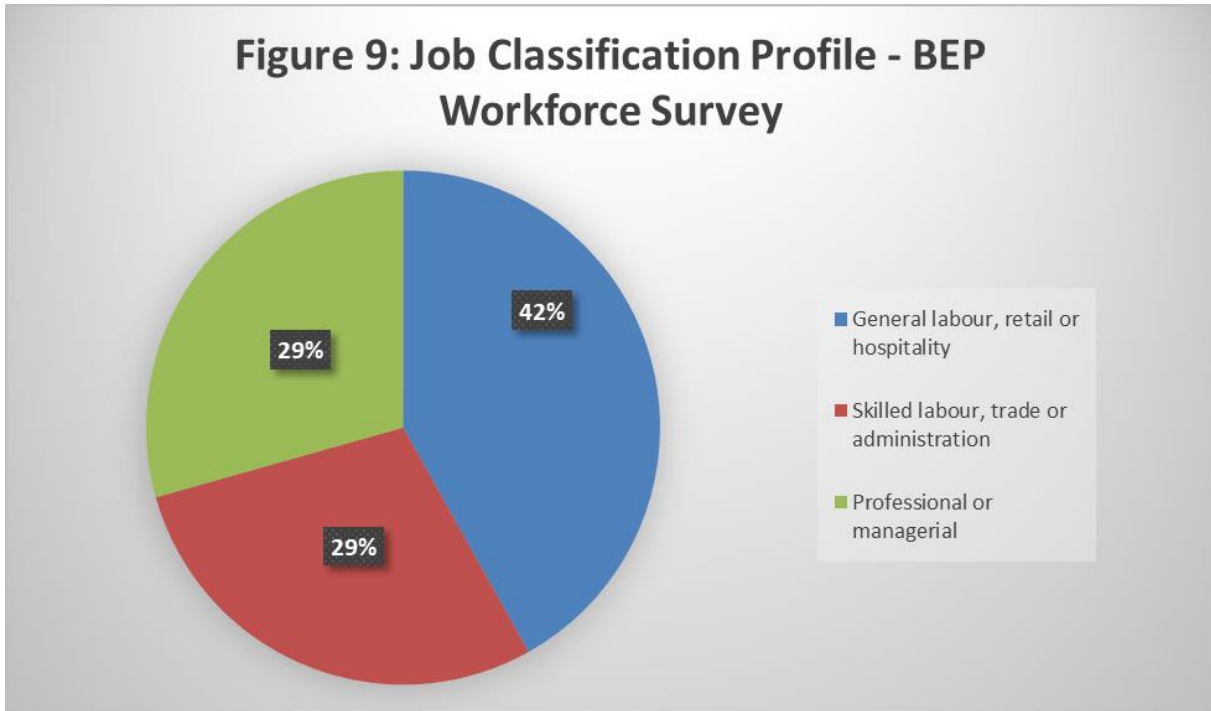


Figure 8: Education Profile - BEP Workforce Survey





Sensitivity to unemployment

Overall, the profile suggests a ‘settled’ workforce – this is *not* a dynamic workforce of people moving from job-to-job and being well equipped to deal with ‘job-hunting’ and unemployment. Indeed, among those who have experienced unemployment, a large proportion were unemployed for an extended period (6 month or more). Such individuals would still carry the economic and psychological legacy of those experiences. Many are unsure what relocation of their employer would mean to them.

- The vast majority of workers (around 90%) have permanent jobs (full-time or part-time) (see Figure 10), and more than half have been with their current employer for more than 6 years (see Figure 11). Indeed, around a third have been with that employer for more than 10 years. This is a largely settled workforce
- Around 30% of workers have experienced unemployment in the last 10 years (see Figure 12), with approximately 40% having been unemployed (and looking for work) for 6 months or more (see Figure 13). The economic and psychological legacy of these experiences would be significant even today.
- A further indication of the sensitivity of this workforce to the relocation of BEP businesses is the finding that nearly half of workers are “not sure” if they can or will remain with their employer should relocation be necessary (see Figure 14). Many workers are already living with uncertainty.

Conclusion

The risk profiles discussed later do not account for the ‘human’ sector. The need for a mitigation strategy early in the process is evident from an employer and employee perspective.

Figure 10: Employment Type Profile - BEP Workforce Survey

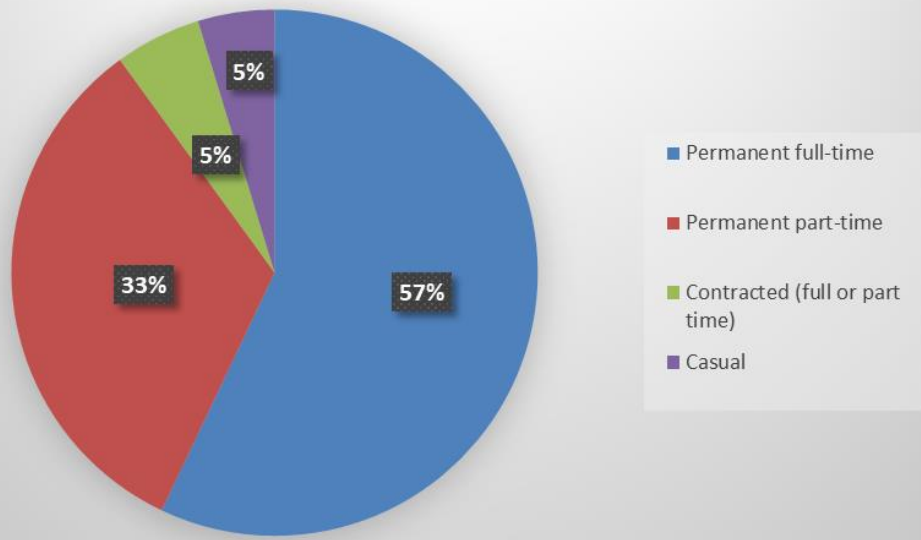


Figure 11: Duration of Current Employment - BEP Workforce Survey

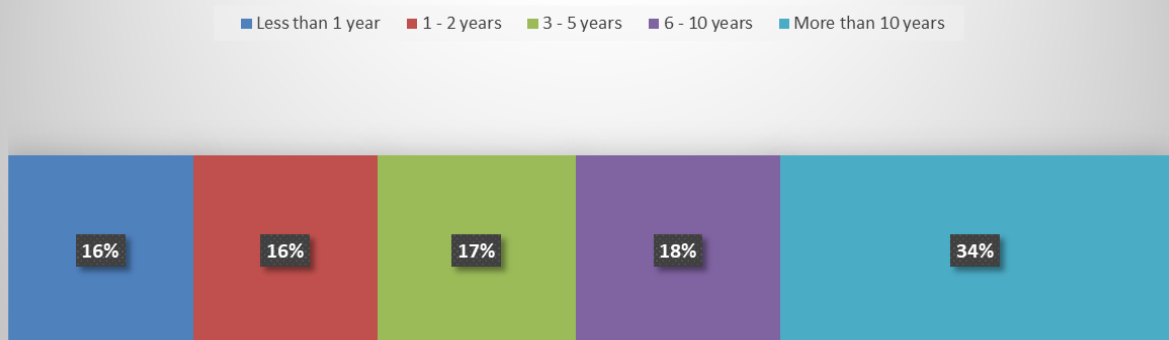


Figure 12: Unemployment in the Last 10 Years - BEP Workforce Survey

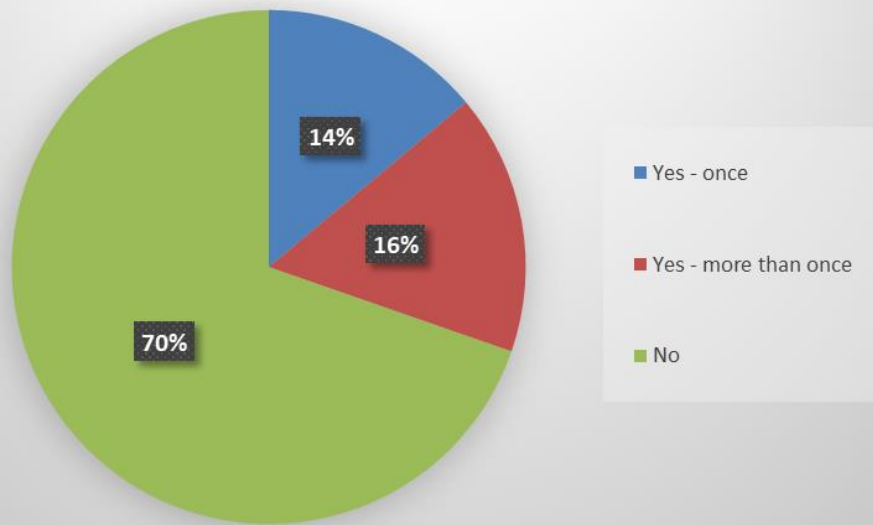
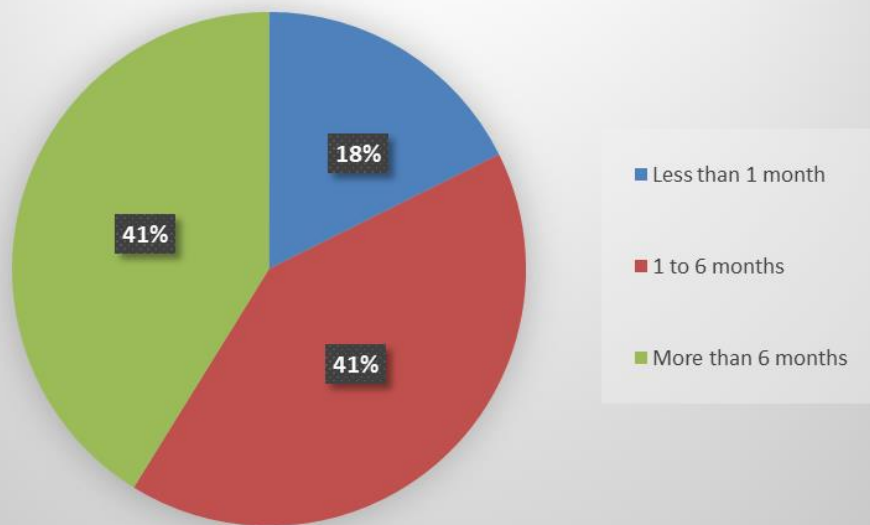
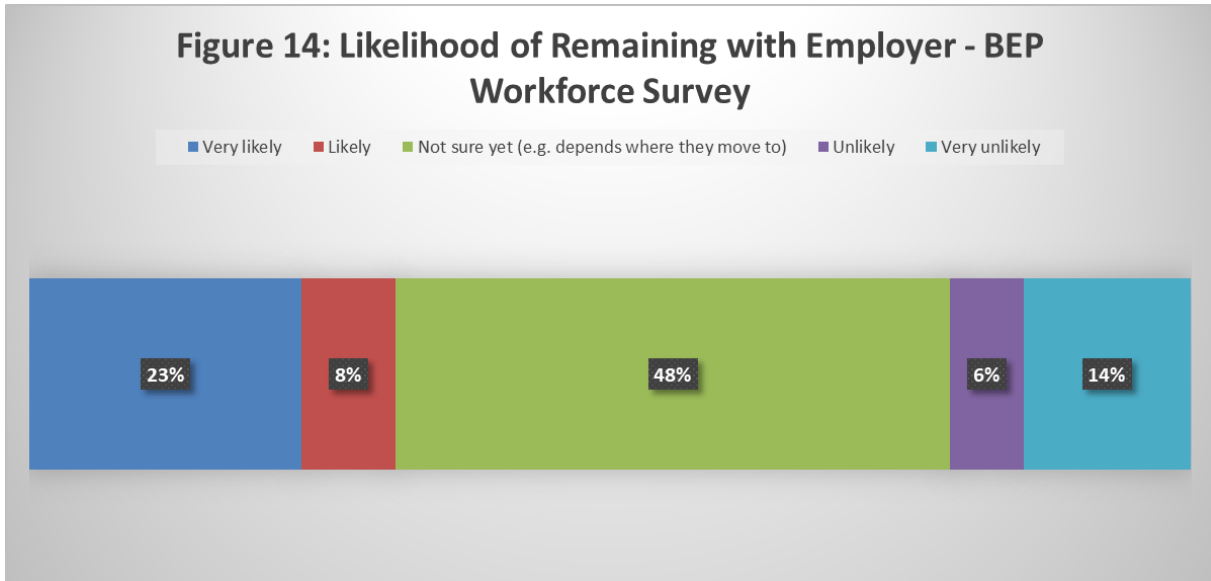


Figure 13: Duration of Unemployment - BEP Workforce Survey





Business surveys: EES surveys/REMPPLAN surveys

The EES states that of the approximately 160 businesses and stakeholders approached, 86 businesses and/or land owners responded to the survey (21 businesses in the M80 Ring Road to the northern portal precinct; 60 businesses and two land owners in the northern portal to the southern portal precinct; and three businesses in the Eastern Freeway precinct). We note there are 260 businesses (EES, page 14-5). All businesses in the BIP were given the opportunity to participate in the survey, given all INZ1 businesses in this area would be subject to acquisition.

Employment and revenue data were collected from businesses during the survey. Businesses provided an indication of staffing and employment levels by specifying the number of full-time, part-time and casual staff.

Business surveys were also undertaken by REMPLAN for the City of Manningham. Forty unique responses were received from existing businesses.

These provided information on:

- Business background
- Employment
- Employment catchment
- Customer catchment
- Turnover
- Current business activities
- Likely business impacts from land acquisition
- Viability of relocation
- Likely relocation locations
- Issues arising from the project
- Suggested solutions to issues arising from the project

2 Existing conditions

A total 50 survey responses were received providing employment figures from which FTE estimates were derived. Table 6.5 outlines the FTE figures, with businesses identified by ANZSIC category.

Table 6-5 Northern portal to southern portal precinct employment

ANZSIC category	Total FTE employment	Total business responses	Average FTE
Accommodation and Food Services	2.5	1	2.5
Administrative Support	75	2	37.5
Arts and Recreation	93	3	31
Construction	112	8	14
Education and Training	448.75	2	224.4
Manufacturing	1.75	1	1.75
Other Services	64.25	14	4.6
Professional, Scientific and Technical Services	136.25	4	27.3
Rental, Hiring and Real Estate	38.25	2	19.1
Retail Trade	127	12	10.6
Wholesale Trade	30.5	1	30.5

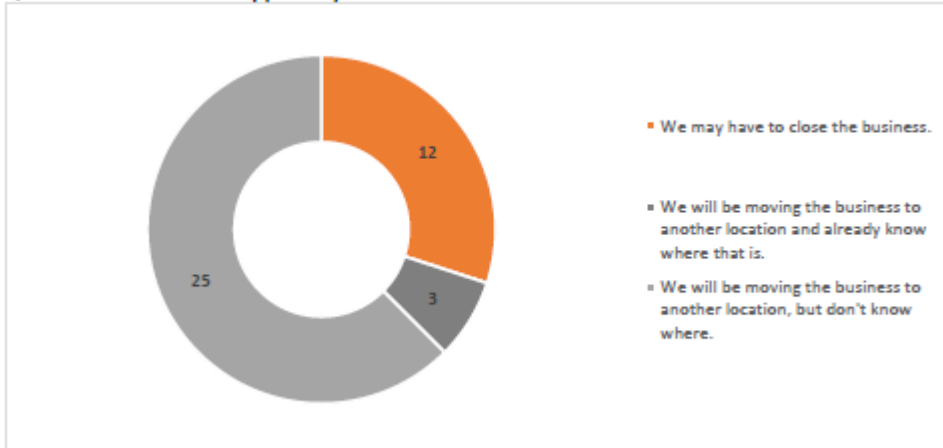
Source: Technical Report F – Business, page 49

Businesses in the education and training category employ the greatest number of FTE employees with an average of 224.4 FTE employees per business. Administrative support and professional, scientific and technical services followed with 37.5 and 27.3 FTE employees respectively. Businesses classified as Other Services consisted of predominantly automotive businesses and had an average FTE employment of 4.6 across a total of 14 responses.

A total of 54 respondents to the business survey provided information on annual business revenue, including one survey that provided figures for two separate businesses. Figure 6-7 shows the indicative annual business revenue ranges for respondents, with businesses identified by ANZSIC category. Of the total survey responses, nine businesses did not indicate a revenue range.

The number of business surveys is inadequate given the severity of impacts. For example, in Question 6 from REMPLAN only three businesses knew where they are moving to.

Question 6 – What will happen to your business once construction commences on North East Link?



Source: REMPLAN – Bulleen Industrial Precinct: Economic Impact Assessment, page 22

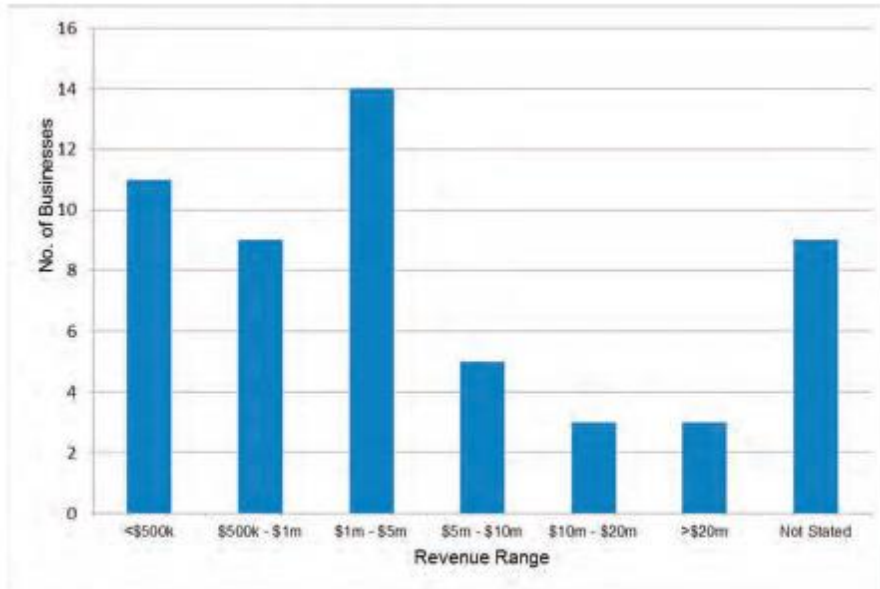


Figure 6-7 Annual business revenue, northern portal to southern portal precinct

Source: Technical Report F – Business, page 50

The EES did not provide a consolidated review of the answers to the survey.

Business survey conclusions

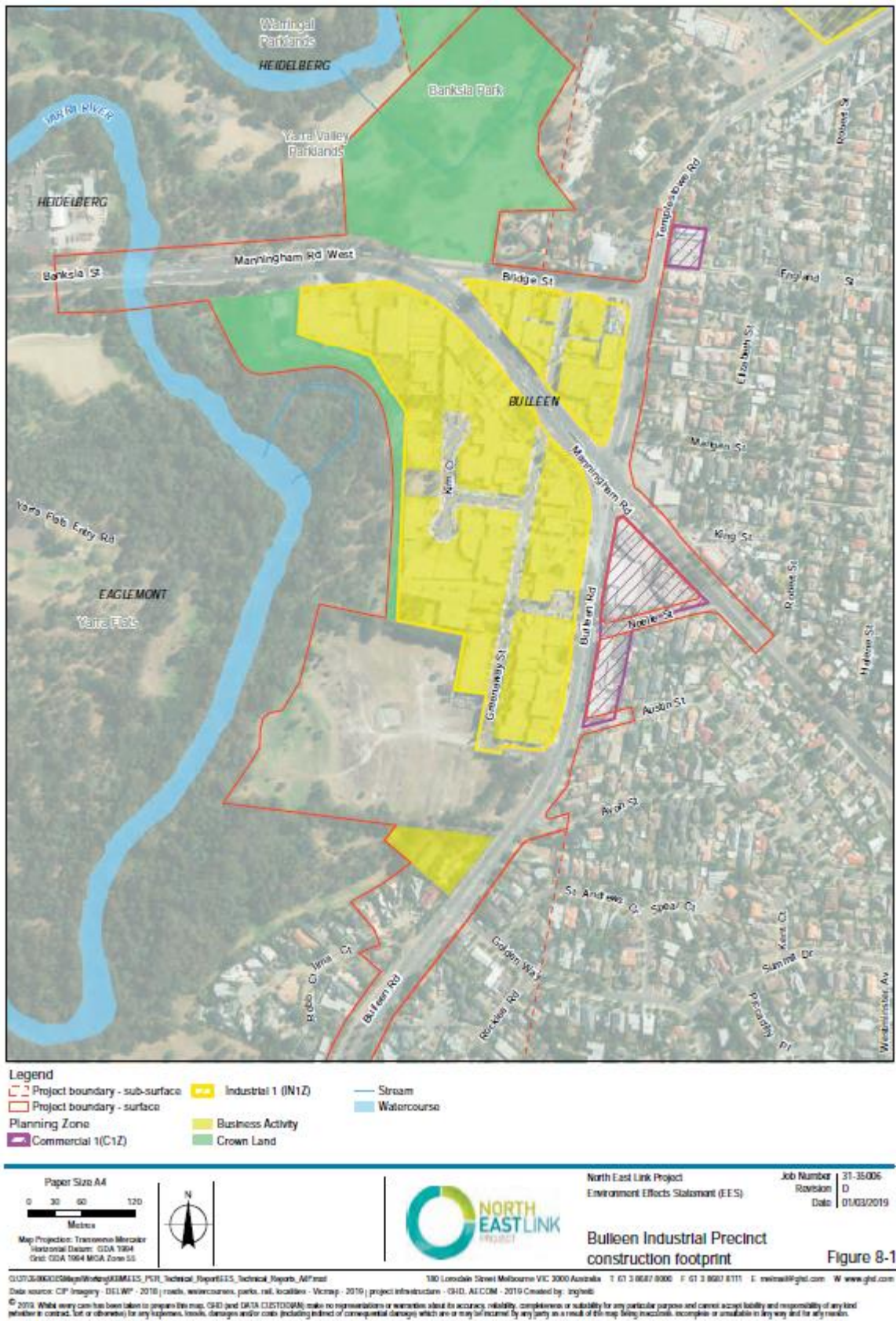
All the businesses in the INZ1 are proposed to be purchased. There is a significant local and regional impact with economic multipliers. Off a small sample REMPLAN indicated (40 businesses), 27 said they would relocate in Manningham (REMPAN Survey Responses, Appendix). The only potential relocation site is on the Depot site, Websters Road, 9 km away, and it is unknown how many businesses would or could viably locate there. Both surveys suggest a large number of businesses would relocate but ‘under certain conditions’ (Technical Report F – Business, page 72).

Businesses stated that relocation would only be viable if a new location was within the local area, to limit the impact on customers and to maintain the competitive advantages of convenient access to the road network and their customer base. This indicates an initial willingness to relocate and continue the business. However, there is a limited number of sites available in the local area and there would likely be a strong surge in demand for new sites when a large number of businesses are displaced at approximately the same time. Theoretically, the vast majority of the businesses can be, from a planning perspective, located within other zones such as Mixed Use Zone, Commercial 1 and 2 Zones, and Industrial 2 and 3 Zones. The effects of business clustering and access to customers are likely to negate this potential.

The extent of the land to be purchased is indicated on Map 1.

The EES survey revealed 17 businesses had intended physically expand or upgrade their business facilities over the next five years (one-third of businesses surveyed). The plans have been put on hold for some businesses due to potential land acquisition and uncertainty about this future operation. This has not factored into any impact analysis. This indicates the project is already adversely impacting employment growth.

2 Existing conditions



Source: Technical Report F – Business, page 73

Social

The Technical Report I, Social, includes workforce issues. However, it does not have stakeholder input from workers, despite stating (page 68) 'Given the length of tenure of some businesses there are strong social ties among business owners, employees and the local community. Consultation undertaken for the social impact assessment found that businesses in the precinct are value based on the longstanding relationships and diversity in employment technical education pathways for the local and broader community that in some cases is reliant on industrial zoning.'

The Technical Report I, Social (page 143) states that

Depending on, if and where the businesses relocate, the displacement of local businesses could result in loss of employment opportunities if employees choose not to continue to work with the business due to its relocation, or if the business does not continue to operate due to land acquisition. The loss of employment opportunities would increase the labour pool seeking employment and potentially increase unemployment, especially for those who may be vulnerable to unemployment such as those close to retirement age, those with limited skill sets, or those who rely on local employment (such as persons with limited mobility).

The potential social impacts of unemployment on the individual and the community are generally well understood. For individuals, unemployment has the potential to increase social isolation, challenge personal identity and life satisfaction, reduce living standards through a reduction in income and ultimately result in detrimental health and wellbeing outcomes (discussed further in Technical Report J – Human Health) (Waddell & Burton, 2006; World Bank Group, 2013). These impacts have the potential to radiate outwards from the individual, resulting in loss of family income and living standards and reduced household and community wellbeing (page 144).

This report states (page 144) that the Environmental Performance Requirements in Technical Report F – Business would support mitigation of the issues as EPR would

- *Inform and regularly update affected businesses of the planning and design progress for the project*
- *Prior to construction, work with councils to identify alternative location options for displaced businesses*
- *Implement support programs to build business resilience and implement a range of marketing and promotional activities to encourage awareness and patronage of businesses located near construction sites*

However, these relate to businesses not workers.

None of the ERPs relate to workforce programs (job placement, retraining, severance packages).

Engagement with businesses and the workforce is critical. The idea that vast majority of businesses can (technically) be located in other zones overlooking the clustering effect on the viability of the businesses and that the lack of opportunity particularly proximate the BIP.

In relation to the impact rating the Technical Report Social indicates

However, for the City of Manningham, the social impact would be moderate to major, reflecting the loss of available choices for locally accessible employment. Similarly, the displacement of employment for people who may be vulnerable such as those close to retirement age, those with limited skill sets, or those who rely on local employment options (such as persons with limited mobility) would be major (page 144).

2 Existing conditions

I note that none of the EPRs (including the Social EPRs) cover this requirement, other than community awareness program, discussed in the EPR Table under SC 2.

Applicable Legislation and Policy	EPR Code	Environmental Performance Requirement	Phase
	NV14	<p>Reduce impacts from engine brake noise</p> <p>Opportunities to encourage heavy vehicle drivers to reduce use of engine brakes must be considered, where practicable.</p>	Design, construction, operation
14. Social and Community (SC)			
<p>Planning and Environment Act 1987</p> <p>Australian Standard AS/NSZ 10002:2014 Guidelines for Complaint Management in Organisations.</p>	SC1	<p>Reduce community disruption</p> <p>Design and construct the project to reduce disruption to residences and community infrastructure facilities from direct acquisition or temporary occupation of residential land, as far as is practicable. Where residential land is to be permanently acquired:</p> <ul style="list-style-type: none"> • Use a case-management approach for project interactions with affected land owners and occupants • Endeavour to reach agreement on the terms for possession of the land • Consider the relative vulnerability and special needs of land owners and occupants. 	Design, construction
	SC2	<p>Implement a Communications and Community Engagement Plan</p> <p>Prior to construction, prepare and implement a Communications and Community Engagement Plan to engage the community and potentially affected stakeholders and communicate progress of construction activities and operation. The plan must include:</p> <ul style="list-style-type: none"> • A process for identifying community issues and the recording, management and resolution of complaints from affected stakeholders consistent with Australian Standard AS/NZS 10002:2014 Guidelines for Complaint Management in Organisations • Approach to stakeholder identification • Enquiry management and record keeping approach and procedures including making available a 24 hour telephone number, postal address, and an email address and publishing these on the project website • Approach to communicating and engaging with the community and potentially affected stakeholders in relation to: <ul style="list-style-type: none"> – Construction activities including temporary facilities and impacts that may affect the community, businesses or individual stakeholders (eg dust, noise, vibration and light) and relevant mitigation (eg relocations policy) – Changes to transport conditions and relevant mitigation (eg road closures, detours) • Identifying how stakeholders can access information on environmental performance that is to be made publicly available • Incident and emergency communications, including notification methods and timeframes in the event of a major incident or overrun • Approach and processes to ensure that the workforce has appropriate community awareness and sensitivity • Innovative communications tools and methods to enhance the project's ability to effectively communicate and engage with the community and stakeholders • Approach to engaging with local schools to provide education opportunities on project activities. 	Design, construction, operation
			<ul style="list-style-type: none"> • Approach to making relevant project information available to the community with specific consideration to vulnerable groups (including culturally and linguistically diverse groups) • How it will evaluate the effectiveness of the communication and engagement under the Communications and Community Engagement Plan. <p>The Communications and Community Engagement Plan must consider and where appropriate address matters of interest or concern to the following stakeholders:</p> <ul style="list-style-type: none"> • Municipalities • Recreation, sporting and community groups • Potentially affected residents and property owners • Potentially affected business • Other public facilities in proximity • Religious and worship groups • Vulnerable groups.
	SC3	<p>Participate in the Community Liaison Group</p> <p>Contractors must participate in the Community Liaison Group (CLG) that has been established and managed by North East Link Project, to facilitate community and stakeholder involvement for the construction phase of the project. Participation must include:</p> <ul style="list-style-type: none"> • Attendance at meetings • Regular reporting of design and construction activities • Timely provision of relevant information, including response to issues raised by the group • Regular reporting and monitoring of community feedback, impacts and discussion of mitigation measures and their effectiveness. 	Design, construction
	SC4	<p>Minimise impacts on sporting, recreation and other facilities</p> <p>Where recreation facilities are displaced by the construction or operation of the project, work in collaboration with facility operators, local Councils and relevant State authorities to identify relocation opportunities with the objective of accommodating displaced facilities and maintaining the continuity of those recreational activities, where practicable.</p> <p>Where construction or operation activities directly impact community infrastructure facilities such as schools, child care centres, and aged care centres, consultation must occur with facility operators, owners and user groups of the facilities to understand and, where appropriate, implement any practical measures that can be taken to avoid or minimise impacts.</p>	Design, construction, operation

Source: EES, Chapter 27 – Environmental Management Framework, pages 56-57.

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The key trends for business impact assessment are contained in the EES. As discussed in the risk section they do not cover:

- economic impacts – the direct and indirect impacts
- workforce impacts – on the employees
- INZ1 Zone impacts – on the entire zone on Manningham Industrial Zone.

Business impacts

Pre-construction

The pre-construction impacts include reduced business investment and expansion, staff turnover and staff addition. They do not cover staff lay-offs due to going out of business, doing business in another location or doing business in another manner. Seventeen (one-third of businesses surveyed) indicated that they intended to expand their businesses in the next five years.

Land acquisition

The EES states that the business impact assessment does not address business compensation due to land acquisition. The number of businesses impacted and the local employment impacts are shown in the next two tables. Around 31% of local employment will be impacted in the Bulleen SA2. Bulleen Industrial Precinct is estimated to have 80 businesses and 770 jobs displaced.

Table 8-1 Key themes for business impact assessment

Impact	Theme	Description	Pre-construction	Construction	Operation
Land acquisition	Uncertainty	Increased uncertainty about the future business environment is causing worry and concern which is distracting some operators. Increased uncertainty about the future business environment decreasing the ability of operators to sell their business. Increased uncertainty affecting the ability to attract new customers (eg students) and affecting the ability to retain existing customers.	X	X	
	Business relocation	New locations would have to be found due to business displacement or cessations of leases. Search costs (in time away from the business) to find new premises are substantial and a burden for small businesses.	X		
	Difficulty in finding alternative premises	Most businesses had initial difficulties securing the location of their business as their current location is very well suited for their needs and industry. Some businesses have particular building requirements and would have difficulty finding suitable alternative premises eg concrete bunkers for handling and storing chemicals, quarantine areas, warehouses on multiple sites allowing for flexibility in reduction or expansion of operations as required. Zoning requirements. Some businesses would need to be located within a certain zone. This may be a new requirement as planning schemes may have changed since business establishment. Any new premises would need to meet the zoning needs of existing businesses. Environmental permits and licences. New premises would have to meet existing requirements of business eg waste disposal systems to meet environmental licence requirements.	X		
	Established client base and business continuity	The current location is convenient for established client base. The client base may be difficult to retain if relocation is necessary, particularly to a new, less convenient location. Businesses have been established in the area for a number of years, sometimes decades and have a long-established customer base. Majority of customers reside or are based locally.	X		

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Impact	Theme	Description	Pre-construction	Construction	Operation
Amenity	Investment opportunities	Some businesses had plans in place to expand but are unable to secure finance due to uncertainty associated with the project. Reductions in business investment impacting business growth. This is due to the uncertainty of the future business environment.	X		
	Hiring and retention of staff	Given uncertainty and insecurity of employment, staff have already started looking for a new job, pre-empting a flooded job market. Investment in new staff and staff training may be impacted by uncertainty in future business environment.	X	X	X
	Amenity	Dust, noise and vibration from construction activities and increased construction traffic may impact customer experience, staff and business productivity and operations. Adverse impacts to visual amenity, such as removal of vegetation or construction activities. This may have an impact on businesses such as nurseries or hospitality for which visual amenity may be a factor in attracting customers and may have the consequence of reducing turnover.		X	X
Traffic and transport	Employee and customer access	Impacts on commute time for customers and staff. Impact to pedestrian access to business. Reduction in passing trade due to congestion or diversion. Construction workforce in the area may impact on availability of car parking. Safety concerns with increased heavy vehicle numbers and construction site access. There is the potential for travel time savings for employees and customers once the project is operational. As many customers and employees are locally based (such as within the same municipality as the business or an adjoining municipality), it is unclear how significant these travel time savings may be.	X	X	X
Business and employment	Benefits of clustering	Agglomeration economies to be considered for relocation decisions, especially as there are established arrangements and relationships. Customers able to access multiple businesses in one visit. Benefits may be lost if existing businesses are separated, impacting existing commercial relationships and business supply chains.	X	X	X

Source: Technical Report F – Business, pages 66-67.

Table 8-2 Businesses affected by permanent acquisition and temporary occupation

Precinct	Total number of businesses (acquired or temporarily occupied)	Full acquisition	Partial acquisition	Temporary occupation
M80 Ring Road to northern portal	7	7	0	0
Northern portal to southern portal	90	85	2	3
Eastern Freeway	5	4	1	0
Total	102	96	3	3

Source: Technical Report F – Business, page 70.

Table 8-3 Businesses and local employment affected by displacement

Precinct	Business count	Employee estimate	FTEs (rounded)	Local employment	Per cent of local employment
M80 Ring Road to northern portal	7	77	55	1,285 ¹	6%
Northern portal to southern portal	85	830	653	2,710 ²	31%

Source: Business surveys, 2018, ABS Census 2018 working population profiles
Notes: (1) Watsonia Statistical Area (SA2 Level), (2) Bulleen Statistical Area (SA2 Level)

Source: Technical Report F – Business, page 70.

The EES states (Technical Report F – Business, page 72)

The Bulleen Industrial Precinct would be significantly impacted by land acquisition due to the large land requirements for the new interchange at Manningham Road as shown in Figure 8-1 and Figure 8-2 (risks BU03, BU04). Full and partial land acquisition would occur in the area close to the southern portal due to changes in the road network and the new interchange with the Eastern Freeway (risks BU05, BU06, BU07).

Displacement of businesses is estimated to affect approximately 830 jobs (rounded), equal to approximately 650 FTEs (risk BU05). Most businesses in this precinct that responded to the survey for the business impact assessment indicated that relocation would be a viable option for their business under certain conditions. Businesses stated that relocation would only be viable if a new location was within the local area, to limit the impact on customers and to maintain the competitive advantages of convenient access to the road network and their customer base. This indicates an initial willingness to relocate and continue the business. However, there is a limited number of sites available in the local area and there would likely be a strong surge in demand for new sites when a large number of businesses are displaced at approximately the same time.

The Technical Report F – Business, page 75, states that approximately 70% of businesses in the precinct have existing commercial relationships with nearby businesses. Land acquisition affecting the businesses would therefore significantly impact supply chains and longstanding commercial relationships.

The remaining businesses around the Bulleen Industrial Precinct are predominantly retail-based. The EES states (Technical Report, page 89)

...the responses received to the business survey suggest that passing trade accounts for up to 20 per cent of business on the east side of Bulleen Road. This equates to an estimated \$6 million in turnover, mainly at petrol and fast food businesses. However, passing trade would unlikely reduce as a result of changed traffic patterns as overall traffic volumes would not decrease. Maintaining roadside car parking on the east side of Bulleen Road (in front of businesses) would be important.

North East Link is expected to generate significant benefits for businesses that remained in the northern portal to southern portal precinct. Improved connectivity with key industrial and commercial precincts, particularly the north and west, may improve the efficiency of business supply chains with faster journey times. More broadly, North East Link would enable improved traffic flow and capacity in Melbourne's north-east, which would enable transport productivity improvements for many freight and logistics businesses.

There would be permanent changes to business access once North East Link is complete, with businesses located near the southern portal having access to Bulleen Road and the Eastern Freeway altered. Businesses that remained in proximity to the Manningham Road interchange are expected to experience significant changes to the transport network, changing the nature of travelling to and from the businesses (risk BU16).

Economic Impact Assessment

The analysis has been prepared to provide an independent assessment of anticipated economic impacts related to the displacement of businesses at the Bulleen Industrial Precinct (BIP) as a result of the construction of the North East Link Project (NELP).

This assessment focuses on determining the value of economic impacts associated with this displacement of businesses including the value of business cessation if relocation is unlikely.

The economic impact analysis considers the direct impact associated with those businesses within the BIP that will be directly impacted by the NELP, as well as business and economic activity that will be indirectly be impacted by the NELP.

In preparing this economic impact assessment, and to inform various study inputs and assumptions, the following exhibited Environmental Effects Statement (EES) documentation and other material have been reviewed:

- The North East Link EES including:
 - Volume 1: Chapters 1-8;
 - Volume 2: Chapter 13;
 - Volume 3: Chapters 14 and 17;
 - Volume 4: Chapter 27 and 28;
- Attachment III Risk Report
- Map Book
- Technical Reports:
 - Technical report E Land use planning;
 - Technical report F Business;
 - Technical report I Social.
- The Bulleen Industrial Precinct: North East Link – Economic Impact Assessment prepared by REMPLAN (September 2018).

A number of key study inputs and assumptions that have formed the basis of the economic impact assessment have been extracted from these studies. These inputs and assumptions and how they have informed the analysis are highlighted in this report.

Documentation review

This section provides a review of those exhibited documents that have informed the economic impact assessment.

Several EES and related documents have been reviewed in order to complete this economic impact assessment. These documents have been used to confirm the key data inputs and assumptions related to the North East Link (NEL) project context, business conditions, and expected business displacement impacts.

While several documents were reviewed, I have relied predominantly on two documents to inform the economic impact assessment. These documents include the EES Technical report F - Business Impact Assessment and the Bulleen Industrial Precinct: North East Link – Economic Impact Assessment prepared by REMPLAN (September 2018).

These two reports have been reviewed and details related to project context, business conditions and business displacement impacts have been adopted from each assessment, where appropriate, to inform the scope and inputs for the economic impact assessment.

Technical Report F – Business Impact Assessment

Report context

This report has assessed potential business impacts throughout the various cycles of the NELP, including pre-construction impacts, construction impacts, operational impacts and cumulative impacts.

The methodology of this report is stated as this report business impact assessment considered impacts across the construction and operation phases of the project as well as potential cumulative impacts³.

The assessment focuses on various business impacts within three defined precincts, with the Bulleen Industrial Precinct (BIP) locate within the 'northern portal to southern portal' precinct.

The northern to southern portal precinct contains 118 businesses with most of these located within the BIP. It has been noted that there are four main business types within the precinct (including retail trade (automotive services), construction, arts and recreation, education and training).

An additional note of importance is "an important element of these clusters and activity centres is the *business-to-business activity and cooperation between businesses*"⁴. This acknowledges the strong existing business to business relationships within local employment precincts, such as BIP, as being a key driver of economic output for these businesses. This indicates that there is a higher potential for containment of economic flow-on effects within the local area (i.e. Manningham City).

Business impacts

The following provides a summary of the extent of impacts to businesses within the BIP as a result of the NELP:

*The most significant business impacts of the project would likely be experienced in the northern to southern portal precinct of the study area, particularly around the Bulleen Industrial Precinct. All businesses located in the Industrial 1 Zone (IN1Z) land in the Bulleen Industrial Precinct would likely be required for the project, resulting in business displacement and negative consequences for local businesses that rely on the Bulleen Industrial Precinct for customers and business-to-business services.*⁵

³ Technical Report F – Business Impact Assessment, page vi

⁴ Technical Report F – Business Impact Assessment, page vii

⁵ Technical Report F – Business Impact Assessment, page x

The exact number of businesses displaced from the BIP as a result of the NELP is inconsistent throughout the Technical Report F with the number presented as:

- **80 businesses and 770 employees** (page 70)
- *Impacts on businesses have been assessed and quantified. The Bulleen Industrial Precinct would be significantly impacted by land acquisition requirements for the project. **Approximately 90 of the businesses are expected to be displaced.*** (page 97)
- *In the northern portal to southern portal precinct, 90 businesses would be affected by permanent or partial acquisition or temporary occupation. **Over 80 of these businesses are in the Bulleen Industrial Precinct** and are expected to be displaced due to land acquisition.* (page 102)

In reference to the business displacements in the BIP, the report also refers to the impacts associated with existing business-to-business activity and supply chain impacts. This is outlined in the following extract:

Approximately 70 per cent of businesses in the precinct have existing commercial relationships with nearby businesses. Land acquisition affecting the businesses would therefore significantly impact supply chains and long-standing commercial relationships.⁶

This highlights the existing potential to contain supply chain effects and value within the local economy as a direct attribute of the clustering of related business activities that has established in the BIP over the past 50 years. This is taken into consideration in the impact assessment in terms of the potential loss of flow-on effects related to supply-chain and consumption effects.

BIP business and employment characteristics

The following two tables present business and employment characteristics for the northern portal to southern portal precinct, with details of the type of businesses as well as the number of employees by business type. It is noted however that this data provides no direct reference to or alignment with the 770 jobs that will be impacted by the displacement within the BIP.

⁶ Technical Report F – Business Impact Assessment, page 75

Table 6-4 Businesses by type in northern portal to southern portal precinct

ANZSIC category	% of businesses
Electricity Gas, Water and Waste Services	0%
Manufacturing	6%
Construction	15%
Wholesale Trade	5%
Retail Trade	21%
Accommodation and Food Services	4%
Transport, Postal and Warehousing	2%
Rental, Hiring and Real Estate Services	5%
Professional, Scientific and Technical Services	3%
Administrative and Support Services	1%
Education and Training	6%
Health Care and Social Assistance	2%
Arts and Recreation	9%
Other Services	20%
Vacant	1%
Total	100%

Source: Technical Report F – Business Impact Assessment, page 48

Table 6-5 Northern portal to southern portal precinct employment

ANZSIC category	Total FTE employment	Total business responses	Average FTE
Accommodation and Food Services	2.5	1	2.5
Administrative Support	75	2	37.5
Arts and Recreation	93	3	31
Construction	112	8	14
Education and Training	448.75	2	224.4
Manufacturing	1.75	1	1.75
Other Services	64.25	14	4.6
Professional, Scientific and Technical Services	136.25	4	27.3
Rental, Hiring and Real Estate	38.25	2	19.1
Retail Trade	127	12	10.6
Wholesale Trade	30.5	1	30.5

Source: Technical Report F – Business Impact Assessment, page 49

Impact mitigation potential

The main opportunity to mitigate against potential impacts is for those affected businesses to relocate within the local area. The Technical Report F highlights this as being challenging with a lack of existing available land and limited potential for new industrial land within the local area.

This is summarised in the following extracts:

Survey responses from businesses facing displacement indicate that relocation is viable if continuity of client base and capacity of passing trade could be maintained. For the businesses that were not displaced, the land acquisitions are expected to have a negative impact on business-to-business services as pre-existing relationships with other businesses would be impacted.⁷

Mitigating impacts to businesses from displacement and maintaining local employment is challenging due to limited availability of suitable and applicably zoned land within immediate proximity of the Bulleen Industrial Precinct.⁸

Summary

It is noted that the conclusion of the Technical Report F states that ‘*In conclusion, North East Link was assessed to have a mostly positive impact on business in the study area with improved connectivity and reduced travel times increasing the ease of doing business along the project’s planned alignment*’⁹. Despite the potential uplift in business trade for remaining businesses following the construction of the NELP, this conclusion is considered contradictory of the analysis presented in the report which indicates that of the 260 existing businesses throughout the study area, 102 will be impacted by acquisitions and displacement including 96 by permanent displacement.

Bulleen Industrial Precinct: North East Link – Economic Impact Assessment

Report context and methodology

The REMPLAN report was produced in September 2018 to assess the potential economic impacts from job losses within the BIP as a result of the construction of the NELP, including the direct and indirect job losses and reduction in economic output.

The report has utilised three scenarios to assess the potential economic impacts, which each differ on the basis of assumed ability/capacity for businesses to relocate following displacement. The metrics for each of these scenarios have been informed by an online business survey which was conducted as part of the assessment.

It is noted that the business survey is somewhat limited in that the number of responses to each question varied significantly from between three (3) and 33. However, even at 33 responses, this is still significantly less than 80+ businesses identified as being located within the BIP in the Technical Report F. Similarly, the number of employees within the BIP is stated in the REMPLAN report as being 588, which is much less than the 770 employees estimated in the Technical Report F.

The three scenarios are summarised below:

- Scenario One – Worst case: assumes that all displaced businesses would either cease operations or relocate outside of Manningham.
- Scenario Two – Status Quo: assumes that some businesses will relocate within Manningham, which is informed by survey responses.

⁷ Technical Report F – Business Impact Assessment, page 97

⁸ Technical Report F – Business Impact Assessment, page 103

⁹ Technical Report F – Business Impact Assessment, page 103

3 Impact assessment

- Scenario Three – Strategic Response: assumes an increased likelihood of business relocation within Manningham if suitable land was made available.

Impact findings

The impact analysis has utilised regional economic modelling including input output analysis to determine the potential economic flow-on effects related to the job losses within the BIP. This includes the consideration of supply-chain effects and consumption flow on effects.

The following provides a summary of the economic impact findings presented in the REMPLAN report.

Figure 3-5 Scenario one summary – City of Manningham

Impact Summary	Direct Effect	Supply-Chain Flow On Effect	Consumption Flow On Effect	Total	Type 1 Multiplier	Type 2 Multiplier
Output (\$M)	-\$170.130	-\$96.880	-\$45.737	-\$312.747	1.569	1.838
Employment (Jobs)	-588	-321	-207	-1,116	1.546	1.898
Wages and Salaries (\$M)	-\$36.758	-\$24.076	-\$11.638	-\$72.472	1.655	1.972
Value-Added (\$M)	-\$63.389	-\$41.326	-\$27.522	-\$132.238	1.652	2.086

Figure 3-6 Scenario 2 Summary – Manningham City Council

Impact Summary	Direct Effect	Supply-Chain Flow On Effect	Consumption Flow On Effect	Total	Type 1 Multiplier	Type 2 Multiplier
Output (\$M)	-\$90.938	-\$52.447	-\$25.081	-\$168.466	1.577	1.853
Employment (Jobs)	-325	-174	-113	-612	1.535	1.883
Wages and Salaries (\$M)	-\$20.246	-\$13.113	-\$6.382	-\$39.741	1.648	1.963
Value-Added (\$M)	-\$34.801	-\$22.553	-\$15.092	-\$72.446	1.648	2.082

Figure 3-7 Scenario 3 Summary – Manningham City Council

Impact Summary	Direct Effect	Supply-Chain Flow On Effect	Consumption Flow On Effect	Total	Type 1 Multiplier	Type 2 Multiplier
Output (\$M)	-\$31.250	-\$14.788	-\$9.913	-\$55.952	1.473	1.79
Employment (Jobs)	-166	-54	-45	-265	1.325	1.596
Wages and Salaries (\$M)	-\$9.111	-\$4.074	-\$2.522	-\$15.708	1.447	1.724
Value-Added (\$M)	-\$14.948	-\$6.973	-\$5.965	-\$27.887	1.466	1.866

As indicated, there is significant variance in the scale of impacts presented by the three different scenarios. Based on REMPLAN’s methodology, this variation and the ultimate scale of impact is dependent on the ability and potential for businesses to relocate, with responses to the study survey used to inform this potential.

However, while some survey responses have indicated the desire and intent to relocate within the local area, there is difficulty in this being achieved based on the constrained supply of vacant industrial zoned land within Manningham. In addition, both the GHD (Technical Report F) and REMPLAN reports note the availability of land supply is only one challenge reducing the potential for businesses to successfully relocate, with interruption to trade, impacts on existing supply chains and commercial relationships, exposure to passing traffic and the emotional cost of having to re-establish a business noted as some of the additional factors.

Report comparison

There are a number of consistencies and inconsistencies between the GHD (Technical Report F) and REMPLAN reports that have an effect on the potential economic impacts of the project.

Some of the key consistencies across the two reports include:

- Both studies acknowledge that all businesses within the BIP will be displaced by the construction of the NELP and will need to be relocated if they are to continue operating;
- Both studies acknowledge that there is constrained industrial land supply within Manningham to support business relocations; and
- Both reports acknowledge that there is strong clustering within the BIP and as a result there is existing business-to-business and commercial relationships within the precinct and surrounding area.

A key inconsistency across the two reports is that the GHD report (Technical Report F) estimates that there is approximately 80 businesses within the BIP supporting approximately 770 jobs, whereas the REMPLAN report does not indicate the number of businesses but estimates that there are 588 jobs within the BIP.

Economic Impact Assessment

This section presents an estimate of the economic impacts of the job losses that will occur within the BIP as a result of the NELP.

Assumptions and inputs

The assumptions and inputs for the impact analysis have been informed by the study context details and existing analysis presented in the GHD (Technical Report F) and REMPLAN reports. Each report has already reviewed the study context and implications related to business and economic impacts, with the information and findings relevant to this current study presented in Section 1.

The key study assumptions and inputs that have informed the impact analysis are outlined below:

- All businesses and employment within the BIP will be permanently displaced by the construction of the NELP;
- It is estimated that there is approximately 80 businesses and 770 employees within the BIP;
- Approximately 70% of businesses within the BIP have existing commercial relationships within the local area (i.e. supporting indirect economic benefits);
- The potential for businesses to relocate within Manningham will be significantly constrained unless additional industrial land is made available to mitigate this.

Methodology

The economic impact assessment has used direct job losses as the basis for determining broader economic impacts including economic output impacts.

The economic impact assessment incorporates economic input output modelling to determine the direct and indirect employment economic output impacts, including supply chain effects and consumption induced effects. The economic multipliers used for this analysis are based on the ABS National Accounts: Input Output Tables (cat. 5209.0.55.001).

Economic Impact Analysis

The direct jobs loss from the BIP as a result of the NELP is estimated as 770. Utilising the employment by industry profile on page 9 of the REMPLAN report, an estimate has been created of jobs loss per industry category. This is presented in the table below (noting that not all industry sectors are represented within the BIP).

Table 1. BIP Direct Employment Impact – By Industry

ANZSIC Industry Category	Estimated Job Losses
Agriculture, Forestry and Fishing	0
Mining	0
Manufacturing	64
Electricity, Gas, Water and Waste Services	0
Construction	185
Wholesale Trade	85
Retail Trade	138
Accommodation and Food Services	13
Transport, Postal and Warehousing	43
Information Media and Telecommunications	0
Financial and Insurance Services	0
Rental, Hiring and Real Estate Services	21
Professional, Scientific and Technical Services	17
Administrative and Support Services	52
Public Administration and Safety	0
Education and Training	18
Health Care and Social Assistance	0
Arts and Recreation Services	0
Other Services	134
Total	770

Source: Macroplan

Based on these direct employment impacts, the following table presents the findings of the overall employment impact assessment.

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Table 2. BIP Employment Impact Assessment

	Direct Employment Impact	First round effects	Industrial support effects	Production induced effects	Consumption induced effects	Total multipliers
Agriculture, Forestry and Fishing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Manufacturing	64	42	37	79	113	256
Electricity, Gas, Water and Waste Services	0	0	0	0	0	0
Construction	185	137	155	292	379	856
Wholesale Trade	85	42	34	76	166	328
Retail Trade	138	15	12	27	81	245
Accommodation and Food Services	13	2	2	3	8	24
Transport, Postal and Warehousing	43	23	17	39	63	146
Information Media and Telecommunications	0	0	0	0	0	0
Financial and Insurance Services	0	0	0	0	0	0
Rental, Hiring and Real Estate Services	21	23	23	46	64	130
Professional, Scientific and Technical Services	17	6	4	11	24	52
Administrative and Support Services	52	17	12	29	83	165
Public Administration and Safety	0	0	0	0	0	0
Education and Training	18	2	1	3	17	38
Health Care and Social Assistance	0	0	0	0	0	0
Arts and Recreation Services	0	0	0	0	0	0
Other Services	134	19	14	34	94	261
Total	770	327	312	639	1,091	2,500

Source: ABS National Accounts, Macroplan

3 Impact assessment

The employment impact analysis indicates that in addition to the direct employment impact of 770 jobs, there is potential for an additional 639 jobs loss in related supply chain (production induced effects) impacts and up to 1,091 jobs loss in consumption induced impacts. Indicating a total potential jobs loss, based on direct and indirect job losses, of 2,500 jobs.

It is noted that the total jobs value is attributed to a range of indirect effects that are typically widely spread throughout a regional economy. Therefore, the actual economic impact to the local Manningham economy could be interpreted as significantly less. However, it has been informed that approximately 70% of businesses within the BIP have existing commercial relationships with businesses either within the BIP or in the surrounding area. This helps inform where indirect economic flows are being directed and indicates that there is a higher level of retention of these indirect economic flows within the Manningham economy.

In terms of economic impacts related to the jobs losses at the BIP, this means that a higher percentage of the indirect and total economic impact is likely to be realised within Manningham.

The following table presents the findings of the economic output impact assessment.

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Table 3. BIP Employment Impact Assessment

	Direct Output Impact (\$M)	First round effects	Industrial support effects	Production induced effects	Consumption induced effects	Total multipliers
Agriculture, Forestry and Fishing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Mining	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Manufacturing	\$25.22	\$13.51	\$11.63	\$25.13	\$24.56	\$74.92
Electricity, Gas, Water and Waste Services	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Construction	\$76.70	\$47.14	\$49.64	\$96.78	\$82.45	\$255.92
Wholesale Trade	\$29.08	\$12.96	\$10.43	\$23.38	\$36.18	\$88.65
Retail Trade	\$12.76	\$4.65	\$3.70	\$8.35	\$17.52	\$38.62
Accommodation and Food Services	\$1.33	\$0.59	\$0.51	\$1.10	\$1.67	\$4.11
Transport, Postal and Warehousing	\$12.30	\$5.96	\$5.00	\$10.96	\$13.79	\$37.05
Information Media and Telecommunications	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Financial and Insurance Services	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Rental, Hiring and Real Estate Services	\$29.42	\$9.22	\$7.05	\$16.27	\$13.83	\$59.51
Professional, Scientific and Technical Services	\$3.61	\$1.65	\$1.32	\$2.97	\$5.16	\$11.74
Administrative and Support Services	\$10.72	\$4.57	\$3.54	\$8.11	\$18.13	\$36.96
Public Administration and Safety	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Education and Training	\$1.96	\$0.41	\$0.32	\$0.73	\$3.67	\$6.36
Health Care and Social Assistance	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Arts and Recreation Services	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other Services	\$15.97	\$5.33	\$4.41	\$9.74	\$20.35	\$46.06
Total	\$219.06	\$105.99	\$97.53	\$203.52	\$237.31	\$659.89

Source: ABS National Accounts, Macroplan

The economic output impact analysis indicates that there will be a direct impact of approximately \$219 million as a result of 770 jobs loss within the BIP. In addition, there is potential for an additional \$203.5 million loss in related supply chain (production induced effects) impacts and up to \$237.31 million loss in consumption induced impacts. Indicating a total potential economic output loss, based on direct and indirect losses, of \$670 million.

As noted, the impact analysis presented above is based on total impacts and not necessarily retained impacts within Manningham. Based on feedback from surveys conducted within the GHD study (Technical Report F), up to 70% of businesses within the BIP have existing commercial trade relationships within or surrounding the BIP. This provides some indication of economic retention within the region and is used as an estimate of the total upper economic loss and impact potential for the Manningham economy. Based on this estimated retention rate, the following table provides a summary of the impacts to the Manningham economy as a result of the job losses within the BIP.

Table 4. Economic Impact Summary – Potential Manningham Impacts

	(A) Direct Employment Impact	(B) First round effects	(C) Industrial support effects	(D) Production induced effects	(E) Consumption induced effects	(F) Total multipliers
				=(B+C)		(=A+D+E)
Employment Impacts (FTE jobs)	770	229	218	447	764	1,981
Economic Output Impacts (\$M)	\$219.06	\$74.19	\$68.27	\$142.46	\$166.12	\$527.64

Source: ABS National Accounts, Macroplan

Summary

The NELP will displace an estimated 80 businesses and 770 employees from the BIP. This direct impact will result in indirect impacts which, based on the strong clustering and existing commercial relationships within the BIP and surrounding area, could be substantial within the Manningham economy.

Direct impacts within Manningham will be in the order of 770 jobs and \$219 million. Indirect impacts within Manningham could be up to 1,200 jobs and \$310 million, depending on the existing containment of economic activity and flow on effects.

While it is acknowledged that some business relocation will likely occur within the local area and that this will potentially reduce economic impacts somewhat, the potential to significantly reduce impacts will be dependent on mitigation measures, such as the ability to provide vacant industrial land that can suitably accommodate those displaced businesses.

North East Link Economic Appraisal

The North East Link (NEL) Economic Appraisal was completed for the business case. It was produced by Ernst & Young for the North East Link Project and the Victoria State Government.

The economic appraisal addresses the following problems and benefits:

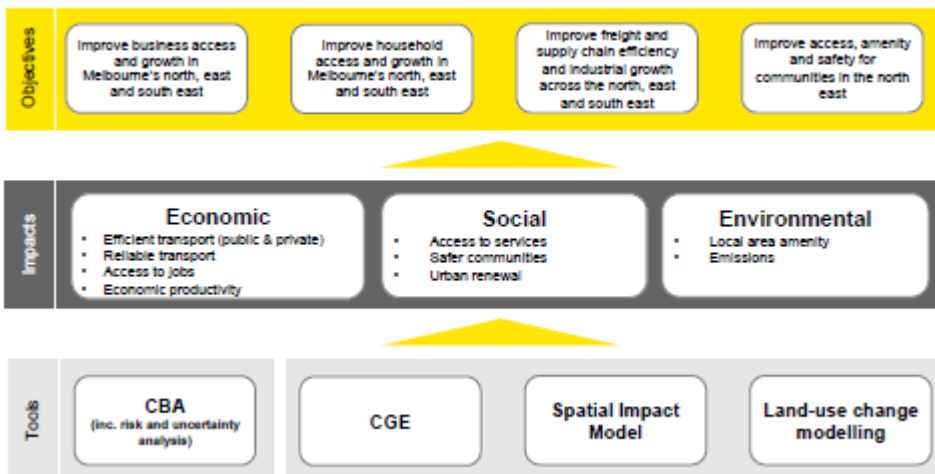
- Problem 1 - Melbourne’s poor orbital connectivity is constraining the economic potential of Victoria
- Problem 2 - Inefficient freight movements between the North and South East of Melbourne is limiting supply chain competitiveness and hindering the growth of high-value industries
- Problem 3 - Congestion and heavy vehicles on neighbourhood roads in the North East is harming liveability and community wellbeing

By addressing these problems, the NEL Project is expected to deliver the following benefits.

- Benefit 1 - Economic growth
- Benefit 2 - Increased economic opportunity for households in the North, East and South-East
- Benefit 3 - Improved competitiveness of the State
- Benefit 4 - Improved liveability and thriving communities in the North East

The economic appraisal has informed by Computable General Equilibrium (CGE) modelling and spatial impact analysis to understand the impacts on economic activity and employment, and the land use changes potentially brought about by the project. The transport CBA was informed by wider economic benefits.

Figure 1 Economic appraisal framework and tools



Source: EY

Source: North East Link Economic Appraisal Report, page 3

3 Impact assessment

The inclusion of land use modelling goes further than most conventional economic appraisal frameworks, but is considered a critical component of this appraisal as the project is expected to have a significant impact on Melbourne's city structure by encouraging households and businesses to locate in areas that will benefit from the significant accessibility improvements that the project will provide. These induced land use changes can create benefits and costs in addition to standard benefits that are usually included in transport cost-benefit analysis (CBA).

The wider economic benefits included agglomeration, labour supply and output change in imperfect markets.

Wider economic benefit	Description
Agglomeration	Agglomeration benefits arise when the transport system changes the 'effective proximity' of businesses and employees. That is, before any locations changes occur, making the transport system more efficient is effectively the same as bringing businesses and people closer together. Evidence shows that this can increase productivity beyond the benefits of direct time savings. These wider economic benefits are calculated based on changes in travel costs and demand only given a fixed land use pattern to avoid double counting with city-shaping benefits.
Labour Supply	Improved transport system efficiency can increase the time people spend at work by working longer in their current job or by becoming available for new employment. This increases overall economic activity and tax revenue for the community.
Output Change in Imperfect Markets	A reduction in transport costs allows firms in imperfectly competitive markets to profitably increase output of goods and services that require use of transport in their production. This will create a welfare gain as consumers' willingness to pay for the increased output will exceed the cost of producing it.

Source: EY

Source: North East Link Economic Appraisal Report, page 25

These have all been designated as business impacts.

Benefit category	Business	Household	Freight	Amenity	Other ³⁵
Crash cost savings				✓	
Transport impacts due to induced land use change	✓	✓	✓	✓	
Other externalities				✓	
Residual value					✓
Wider economic benefits					
Agglomeration	✓				
Labour supply	✓				
Imperfect competition	✓				

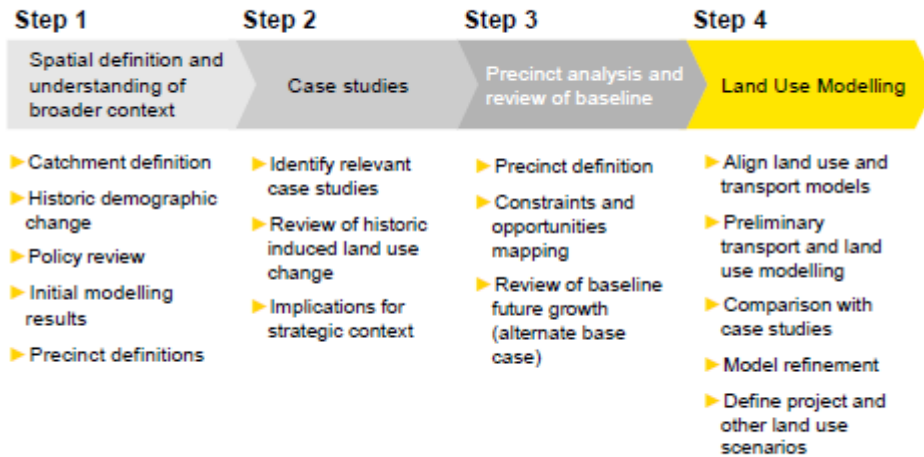
Source: EY

Source: North East Link Economic Appraisal Report, page 26

Land use assessment

In order to calculate the estimated land use impacts of the project in terms of its effect on the distribution of population and employment across Melbourne, a separate land use assessment has been used by EY.

Figure 13 Approach to assessing the land use impacts of North East Link



Source: EY

Source: North East Link Economic Appraisal Report, page 34

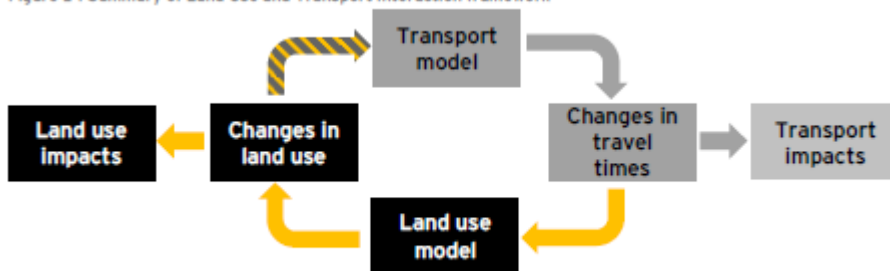
A key component of the land use assessment in terms of its impact on the CBA, is the use of land use modelling and the application of the Land Use Transport Interaction (LUTI) framework to quantify the benefits associated with land use change as a result of the project.

The land use model interacts with the transport model to estimate dynamic (second/third round) impacts on the distribution of population and employment.

The project is expected to provide significant accessibility improvements to areas in the north east which can lead to land use changes as a result of shifting demand by encouraging:

- Residents to choose to locate in areas with greater accessibility to jobs.
- Businesses to choose to locate in areas with greater accessibility to potential employees and to other forms.

Figure 14 Summary of Land Use and Transport Interaction framework



Source: EY

Source: North East Link Economic Appraisal Report, page 34

3 Impact assessment

To provide high-level economic impact metrics - impacts on GSP, household incomes and productivity, for instance - EY engaged the Victoria University Centre of Policy Studies (CoPS) to prepare a state-wide analysis based on initial project costing and economic modelling.

Figure 20 of North East Link Economic Appraisal Report summarises these benefits in terms of its alignment to NEL's overarching project objectives.

Figure 20 Overview of North East Link benefits



Source: VLC, VU-CoPS, EY analysis

Source: North East Link Economic Appraisal Report, page 49

Wider economic benefits

Wider economic benefits refer to the wider economic benefits (WEBs) related to productivity gains that arise from changes in agglomeration, time spent at work and business output linked to transport system changes (i.e. in contrast to land use system changes that underpin the estimation of city-shaping benefits).

Table 22 Wider economic benefits

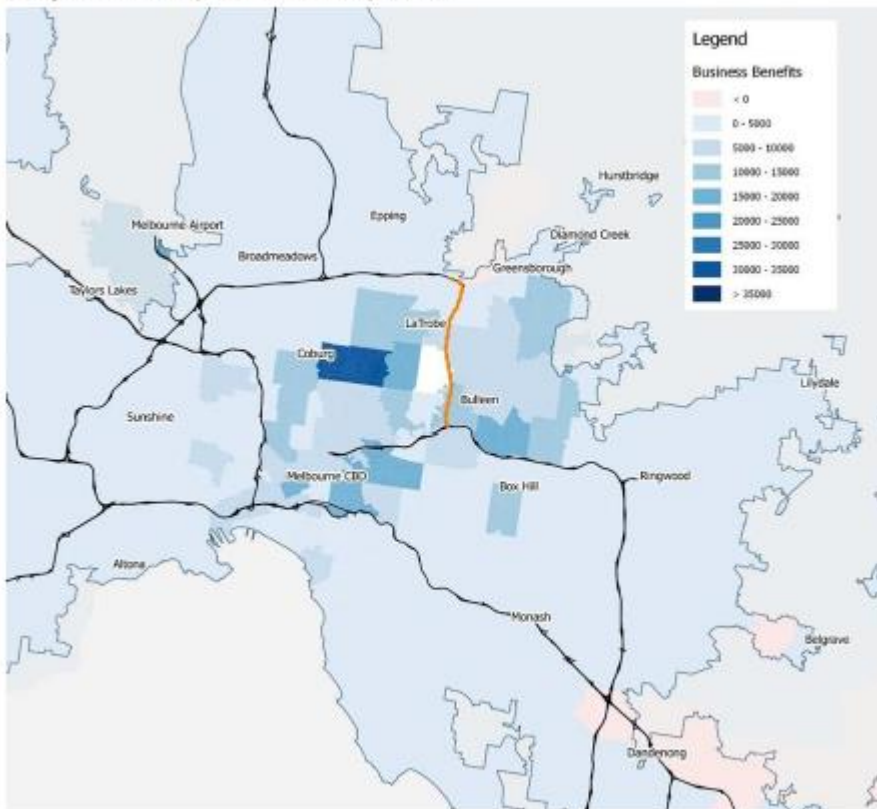
Benefit category	Value (\$2017, Real)	Value (\$2017, PV)
Agglomeration	\$5,101m	\$590m
Labour Supply	\$689m	\$89m
Output Change in Imperfect Markets	\$1,704m	\$211m
Total wider economic benefits	\$7,494m	\$890m

Source: EY analysis

Source: North East Link Economic Appraisal Report, page 57

Figure 24 indicates few or no business travel time benefits for Bulleen. Figure 25 indicates that a few, if any, household commuter travel time benefits for Bulleen.

Figure 24 Distribution of business travel time benefits by destination due to North East Link (change in consumer surplus hours - Car Inter-peak 2036)

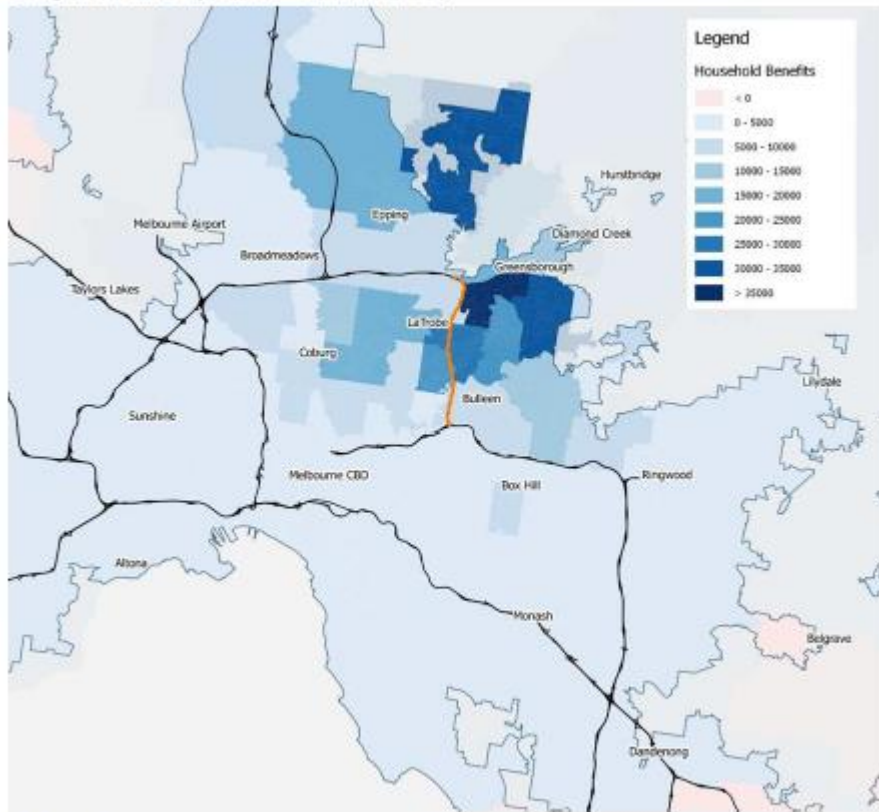


Source: VLC

Source: North East Link Economic Appraisal Report, page 55

3 Impact assessment

Figure 25 Distribution of household (commuter) travel time benefits by origin (change in consumer surplus hours - Car AM Peak 2036)



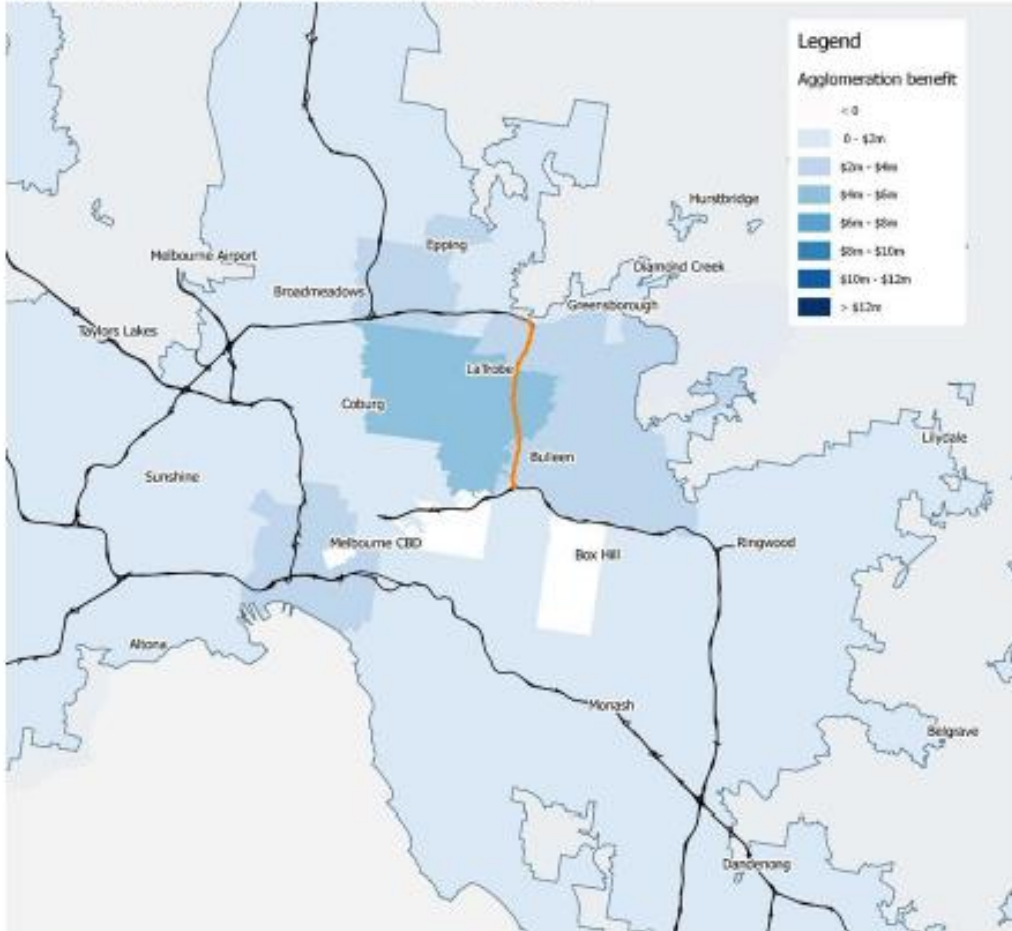
Source: VLC

Source: North East Link Economic Appraisal Report, page 56

Distribution of agglomeration benefits

The distribution of agglomeration benefits attributable to NEL are focused primarily in the northern and north-eastern suburbs of Melbourne, as shown in Figure 27 below for 2036.

Figure 27 Agglomeration benefits due to North East Link (2036)



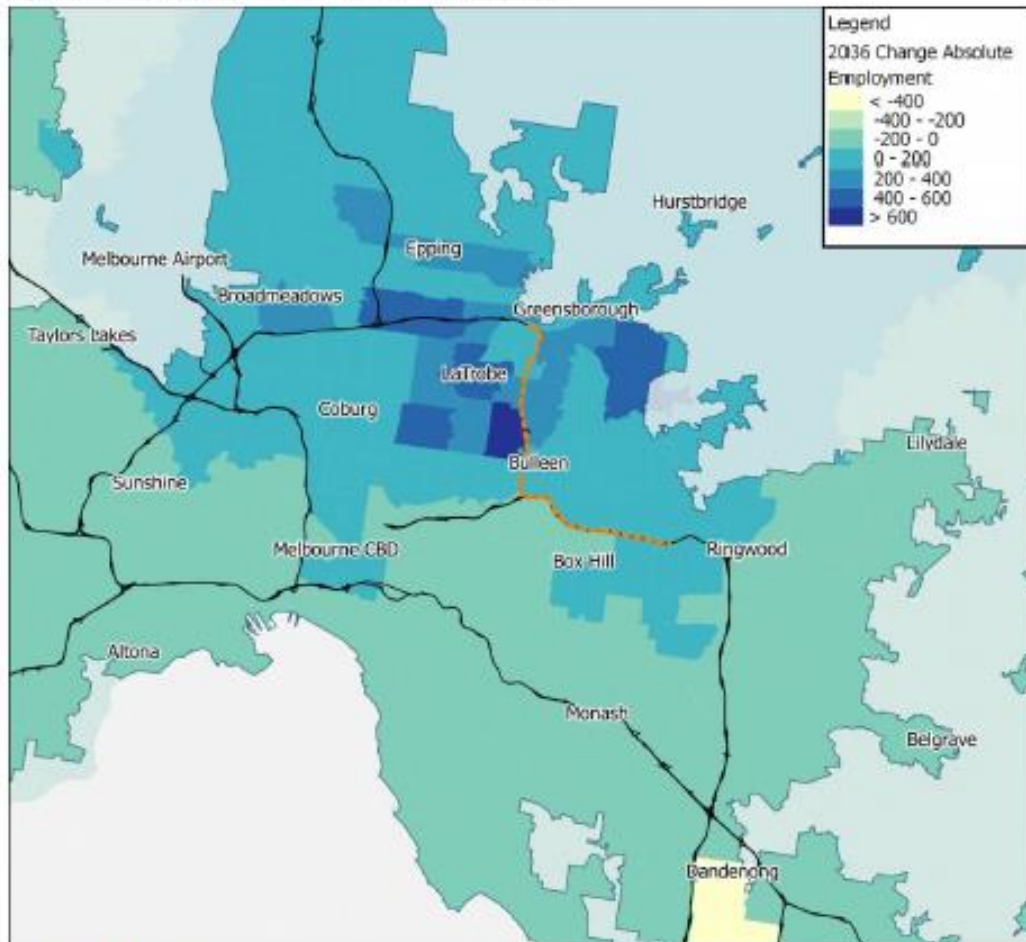
Source: VLC

Source: North East Link Economic Appraisal Report, page 58

To identify areas likely to be impacted by changes in demand arising from improved accessibility, a land use and transport interaction (LUTI) modelling approach was used to estimate the potential redistribution of employment. The redistribution of employment is used as a proxy to represent the potential impacts of the project in attracting additional commercial or industrial activities due to improved accessibility.

Figure 28 shows the projected change in employment location as a result of the North East Link. The results suggest that there will be an increase in demand for employment and development in key commercial and industrial precincts such as Epping, Campbellfield, Thomastown/Bundoora, La Trobe and Heidelberg.

Figure 28 Redistribution of employment due to North East Link



Source: VLC, EY analysis

Source: North East Link Economic Appraisal Report, page 59

The project is expected to redistribute approximately 7,700 jobs to key residential locations in Melbourne’s north east.

An additional provision of employment opportunities to areas of high growth (especially to regions like Whittlesea, where population growth is forecast to increase by over 140,000 between 2016 and 2036) is a beneficial and necessary phenomena that will help local workers in these regions to avoid having to travel long distances to employment opportunities.

Table 5 Additional employment growth redistributed using LUTI approach (Top 5 LGAs)

LGA	VIF forecast employment growth (2016 - 2036)	Additional employment growth redistributed using LUTI	LUTI employment growth uplift proportion
Banyule	22,530	3,720	17%
Whittlesea	144,420	3,580	2%
Darebin	49,290	2,050	4%
Manningham	4,960	1,510	30%
Nillumbik	24,010	1,090	5%

Source: VIF 2015, VLC, EY analysis

Source: North East Link Economic Appraisal Report, page 59

The additional growth redistributed is minimal for Manningham.

Conclusion

The wider economic benefits do not add much to the transport benefits. The CBA ratio is 1:4 as opposed to 1:3.

The North East Link Economic Appraisal suggests that the project is dominated by transport benefits and wider economic benefits as informed by land use modelling result in little benefit for Manningham. The 1,510 additional redistributed jobs will be white collar hence there is no mitigation of the blue collar jobs. There are in fact up to 1,970 jobs lost.

4 Risk assessment

The risk assessment is based on consequence criteria, extent, severity and duration. The risk pathway was then assigned a value for all three characteristics which were added to provide an overall consequence rating (Tables 111-2 and 111-3). The Environmental Performance Requirements are noted below. The EPR denotes a 'solution' for each risk. We note there is no reference to the creation of a new INZ1 Zone in Manningham. The importance of an industrial zone is noted in the land use planning section, and is state to be Planned Major Consequence, but this is not an EPR and it should be.

Furthermore, we note that a number of risks are understated. We have noted these on the sheets. We find:

- The uncertainty for businesses – a high impact on these businesses and many will likely to ceases to trade. The EPR of Business Support is unlikely to be effective without a material opportunity to relocate.
- The permanent acquisition of INZ1 land displaces businesses and reduces the number of jobs available for workers in this area. EPR B2 minimises disruption to businesses from land acquisition does not address jobs for workers in the area.
- The permanent acquisition of INZ1 land displaces businesses and impacts on the viability of the remaining businesses in the area that have linkages with displaced businesses. This is not reflected on EPR B2, or any of the EPRs.

We have noted in the table of Business Impacts:

- BU01 – Business support should be High, not Medium
- BU04 – Minimise disruption to business should be High, not Low
- BU05 – Minimise disruption to business should be Very High, not Medium
- BU07 – Full acquisition of land results in displacement should be Very High, not Medium
- BU11 – Increased travel time should be High, not Medium

Overall we find these risks and EPRs are understated.

4 Risk assessment

Table III-2 Consequence criteria

Characteristic	Factor	Value
Extent	Wider region	4
	Corridor	3
	Municipality	2
	Local	1
Severity	Very high A very high degree of impact on an environmental asset, value or use of moderate or higher significance, or A very high number of impacts on environmental assets, values or uses, or Impacts on environmental assets, values or uses of very high significance.	8
	High A high degree of impact on an environmental asset, value or use of moderate or higher significance, or A high number of impacts on environmental assets, values or uses, or Impacts on environmental assets, values or uses of high significance.	6
	Medium A moderate degree of impact on an environmental asset, value or use of moderate or higher significance, or A moderate number of impacts on environmental assets, values or uses, or Impacts on environmental assets, values or uses of moderate significance.	4
	Low A low degree of impact on an environmental asset, value or use, or A low number of impacts on environmental assets, values or uses, or Impacts on environmental assets, values or uses of lower significance.	2
	Very low A very low degree of impact on an environmental asset, value or use, or A very low number of impacts on environmental assets, values or uses, or Impacts on environmental assets, values or uses of very low significance	0

Characteristic	Factor	Value
Duration	Permanent (>7 years)	4
	Long term construction (>2 – 7 years)	3
	Medium term construction (>3 months – 2 years)	2
	Short term construction (0 – 3 months)	1

Table III-3 Consequence ratings

Value total	Overall consequence
2-4	Negligible
5-7	Minor
8-10	Moderate
11-13	Major
14-16	Severe

Source: EES – Attachment III – Risk Report, pages 14-15.

Risk matrix

Risk levels were determined using the matrix in Table III-5. The consequence and likelihood were assessed using the criteria in Table III-3 and Table III-4 above.

Table III-5 Risk rating

Likelihood	Consequence				
	Negligible	Minor	Moderate	Major	Severe
Rare	Very low	Very low	Low	Medium	Medium
Unlikely	Very low	Low	Low	Medium	High
Possible	Low	Low	Medium	High	High
Likely	Low	Medium	Medium	High	Very high
Almost certain	Low	Medium	High	Very high	Very high
Planned	Planned (negligible consequence)	Planned (minor consequence)	Planned (moderate consequence)	Planned (major consequence)	Planned (severe consequence)

Source: EES – Attachment III – Risk Report, page 16.

Planned events

North East Link would result in some planned events, such as the purchase of the BIP land, being events with outcomes that are certain to occur (i.e. planned impacts such as land acquisition). This warrants a more comprehensive approach because it is 'planned'.

Environmental Performance Requirements

The final EPRs form a component of the Environmental Management Framework for delivery of North East Link as presented in Chapter 27 – Environmental management framework. These EPRs do not match the actual requirements for project mitigation. The core lacking in respect of:

- Workforce: planning for mitigation of impacts
- INZ1: planning for mitigation of the INZ1
- Early intervention: planning for businesses (e.g. to collaborate in moving, providing alternative accommodation, etc).

4 Risk assessment

Applicable Legislation and Policy	EPR Code	Environmental Performance Requirement	Phase
5. Business (B)			
Planning and Environment Act 1987 Land Acquisition and Compensation Act 1986 Australian Standard AS/NSZ 10002:2014 Guidelines for Complaint Management in Organisations	B1	Business support Inform and regularly update affected businesses and commercial facilities of the planning and design progress for the project. Prior to construction, North East Link Project would work with councils to identify alternative location options for displaced businesses. Implement support programs to build business resilience and implement a range of marketing and promotional activities to encourage awareness and patronage of businesses located in proximity to construction sites.	Design, construction
	B2	Minimise disruption to businesses from land acquisition and temporary occupation Minimise disruption to businesses from permanent acquisition or temporary occupation of land to the extent practicable, and work with affected businesses and land owners to endeavour to reach agreement on the terms for possession of the land in accordance with relevant legislation.	Design, construction
	B3	Minimise and remedy damage or impacts on third party property and infrastructure Through detailed design and construction, and in consultation with relevant land owners and parties as necessary, design and construct the works to minimise, to the extent practicable, impacts to, and interference with, third party property and infrastructure and to ensure that infrastructure and property is protected during construction and operation. Any damage caused to property or infrastructure as a result of North East Link must be appropriately remedied in consultation with the property or asset owner.	Design, construction
	B4	Minimise access and amenity impacts on businesses Any reduction in the level of access, amenity or function of any business or commercial facility must be minimised to the extent and duration necessary to carry out the relevant construction related works. Affected business and commercial facilities must be provided with adequate notification of potential impacts and temporary access arrangements. Emergency access must be maintained at all times. Access must be maintained for customers, delivery and waste removal unless there has been a prior arrangement with affected businesses. All permanent access to business and commercial facilities affected by North East Link works is to be reinstated, or relocated as agreed with the relevant property owner, including associated landscaping and reinstatement works, and temporary access arrangements put in place for construction must be removed when relevant construction activities have ceased.	Design, construction
	B5	Protect utility assets Protect or, where required, relocate utility assets to the reasonable satisfaction of the service provider and/or asset owners.	Design, construction
	B6	Business liaison groups Contractors must participate in the Business Liaison Groups established and managed by the North East Link Project to facilitate business and stakeholder involvement for the construction phase of the project. Participation must include: <ul style="list-style-type: none"> • Attendance at meetings • Regular and timely reporting of design and construction activities and key project milestones • Provision of advance notice about changes to traffic and parking conditions and the duration of impact • Timely provision of relevant information, including response to issues raised by the group • Regular reporting and monitoring of business community feedback, impacts and discussion of mitigation measures and their effectiveness • Recording, managing and resolving complaints from affected businesses in accordance with the complaints management process required under EPR SC2. 	Design, construction

Source: EES – Chapter 27 – Environmental management framework, pages 29-30.

4 Risk assessment

Business Impacts															
		Initial Risk							Residual Risk						
		Magnitude of effect							Magnitude of effect						
Risk ID	Potential threat and effect on the environment	Initial EPR	Extent	Severity	Duration	Overall consequence	Likelihood	Risk level	Final EPR	Extent	Severity	Duration	Overall consequence	Likelihood	Risk level
BU01	Uncertainty for businesses about the future business environment may reduce business viability and therefore the availability of local jobs and services	EPR B1 – Business support	Corridor	Low High	3 months to 2 years 7+ years	Major	Almost certain	Medium High	EPR B1 – Business support	Corridor	Low High	3 months to 2 years 7+ years	Minor Major	Almost certain	Medium High
BU2	Preparatory works such as the relocation of utilities may cause interruption to the availability of utilities and disrupt business operations.	EPR B5 – Minimise impacts on utility assets.	Municipality	Medium	2-7 years	Minor	Possible	Low	EPR B5 – Minimise impacts on utility assets	Municipality	Medium	2-7 years	Minor	Possible	Low
BU03	Permanent acquisition of INZ1 land in Bulleen displaces businesses and reduces the number of jobs available for workers in this area.	EPR B2 – Minimise disruption to businesses from land acquisition and temporary occupation.	Local Corridor	Low High	2-7 years 7+ years	Moderate Major	Planned	Planned	EPR B1 – Business support. EPR B2 – Minimise disruption to businesses from land acquisition and temporary occupation.	Local Corridor	Low High	2-7 years 7+ years	Major	Planned	Planned
BU04	Permanent acquisition of INZ1 land in Bulleen displaces businesses and impacts on the viability of remaining businesses in the area that have linkages with displaced businesses.	EPR B2 – Minimise disruption to businesses from land acquisition and temporary occupation.	Corridor	Very low Moderate	2-7 years 7+ years	Minor Major	Likely Almost certain	Medium	EPR B1 – Business support. EPR B2 – Minimise disruption to businesses from land acquisition and temporary occupation.	Corridor	Very low Moderate	2-7 years 7+ years	Minor Major	Possible Almost certain	Low High
BU05	Full acquisition of land results in displacement of businesses along alignment and therefore reduces availability of local jobs and services.	EPR B2 – Minimise disruption to businesses from land acquisition and temporary occupation.	Local Corridor	Low Very High	2-7 years 7+ years	Minor Major	Almost certain	Medium High	EPR B1 – Business support. EPR B2 – Minimise disruption to businesses from land acquisition and temporary occupation.	Local Corridor	Low Very High	2-7 years 7+ years	Minor Major	Almost certain	Medium Very High

4 Risk assessment

Business Impacts															
		Initial Risk							Residual Risk						
		Magnitude of effect							Magnitude of effect						
Risk ID	Potential threat and effect on the environment	Initial EPR	Extent	Severity	Duration	Overall consequence	Likelihood	Risk level	Final EPR	Extent	Severity	Duration	Overall consequence	Likelihood	Risk level
BU06	Partial acquisition of business land causes disruption or reduced viability of businesses or commercial facilities.	EPR B2 – Minimise disruption To businesses from land acquisition and temporary occupation.	Local	Medium	2-7 years	Minor	Likely	Medium	EPR B2 – Minimise disruption to businesses from land acquisition and temporary occupation. EPR B4 – Minimise access and amenity impacts on businesses.	Local	Medium	2-7 years	Minor	Unlikely	Low
BU07	Full acquisition of business land results in business displacement which reduces business viability.	EPR B2 – Minimise disruption to businesses from land acquisition and temporary occupation.	Corridor	Low Very High	2-7 years 7+ years	Moderate Very High	Likely	Medium Very High	EPR B1 – Business support. EPR B2 – Minimise disruption to businesses from land acquisition and temporary occupation.	Corridor	Low Very High	2-7 years 7+ years	Moderate Very High	Likely	Medium Very High
BU08	Temporary occupation of sites for construction reduces the viability of neighbouring or occupied businesses and commercial facilities.	EPR B2 – Minimise disruption to businesses from land acquisition and temporary occupation.	Local	Low	2-7 years	Moderate	Likely	Medium	EPR B2 – Minimise disruption to businesses from land acquisition and temporary occupation. EPR B4 – Minimise access and amenity impacts on businesses.	Local	Low	2-7 years	Minor	Almost certain	Medium
BU09	Areas required for construction, materials storage, and stockpiling causes adverse impacts to views and amenity experienced from businesses where view and amenity is part of the customer experience e.g. businesses with outdoor serving areas, child care centres.	EPR B4 – Minimise access and amenity impacts on businesses.	Corridor	Low	2-7 years	Moderate	Almost certain	High	EPR B4 – Minimise access and amenity impacts on businesses. EPR B6 – Business liaison groups. EPR LV2 – Minimise landscape impacts during construction. EPR NV3 – Minimise construction noise impacts to sensitive receptors. EPR NV4 – Implement a Construction Noise and Vibration Management Plan (CNVMP) to manage noise and vibration impacts. EPR AQ1 – Implement a Dust and Air Quality Management and Monitoring Plan to minimise air quality impacts during construction.	Corridor	Low	2-7 years	Minor	Almost certain	Medium

4 Risk assessment

Business Impacts															
		Initial Risk							Residual Risk						
		Magnitude of effect							Magnitude of effect						
Risk ID	Potential threat and effect on the environment	Initial EPR	Extent	Severity	Duration	Overall consequence	Likelihood	Risk level	Final EPR	Extent	Severity	Duration	Overall consequence	Likelihood	Risk level
BU10	Areas required for construction, materials storage, and stockpiling in the vicinity of schools reduces the attractiveness of the school experience and may impact on the ability to attract and retain students.	EPR B4 – Minimise access and amenity impacts on businesses.	Corridor	Very low	2-7 years	Minor	Likely	Medium	EPR B4 – Minimise access and amenity impacts on businesses. EPR B6 – Business Liaison Groups EPR NV3 – Minimise construction noise impacts to sensitive receptors.. EPR NV4 – Implement a Construction Noise and Vibration Management Plan (CNVMP) to manage noise and vibration impacts. EPR AQ1 – Implement a Dust and Air Quality Management and Monitoring Plan to minimise air quality impacts during construction.	Corridor	Very low	2-7 years	Minor	Almost certain	Mediums
BU11	Increased travel time from changed traffic patterns during construction reduce the attractiveness of retail and service businesses.	EPR B4 – Minimise access and amenity impacts on businesses.	Local Corridor	Medium High	2-7 years	Moderate High	Almost certain	Medium	EPR B4 – Minimise access and amenity impacts on businesses. EPR T2 – Transport Management Plan(s) (TMP).	Local Corridor	Medium High	2-7 years	Minor High	Almost certain	Medium High
BU12	Road detours or other changed road and car parking conditions during construction cause reduced ease of access for deliveries, staff and customers thereby disrupting business operations.	EPR B4 – Minimise access and amenity impacts on businesses.	Corridor	Low	2-7 years	Moderate	Almost certain	High	EPR B4 – Minimise access and amenity impacts on businesses. EPR B6 – Business liaison groups. EPR T2 – Transport Management Plan(s) (TMP).	Corridor	Low	2-7 years	Minor	Likely	Medium

4 Risk assessment

The two missing risks are to

- provide for unemployed workers in the form of transitional plan including reskilling and job placement
- provide INZ1 land for the future in Manningham irrespective of the number of stakeholders in BIP who take up the offer
- early intervention

In this respect we suggest:

- Very High/Major Planned consequence for unemployed workers and project support. This recognises the vulnerabilities of the workforce.
- The provision of INZ1 recognises that tenancies change over time (but slowly in Bulleen Industrial Precinct) and Manningham has a requirement for industrial land.
- A plan for early intervention with a Very High risk rating.

5 Mitigation

Manningham Industrial Policy

The City of Manningham Local Industrial Policy recognises there are no further opportunities for the development of a new industrial centres within the municipality and encourages consolidation of existing centres.

Clause 21.02-10 relates to Industry and describes the limited potential for future industrial development due to a lack of vacant land available. It is envisaged that industrial uses in Doncaster Hill will be phased out over time as the area is developed for higher density living.

Clause 21.08 refers to Industrial land use and provides the following relevant policy guidance:

- Council will discourage the establishment of non-industrial uses in the Bulleen and Templestowe areas to consolidate the role of these light industrial areas.
- It is envisaged that industrial uses within Doncaster Hill will be phased out over time as the area is developed for higher density living.

Relevant objectives and strategies include:

- To retain opportunities for industrial uses within existing industrial areas
- Consolidate the role of the Bulleen and Templestowe industrial estates to minimise the need to rezone additional land for industrial purposes
- Discourage the further expansion of industrial uses within the Doncaster Hill Activity Centre

Clause 22.10 refers to the *Bulleen Gateway Policy* and identifies that:

- Bulleen is a major gateway to Manningham and adjoins the Yarra Valley Parkland and the Yarra River
- The Municipal Strategic Statement encourages the improvement and enhancement of the visual amenity and function of the Bulleen Gateway area.

Relevant objectives of this policy include:

- To encourage appropriate built form to enhance this gateway to the municipality
- View lines between development and adjoining parklands be protected and enhanced through the sensitive siting and design of buildings and works
- The role of the industrial area to be consolidated by discouraging non-industrial uses

The Technical Report E, on page 61, states that

Notwithstanding that the substantial disruption proposed to the Bulleen Industrial Precinct with the acquisition of all IN1Z land in the precinct is at odds with local policy, the physical removal of a significant pool of employment use and developed land would mean a substantial land use change in this location during construction. However, the land would remain zoned IN1Z and that industrial and commercial land uses may re-establish post construction. While the impacts on the industrial precinct and nearby business and subsequent geographic shift in employment opportunities are discussed in Technical Report F – Business, the project would impact an existing, established land use and built form character during construction.

The EES states on page 75 (Technical Report E)

The project is not consistent with the objectives and relevant strategies of Clause 17.03-‘Industrial Land Supply’ which seeks to ‘ensure the availability of land for industry’, specifically in relation of the need to ‘protect and carefully plan existing industrial areas to, where possible, facilitate further industrial development’. The project would require land in the Bulleen Industrial Precinct, resulting in significant impact for this locally significant industrial land use to enable the cut and cover construction of tunnels. Further discussion surrounding industrial policy and the Bulleen Industrial Precinct is outlined in the Manningham local policy discussion below.

The EES states on page 83 (Technical Report E)

North East Link would require land in the Bulleen Industrial Precinct for cut and cover construction of tunnel infrastructure. The acquisition of land for project purposes would adversely impact the vision and intent of the Bulleen Industrial Precinct to provide future opportunity for industrial development in the City of Manningham, noting that the land would remain zoned IN1Z and that industrial and commercial land uses may return post construction. Business-related impacts and EPRs associated with the project for the Bulleen Industrial Precinct and other businesses in Manningham are addressed in Technical report F – Business. This includes pre-construction business support such as working with the council to identify alternative location options for displaced businesses.

The EES states on page 95 (Technical Report E)

The Yarra Strategic Plan and Yarra River – Bulleen Precinct Land Use Framework Plan are currently in preparation and are Victorian Government directives affecting part of this precinct that is located near the Yarra River.

As mentioned in previous sections, construction and delivery requirements of the project (such as at the Bulleen Industrial Precinct) may also generate opportunity to improve the local area postconstruction. The form of any future land use change (i.e. enhancements) would require a separate approval process, subsequent to this EES. In these instances, it would also be necessary to have regard to policy and strategy documents such as the Yarra Strategic Plan and Yarra River – Bulleen Precinct Land Use Framework Plan for key relevant strategic direction.

As outlined at Section 4.4, preparation of the planning scheme amendment would be undertaken. The amendment would insert new Schedules to the DDO into the Banyule and Manningham Planning Schemes to

protect the construction and operation of the tunnel from incompatible development, controlling future development in the DDO area. The presence of the tunnels would unlikely prevent development, although engineering measures may be required in some cases to stay clear of North East Link assets, or to keep the loading on North East Link assets to acceptable levels. Development potential may not therefore be specifically restricted by the tunnels (expected to be where there is potential for built form or structural interference or foundation depths are limited).

Other than the above, key Victorian Government and local strategic policy concerned with future redevelopment of land which the project has the potential to impact has not been identified in the study area for this precinct.

The EES concludes in relation to impacts on redevelopment potential (page 107, Technical Report E)

Construction and delivery requirements for the project (such as surrounding the Watsonia railway station, the interchange at the Bulleen Industrial Precinct, the proposed Bulleen Park and Ride and proposed upgrade of the Doncaster Park and Ride) could provide opportunity to improve the local area post-construction. The form of any future land use change (i.e. enhancements) would require a separate approval process, subsequent to this EES. In these instances, it would also be necessary to have regard to the relevant strategic policy (such as the Yarra Strategic Plan and Yarra River – Bulleen Precinct Land Use Framework Plan (once approved)), Victorian Government and local strategic planning objectives and the views of relevant stakeholders.

Managing impacts

While the EES argues that Environmental Performance Requirements (EPRs) define the environmental outcomes the project must achieve during its construction and operation the EPRs are minimal for the BIP. The EES (Technical Report F – Business, page 90) states that the impacts identified are of a type/nature and magnitude that is typical or expected for a project of this nature, however, displacing an entire INZ1 must be said to be unusual. Further, the EES argues that these impacts can be practicably managed by achieving the EPRs associated with each impact, but that is not the case with the Business EPRs because it has not stated that INZ1 land should be replaced. With regard to land acquisition, it would be important to provide ample warning of acquisition to allow businesses to plan for relocation and collaborate with business.

The Technical Report F – Business (pages 91-92) states

Permanent acquisition of INZ1 land would be required for the project, notwithstanding that it would be designed and planned to minimise business displacement due to acquisition. Early engagement with the business community would assist businesses with planning for relocation. NELP is continuing to assess available industrial and commercial land and precinct opportunities with Manningham City Council and other stakeholders, with the aim to engage with businesses on possible alternative sites that may be considered for relocation (EPR B1).

This means co-operating with a planning exercise with a particular solution.

NELP understands the Bulleen Industrial Precinct is unique in the City of Manningham and that similar land and precinct options within immediate proximity are very limited. This view was informed through the business surveys and discussions with local stakeholders including the council.

Displacement could fragment the business-to-business connections and inter-dependencies that have been established and fostered within the precinct. At this stage it is unknown how many of the displaced businesses would choose to relocate jointly to maintain existing relationships, or if they would relocate separately based on their individual need.

NELP is actively working with the Manningham City Council to consider available sites across the municipality and the potential to rezone or redevelop these sites. This has included consideration of the rezoning of 2–14 Websters Road in Templestowe, a 4.5-hectare council-owned land parcel.

The site currently operates as an auxiliary storage site. It represents a significant development opportunity with potential to be transformed into a light industrial precinct that could accommodate a range of businesses. However, this site is located approximately 7.5 km from Bulleen and may require rezoning and amendment of the Urban Growth Boundary.

There is only this site that can be contemplated plus the residual lands.

The council is determining the best applicable use of the site in a commercial and industrial sense to create an alternative employment-based precinct and potential relocation opportunity for some Bulleen businesses.

In addition to these ongoing discussions with the council, NELP has engaged other local government stakeholders to initiate similar assessments of land and site availability for industrial and commercial rezoning or redevelopment. NELP will continue to explore these opportunities with neighbouring councils to understand the viability of relocation beyond the City of Manningham and provide a further set of options to be considered by displaced businesses.

The Technical Report F – Business (pages 102 and 103) states that

During the project's construction phase, there would likely be adverse pre-construction impacts as well as construction impacts, with uncertainty for those located in the project footprint that may face acquisition, and by business displacement due to land acquisition and from reduced ease of access for customers and staff. Pre-construction impacts can be mitigated with preconstruction support (EPR B1) and the disruption to businesses from land acquisition and occupation would be minimised as much as practicable while also working with affected businesses to reach agreement on the terms of possession of the land (EPR B2). For other businesses, access and amenity impacts would be minimised to the extent and duration necessary and potentially affected businesses must be provided with adequate notification of arrangements (EPR B4). Business liaison groups would be established comprising the project construction team and representatives from existing businesses to facilitate timely reporting, communication, notification and feedback (EPR B6). However, the project is anticipated to provide an overall opportunity for businesses to realise significant benefits with improved connectivity and reduced travel times for customers and employees.

In the northern portal to southern portal precinct, 90 businesses would be affected by permanent or partial acquisition or temporary occupation. Over 80 of these businesses are in the Bulleen Industrial Precinct and are expected to be displaced due to land acquisition. This has created significant challenges of uncertainty before any commencement of project construction works. Staff retention was flagged as an impact already being experienced by businesses facing acquisition. Survey responses from businesses facing displacement indicated

that relocation was viable if continuity of client base, business-to-business services and capacity of passing trade could be maintained. For the businesses that were not displaced, the land acquisitions are expected to adversely impact business-to business-services as pre-existing relationships with other businesses are impacted. The business community within the Bulleen Industrial Precinct enjoys productivity benefits of proximity to other businesses in the Bulleen Industrial precinct, and displacement would impact these relationships. Pre-construction support is being provided with businesses being regularly updated about the planning and design progress for the project and to identify alternative location options for displaced businesses (EPR B1).

EPRs have been developed to manage the risks and mitigate impacts where possible. The EPRs for business cover risks of impacts to businesses associated with land acquisition, damage or impacts on third-party property and infrastructure, access and amenity during construction (and restoration) and impacts associated with the relocation of utility assets. The EPRs are generally sufficient for impacts associated with the project's construction. Mitigating impacts to businesses from displacement and maintaining local employment is challenging due to limited availability of suitable and applicably zoned land within immediate proximity of the Bulleen Industrial Precinct. NELP is assessing industrial and commercial land and precinct opportunities within 5–10 kilometres of Bulleen to help inform businesses in their relocation considerations (EPR B1).

The recognition of the 'challenging' nature of the task does not cover the entire issue. There needs to be a plan.

6 Mitigation strategy

I believe the following enhancements are necessary for a moderately beneficial mitigation strategy.

Workforce

- The workforce is vulnerable so that a transitional plan is essential

INZ1

- The City of Manningham requires an industrial zone as there is no alternative an industrial park is proposed. This would be masterplanned.

This could involve the residual land on the Bridge Street corridor provided that there was take up. Given the length of time (a period of 4-5 years) there may not be much take up from the original businesses. Expecting businesses to rebuild or rent would a second time not be appropriate for all businesses.

Business mitigation

- Fast track rezoning of the
 - o depot
 - o possibly the Garden Centre to accommodate the depotare essential.

This would involve

- o rebuilding the depot
- o subdivisional works
- o a development for industrial uses

The residual land is much more difficult to deal with due to access. There are limited ingress/egress options available but conditions might be right for some businesses.

City of Manningham/NELP Employment Land Planning Study

Macroplan prepared a report to explore opportunities within the Manningham Local Government Area to provide employment land given the impact that the proposed North East Link will have on the Bulleen Industrial Precinct.

The Manningham Planning Scheme was reviewed and the relevant clauses relating to employment land, in particular relating to industrial areas. Also Councils Economic Strategy was addressed.

All employment zones within the municipality were reviewed and assisting in determining suitable zones for future industrial land sites.

Future employment land

A number of sites were reviewed that could potentially be utilised as employment land. Whilst a number of sites were considered, there were several constraints imposed by each site's existing conditions and ownership.

Potential employment land sites

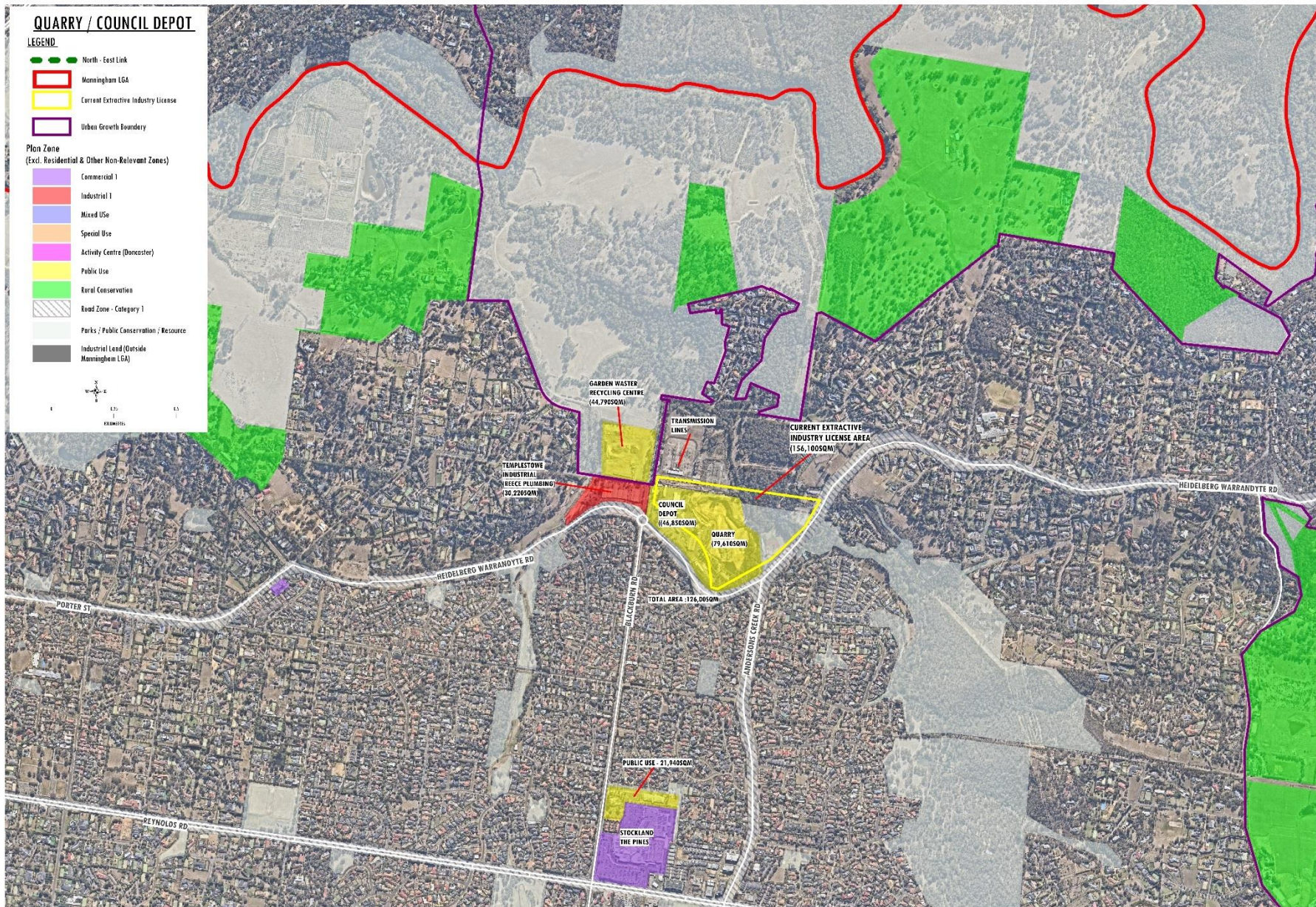
Manningham City Council Depot and Manningham Garden Waste Centre were found to be the most suitable sites for employment land. The Manningham Garden Waste Centre is located outside of the Urban Growth Boundary.

Overall, Manningham City Council Depot and Manningham Garden Waste Centre are considered as suitable sites to offset the loss of the Bulleen Industrial Precinct due to the proposed North-East Link. This will offset approximately 33% of the land affected. However, it will not account for:

- Proximity to customer base; and
- Clustering of the automotive and construction industries.

Accordingly, it is not known how many businesses will relocate. While the Garden Waste Centre is outside the Urban Growth Boundary, it is a Public Use Zone designated for local government use. This would require further advice to determine if it is possible. The report is appended.

6 Mitigation strategy



6 Mitigation strategy

Site Name	Area	Current Zone	Current Use	Commentary	Overall Score
Manningham City Council Depot, Doncaster East	46,850sqm (4.68 hectares)	Public Use Zone (Schedule 6 – Local Government)	Depot	<ul style="list-style-type: none"> • Council owned land • Adjacent the to the existing Templestowe Industrial Precinct. • Would require a rezoning of the land; and • Relocation of the depot. • Does not have direct abuttal to residential zoning 	Y
Council owned quarry, Doncaster East	79,610sqm (7.96 hectares)	Public Use Zone (Schedule 6 – Local Government)	Quarry	<ul style="list-style-type: none"> • Council owned land • Adjacent the to the existing Templestowe Industrial Precinct. • Does not have direct abuttal to residential zoning • Potential contamination; • Quarry voids will need to be filled; • Site rehabilitation required; • Site preparation to be suitable for use; and • Would require a rezoning of the land. 	N – Pending further consideration by Council
Manningham Garden Waste Centre, Templestowe	44,790sqm (4.47 hectares)	Public Use Zone (Schedule 6 – Local Government)	Garden waste centre	<ul style="list-style-type: none"> • Council owned land • Adjacent the to the existing Templestowe Industrial Precinct. • Does not have direct abuttal to residential zoning • Outside the Urban Growth Boundary; • Would require a rezoning of the land; • Relocation of the waste centre; • The site is covered by the Environmental Significance Overlay (Schedule 3 – Buffer Conservation Areas Supporting Sites of Biological Significance) 	Y

Bulleen Industrial Precinct: Economic and Social Opportunities

This study explored the likely future uses of the residual land having regard:

- to the potential need to relocate uses in the BIP
- the need for industrial land in City of Manningham
- the constraints on land in respect of ingress/egress
- the likely future use of the land.

It is noted that

- The NELP authority intend to retain the underlying on the land as INZ1.
- Appendix F Value Creation and Capture to the business case states that 33,000-54,000 sq.m of commercial or mixed use residential land located at Bridge Street and bounded by Bulleen Road may be suitable for consolidation into parcels and available for divestment to private sector (Section 2.2.2). The report notes this land assuming the land assets are sold by public agency, the state would capture 100% of the value including any volume uplift from 'upzoning'. The value capture potential is 'redacted-commercial in confidence'.

City of Manningham Highest and Best Use Study: Residual Land

Considering the site's gateway location, improved transport connectivity, policy alignment, market conditions and potential gaps, maximising local employment, and complementing key existing employment nodes, **a commercial mixed use development** could be constructed at the residual land of Bulleen Industrial Precinct.

This commercial mixed use development could be anchored by a new office park with coworking space and some incubator space and could also comprise a major share of affordable housing and retirement living complemented by various amenities on site and surrounds.

The development could involve the following uses:

- **Office:** up to 20,000 sqm office park, coworking space and some incubator space;
- **Residential, affordable housing and retirement living:** approximately 1,000-1,500 dwellings;
- **Retail** of two potential options:
 - **Option 1 – a small shopping centre** with a small range of shops such as a small supermarket (approximately 1,000 sqm), convenience stores, bottle shops, specialty shops and food and beverage (F&B) totalling approximately 2,500 sqm, or
 - **Option 2 – a sub-regional shopping centre** of up to 15,000 sqm which is considered opportunistically depending on whether Kmart (approximately 5,000-7,000 sqm) locates to the site and the ability to attract a major full-line supermarket (approximately 3,000-5,000 sqm) operator as a co-anchor.

The potential development at the site could also provide a gateway to the Yarra River, major parks, end of trip facilities and picnic facilities.

There is strong alignment with Council's policies and a range of economic and social benefits in developing this commercial mixed use development on the residual land and with respect to industrial uses. It will utilise the residual land effectively, create a gateway landmark and local employment node at the Southern Portal of NEL, minimise negative impact of job loss due to land acquisition, and maximise local employment and economic outcomes.

Based on assumptions for average employment density for various uses, the total direct on-site employment potentially generated upon completion is estimated at approximately **1,114 FTE jobs** (with retail option 1) up to **1,530 FTE jobs** (with retail option 2).

Some of the existing uses which are to be displaced may potentially locate back on site within the proposed commercial mixed use development, such as eateries, dry cleaners and fitness centres.

A summary of the recommended land uses is presented below and the report is appended.

6 Mitigation strategy



20,000 sqm
office park, coworking space
& incubator space



1,000-1,500 dwellings
residential, affordable housing
& retirement living



2,500 sqm
small shopping centre
OR
15,000 sqm
sub-regional shopping centre

The indicative uses are based on the notional egress/ingress noted in the plan.

Indicative Ingress / Egress – Option 1



Note: Indicative only
Source: North East Link Project Environment Effects Statement (2019), Macroplan

It may be possible to accommodate industry along the Bridge Street corridor but these uses have 4 to 5 years to wait and suffer the cost of interim move.

7 Conclusion

I conclude that recommendations by the IAC should be made in respect of the following matters:

The North East Link project poses major issues for Bulleen Industrial Precinct. First, in relation to the workforce, there is no program to investigate the effects on the workforce. The workforce are not stakeholders and should be stakeholders. Their vulnerability is acknowledged yet there are no Environmental Performance Requirements to address this issue.

We suggest a Very High/Major planned consequences risk rating for workforce disruption.

We suggest that

- i. Recommendations should be made in relation to the rezoning of the Council Depot at Websters Road to allow for the creation of new industrial land.
- ii. This is necessary step because Manningham will have virtually no industrial land following the acquisition of the BIP.
- iii. This would involve moving the Depot, subdivisional works and redeveloping the land for industrial purposes.
- iv. It would be reasonable NELP would pay for this.
- v. It may be possible to locate the relocated Depot outside the UGB, but greater clarity is needed.
- vi. The IAC could recommend a fast track rezoning and the provision of funding for the resolution of the rezoning and UGB issues.

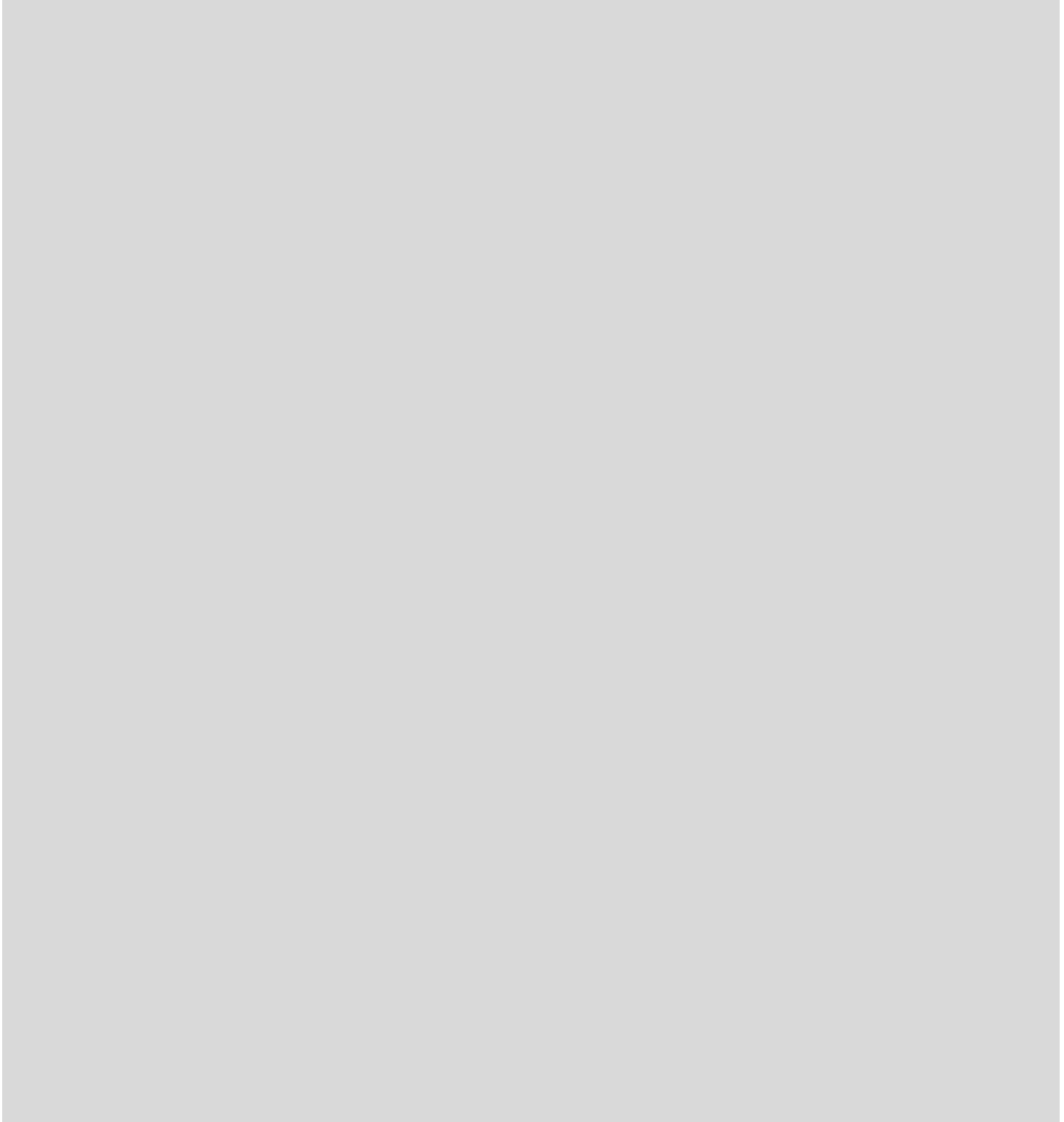
We suggest an EPR based on Manningham managing the industrial zone issue and controlling the residual land because it is planned major impact, including:

- the impacts on the BIP and the secondary economic impacts
- the time taken for the project
- the fact that only small percentage of the impacts will be absorbed, noting that 770 direct people will be displaced from their jobs and up to 1,200 people could be displaced. This impact on output is \$219 million in respect of the 770 jobs and \$310 million in respect of the 1,200 jobs in Manningham.

Sources:

- REMPLAN North East Link – Economic Impact Assessment (September 2018).
- North East Link Environment Effects Statement:
 - Volume 1 Chapters 1 – 8
 - Volume 2 Chapter 13
 - Volume 3 Chapter 14 and Chapter 17
 - Volume 4 Chapter 27 and Chapter 28
 - Map Book
- Technical Reports:
 - Technical Report E Land Use Planning
 - Technical Report F Business
 - Technical Report I Social
- North East Link Economic Appraisal (2018), Ernst & Young
- Appendix F Value Creation and Value Capture (2018), Ernst & Young

Appendix 1: Curricula Vitae



Brian Haratsis | Executive Chairman

Economist / Strategic Advisor <https://www.brianharatsis.com.au/>

Brian established MacroPlan Australia (*now MacroPlan Dimasi*) in 1985 after gaining experience in local Government, State Government and private consultancy. Brian is an economist, strategist and advisor and currently provides services to a range of major corporate and government clients throughout Australia.

RECENT MAJOR PROJECTS

NEW SOUTH WALES

- Mercedes Benz (Rushcutters Bay) Vs Daimler Benz: Economic Evidence to support Sales + Network Strategy for Compensation (2015-2017)
- Dan Murphys Vs NorthConnex: Demand + Revenue Analysis for resumption compensation
- Sydney Metro West – Cost Benefit Analysis, Department of Planning
- Sydney Metropolitan Retail Strategy – Research and Analysis, Department of Planning
- West Wilton Residential + Commercial Land Demand Assessment (4,000 lots / 30ha commercial)
- South Campbelltown Residential + Commercial Land Demand Assessment (12,000 lots, three retail centres)
- Regional Development Australia: Illawarra RDA Strategy Implementation Plan (Convention Centre, CBD Revitalisation & Employment Plan)
- Sydney CC: Light Rail Economic Impact Study
- Lloyds of London: Portfolio Review, Risk Assessment and Project Advice
- Newcastle Metropolitan Strategy Economic Analysis
- Huntlee / Branxton: Economic Development Strategy and Project Positioning
- Panthers Portfolio: Portfolio Review, Property Strategy, Project by Project – Planning, Economics, Feasibility – Club of the Future Strategy
- Marsden Park: Economic and Land Use Study; Community Facility requirements
- Frasers: Central Park Economic Assessment, Tenant / Marketing
- NSW Dept of Planning: Sydney Metropolitan Employment Submarket study and Residential Submarket Study
- Parramatta Civic Place, Project Feasibility/Retail Mix Analysis (NSW) (\$1b+)
- Green Square Activity Centre Retail Analysis
- Wollongong Lifestyle Village Demand Assessment

VICTORIA

- Plan Melbourne 2014 + 2017 Ministerial Advisory Committee - Economist Committee Member
- Pakenham Racing Club: Racecourse Redevelopment Rezoning and Feasibility & New Racecourse Rezoning (~\$150m)
- Cardinia Shire / Parklea Pty Ltd: Cardinia Road Employment Precinct Structure Plan, Market Research and Town Centre Masterplan (~\$100m)
- Coles P/L: Coburg NAC Economic + Impact Analysis, Armstrong Creek Strategic Town Centre Advice
- ISPT: Mining and Resources – Investment Strategy; Ageing and Health – Investment Strategy
- Regional Cities Victoria: City Growth Model and Strategic Audit
- Cardinia Shire Council: Infrastructure Funding Mechanisms
- Places Victoria: Fishermans Bend Urban Renewal Precinct (Economic and Strategic Planning)
- Riverlee Australia: World Trade Centre Market Assessment (200,000sqm CBD mixed use Development Strategy) (\$2bn)
- Doncaster Hill: Urban Village Market Research/Masterplan/Cost Benefit
- South East Melbourne Airport Market Assessment (Cardinia Shire Council)
- Wodonga Road/Rail By-pass/Central Area Masterplan (\$300m)
- Murray Links Golf Course, Residential Market Assessment
- Harvey Norman Bulky Goods Centre, Nepean Highway Retail Assessment
- Burwood East Regional Shopping Centre Retail Assessment

QUEENSLAND

- Urban Land Development Authority: Bowen Hill Urban Regeneration Project, Economic + Financial Feasibility (~\$16m)
- Gold Coast City Council: Light Rail Economic Impact and Land Use Opportunities & Gold Coast Activity Centres Review
- Surat Basin Property Group: Population and Housing Forecast for Surat Basin (Implications of Mining and Infrastructure)
- Bowen Hills – Economic Study, Land Use Assessment, Financial Assessment and preparation of Master Plan
- Brisbane City Council – Brisbane Industrial and Office Land Supply Study
- Brisbane Airport Corporation: Economic Assessment of Masterplan and Second Runway Business Case
- Coomera Town Centre: Market Assessment/Sizing and Cost Benefit Analysis
- No. 1 Tedder Avenue, Retail / Residential Assessment
- Emu Park Shopping Centre Retail Assessment
- Coomera Town Centre Expansion Retail Assessment
- Apollo Bay Golf Course - Residential Market assessment

SOUTH AUSTRALIA

- Land Development Agency: Bowden Urban Village Economic & Financial Feasibility
- Newport Quays (Port Adelaide) Residential and Mixed Use Development Market Feasibility (SA) (\$200m)

WESTERN AUSTRALIA

- Southern Cross Care: Ridgewood Open Community Living Project (~\$100m) & Portfolio Strategy
- Midland Integrated Transport Hub, Market Research / Sizing / Market Assessment (WA)
- Port Hedland – Residential Rezoning, Hotel Assessments, Indigenous property strategies
- Perth Waterfront (Elizabeth Quay) – RACWA Major Mixed Use Development (\$6m - \$20m)
- BHP Billiton: Pilbara Cities Strategic Research
- Nyamba Yawuru P/L: Broome Native Title Land Commercialisation
- City of Melville: Intergenerational Impact Assessment
- WAPC: Retail Development Guidelines (SPP 4.2 Activity Centre for Perth and Peel) & North West Metropolitan Economic Review
- WA Dept of Planning and Infrastructure: Economic Analysis - State Planning Strategy 2010
- Yanchep / Two Rocks: Infrastructure and Benefit Cost Analysis
- Perth Convention and Exhibition Centre Market Assessment
- Stirling Alliance Osborne Park Urban Regeneration Cost Benefit Analysis (Financial, Economic and Business Case)
- Perth Convention and Exhibition Centre Feasibility Assessment and Government Advisory (WA) (\$300m+)
- Observation City Hotel and Residential Redevelopment Market Assessment
- Holcim Cement Rezoning, East Perth Economic Analysis

NORTHERN TERRITORY

- Darwin Metropolitan Strategy Demographic & Economic Analysis
- Coles: Northern Territory Economic and Demographic Analysis and Network Strategy
- Darwin – Metro Strategy Housing and Employment Forecasts 2008, 2014, 2016
- Proposed Museum Cost Benefit Analysis (2018)
- Katherine Flood Mitigation Town Centre Strategy
- Coles / Kmart Demand Analysis (Coolalinga)

AUSTRALIAN CAPITAL TERRITORY

- ACT Government: Public Housing Strategy
- Coles ACT: Supermarket Competition Review
- ACTPLA: City to Lake Project: Convention, Stadium and Mixed Use (Economic, Strategic and Financial Analysis)
- LDA: Economic Development Strategy Canberra Brickworks
- Light Rail Cost Benefit Analysis

MAJOR PROJECTS CONSTRUCTED

- Queen Victoria (QV) Concept Development, Retail / Residential and Mixed Use Product Mix Analysis (VIC) (\$600m)
- RACV Club Redevelopment Market Research /Concept Development and Product Mix (VIC) (\$100m+)
- Barangaroo (Sydney) Project sizing and economic assessment
- Eureka Towers (Melbourne) Residential and Mixed Use Market Research (VIC) (\$200m+)
- Maryborough Town Centre Revitalisation (\$5m)
- Castlemaine Town Centre Revitalisation (\$7m)
- Brighton Main Street (WA) (\$16m)
- Monash (Caulfield Campus) Expansion (\$20m)
- West Coast Business Park Project (VIC) (\$75m)
- Top Ryde Retail and Mixed Use Development Market Assessment (NSW) (\$400m)
- Varsity Transit Oriented Development Market Assessment and Feasibility (QLD) (\$100m+)

COMPENSATION CASES:

- 2330 Epping-Killmore Road Wallan (VIC) 2018
- Mercedes Benz – Rushcutters Bay Vs Daimler Benz (Compensation) (NSW) 2017
- Dan Murphys Vs NorthConnex (2017/18) (Compensation)
- Goldrange Pty Ltd (WA) – Residential Compensation for freeway reservations (Compensation)
- Midvale DR 388 / 2016 John Nominees v Presiding Member of Metro-East Joint development Assessment Panel – (WA) (2017)
- Austin Cove (WA) Residential Compensation



Qualifications

- Master of Science, London School of Economics, London University 1983
- Bachelor of Town and Regional Planning, University of Melbourne 1978
- Bachelor of Commerce, University of Melbourne 1977

Professional Membership

- Fellow, Planning Institute Australia
- Fellow, Victorian Planning and Environmental Law Association

Books

- Autropolis: The Diverse Mobility Revolution (2017)
- Destructive Cities (2016)
- Beyond the Fringe (2013)
- Australia 2050: Big Australia? Volume 1 (2010)
- Follow the Money – Made in Australia (2012)
- Enterprise: The new business of Local Government (1998)
- Local Government Rates (1978)

Presentations (2016 onwards)

- Future Vehicles Keynote / Panellist – Essendon 2018
- UDIA VIC Northern Chapter Keynote – Bendigo 2018
- ARRB Brisbane Conference Panel (2018)
- PIA Perth Congress Panel (2018)
- IPWEA Conference Keynote Melbourne (2018)
- UDIA VIC Northern Chapter Bendigo (2018)
- Urban Developer Outlook Sydney, Melbourne & Brisbane Keynote (2018)
- Illawarra Property Council Outlook – Keynote (2018)
- International Driverless Vehicle summit – Speaker/panellist (2017)
- Property Council Hunter Lunch – Keynote (2017)
- ICT Melbourne Conference – Keynote (2017)
- Tesla Sydney – Keynote (2017)
- AMCA Melbourne keynote (2017)
- Future Vehicles – North Sydney Keynote (2017)
- Property Council Retirement Conference – Keynote (2017)
- ASF Business Opportunity – Keynote (2017)
- Urban Futures Conference SA – Keynote (2016)
- WA Retirement Living Conference WA Keynote (2016)
- LGAQ Brisbane Keynote (2016)
- Property Council Retirement Living Keynote (2016)
- ShapeGroup Brisbane Keynote (2016)
- Property Council Illawarra Outlook Keynote (2016)
- UDIA City Life Sydney – Keynote (2016)

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Daniel Parker | General Manager Gold Coast

Daniel joined MacroPlan in 2010 and has been directly involved in urban economic analysis and strategic economic planning for over 13 years.

Daniel's experience and expertise lie in defining and analysing key economic relationships, inputs and outputs relevant to a specific development or region. Daniel takes a holistic approach to strategic economics, economic planning and analysis and this real world grounding has influenced the conceptual planning of large scale developments as well as regional strategies throughout Australia.

Daniel's experience gained across all major development sectors allows him to identify and understand the underlying economic drivers, impacts and interrelations that influence the development outcome of projects.

Daniel specialises in economic market analysis and forecasting, strategic economic planning, need and impact analysis, economic modelling, cost benefit analysis, and employment modelling and planning.

As an Economics Manager Daniel can provide the necessary project management skills and strategic input to give a project direction and achieve an optimal outcome.

Recent Project Experience

- Produced the economic and network modelling as input for the business case for the Gold Coast light rail project.
- Completed a cost benefit assessment of the planned Beenleigh City Square redevelopment which resulted in successful federal funding.
- Prepared the economic benefit and feasibility analysis for the proposed Gold Coast Cruise Ship Terminal development proposed on Wave Break Island.

- Completed a strategic and economic review of the centres network and hierarchy for the City of Gold Coast which provided input for the new planning scheme.
- Provided strategic planning and economic advice to Northern Territory Government to influence the future activity centres planning framework throughout the Darwin metro area.
- Conducted extensive commercial and industrial market research throughout the Geelong and Melbourne regions to inform the conceptual planning for a major business park development.
- Completed the economic benefits study for Jewel, a major \$1B mixed use resort development, which successfully achieved approval through state government.
- Prepared a review of all employment land areas and planning policies for City of Gold Coast to inform future land use planning.
- Assisted in preparing a federal submission of 'national population sustainability' on behalf of BHP.
- Provided the economic and strategic land use advice to Latrobe Council to inform the future development of the Latrobe Regional Airport.
- Project managed an extensive study focused on evaluating the value uplift and benefits associated with urban densification around public transport networks.

Areas of Expertise

- Cost benefit and economic impact analysis.
- Land use feasibility analysis.
- Strategic planning review and advice.
- Technical economic modelling and analysis.
- Detailed market research assessments.
- Highest and best use studies.



Qualifications

- Bachelor of International Business (Economics)
Griffith University, 2004

Professional Associations

- Committee Member,
Property Council of
Australia Gold Coast
Committee
- Corporate Member,
Property Council of
Australia

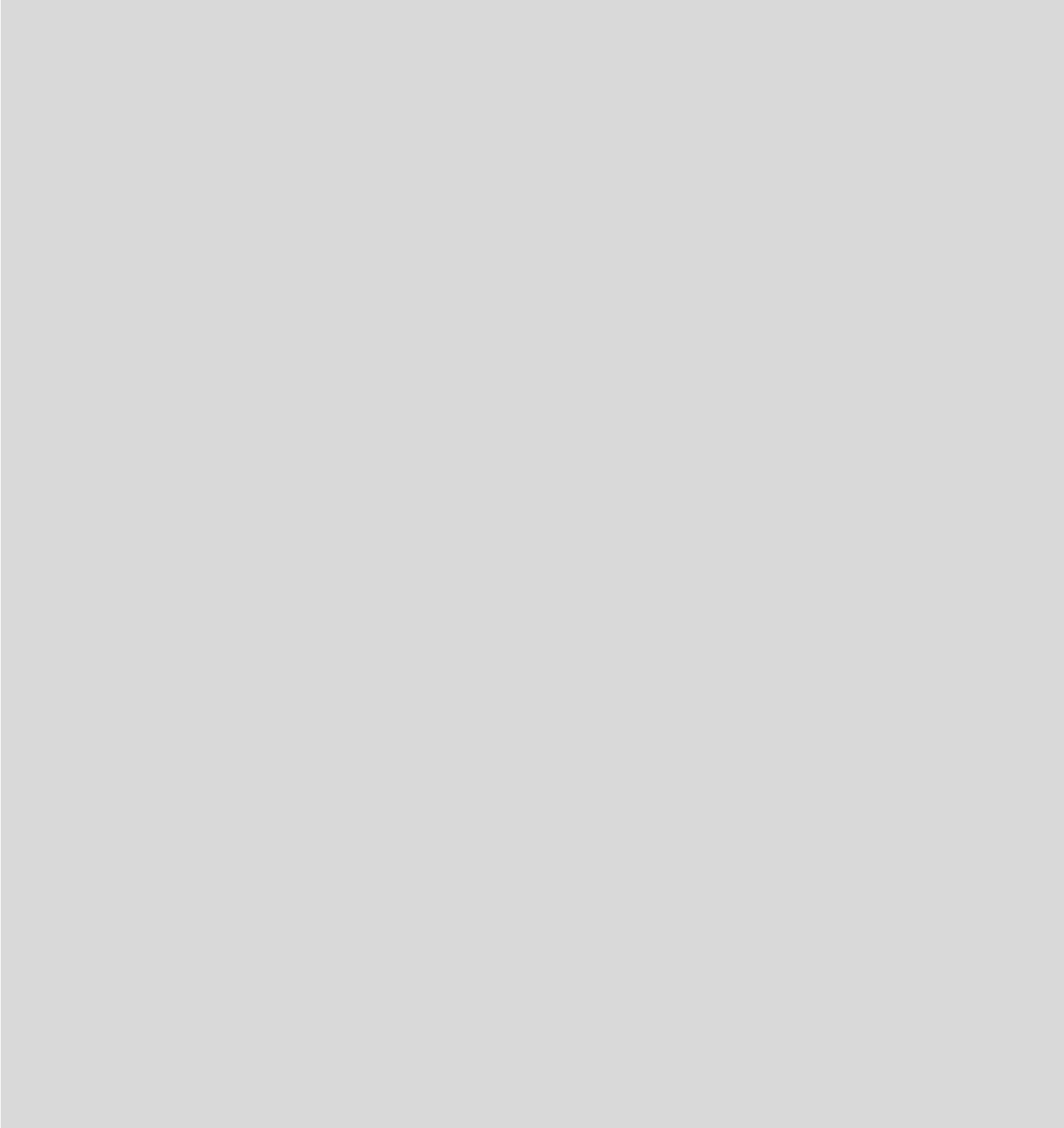
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Appendix 2: BEP Workforce Survey



chorus consulting

BIZ Group Staff Survey

Welcome

Thank you for taking the time to complete this survey.

The information we gather from you will be used to support our campaign to save the Bulleen Industrial Zone in light of the North East Link construction.

The information will be anonymous - we will not be asking for your name or identifying you in anyway.

We ask that you complete the survey honestly and in full. It should only take about 5 minutes.

Your help is important in our work for the Bulleen Industrial Zone.

As you move through the survey, use the "Prev" and "Next" buttons at the bottom of the screen to progress. Do not use the "back" or "forward" buttons on your internet browser. All responses will be saved as you go.

Many thanks!

chorus consulting

BIZ Group Staff Survey

Building a workforce profile

We are trying to build a profile of the workforce within the Bulleen Industrial Zone. Your honest and accurate answers help us to do this. Questions marked with an * must be completed.

1. Which business do you work for?

* 2. How old are you?

Under 18 18-24 25-34 35-44 45-54 55-64 65+

* 3. What is your gender?

Male Female Prefer not to say

4. Which suburb do you live in?

* 5. Do own or rent the home you live in?

Rent

Own

chorus consulting

BIZ Group Staff Survey

Building a workforce profile, continued

* 6. Including you, how many people in your household hold a job?

1 - I am the sole money earner 2 3 4 5 or more

* 7. What is your yearly household income - before tax? (This includes your income plus anyone else in your household who is working)

Less \$50,000 per year

Between \$50,000 and \$100,000 per year

\$100,001 to \$150,000 per year

\$150,001 to \$200,00 per year

More than \$200,000 per year

* 8. What is the nature of your employment?

Permanent full-time Permanent part-time Contracted (full or part time) Casual

* 9. Which of the following best describes the type of work you do?

General labour, retail or hospitality

Skilled labour, trade or administration

Professional or managerial

Not sure/don't know

* 10. What is the highest level of education you have achieved?

Some high school

Completed high school

Certificate I, II, III or IV

Diploma, Advanced Diploma, or Associate degree

Bachelor Degree

Postgraduate Degree

Not sure/don't know

chorus consulting

BIZ Group Staff Survey

Building a workforce profile, continued

* 11. How long have you worked in your current job?

- Less than 1 year
- 1 - 2 years
- 3 - 5 years
- 6 - 10 years
- More than 10 years

* 12. In the last 10 years, have you ever been unemployed and looking for work (not including when you were at school or university)?

- Yes - once
- Yes - more than once
- No

chorus consulting

BIZ Group Staff Survey

Building a workforce profile, continued

13. For how long were you unemployed and looking for work?

- Less than 1 month
- 1 to 2 months
- 3 to 6 months
- 7 to 12 months
- More than a year
- Not sure/don't know

chorus consulting

BIZ Group Staff Survey

Building a workforce profile, continued

14. What was the longest period for which you were unemployed and looking for work?

- Less than 1 month
- 1 to 2 months
- 3 to 6 months
- 7 to 12 months
- More than a year
- Not sure/don't know

chorus consulting

BIZ Group Staff Survey

Building a workforce profile, continued

15. How far do you travel to work (in kilometres)?

16. If your work was to move as a result of the North East Link, how likely are you to remain with the company?

- Very likely
- Likely
- Not sure yet (e.g. depends where they move to)
- Unlikely
- Very unlikely

17. Do you have any comment about the North East Link and its possible impact on your job?

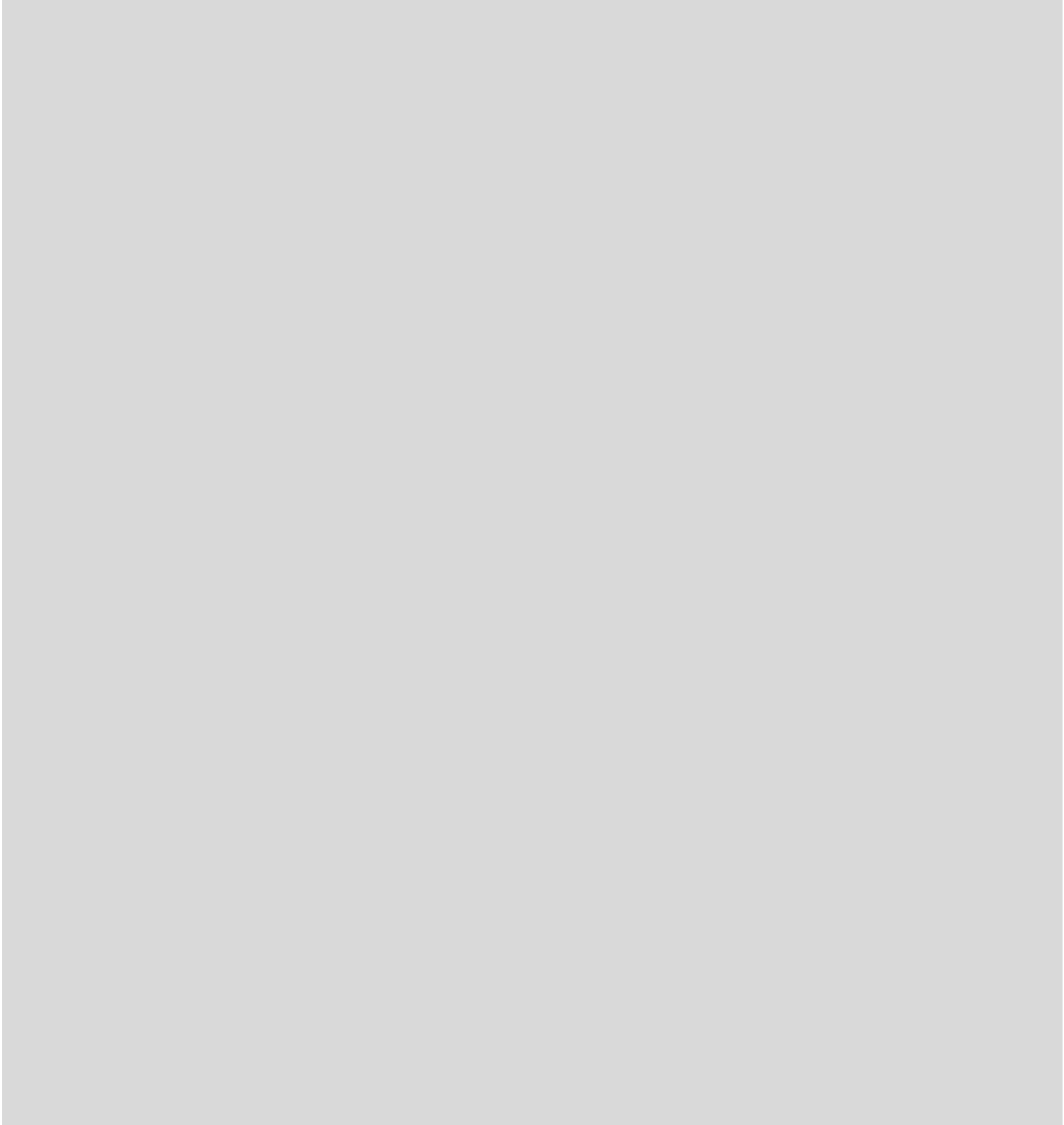
chorus consulting

BIZ Group Staff Survey

Thanks!

Thanks for your time. You have now completed the survey.

Appendix 3: EES Business Survey



EES Business Survey

Source: EES – Technical Report F – Business, Appendix B: Business Survey Questionnaire

Business consultation survey – Final

Existing conditions

Pre-fill info

Date	Answer
Interviewer (comms team representative)	Answer
Interviewer (AECOM and/or Matters More representative)	Answer
Interviewee (business owner/MD)	Answer
Business name	Answer
Business address	Answer
Business precinct	Answer
Business ANZSIC code	Answer

Business sensitivities

Note that information collected from each business will be treated sensitively, and businesses will not be mentioned by name. For the most part, information collected will be aggregated. For instance, employee numbers, turnover and business impacts etc would be added together, rather than identified separately. For example, 'three [insert business type] located in [region] could be affected by reduced amenity due to construction. This would impact these businesses... etc'. However, sentences like this may not always be plural, and may sometimes just indicate your business. For example, 'a [insert business type] located in [region] could be affected by reduced amenity due to construction. This would impact this business...'

Note that the business impact analysis will inform part of the Environment Effects Statement, which is due to be released for public exhibition in early 2019.

With the above in mind, please note that while you do not need to answer all questions, having sufficient information to aggregate will assist the business impact team to clearly and quantitatively articulate how businesses could be affected.

Business operations

Q1. What kind of work does your business undertake? How would you classify your business?	Answer
Q2. How many people do you employ, including yourself? Are they full time, part time, casual?	Answer
Q3. What hours do they work? ie standard hours (9 am-5 pm) or outside these hours?	Answer
Q4. In what areas do your employees live? How do your employees travel to work?	Answer
Q5. Do you own or lease the property? If lease, how long is your lease agreement for?	Answer
Q6. How long has your business been located at the current site? Was it difficult to find this property for your business?	Answer
Q7. Does any other business or organisation use the property?	Answer

<p>Q8. Do you rely on a supply chain or only one or two businesses for inputs? Note that while nearly all businesses have a supply chain (delivery of or sending product), we're really asking about businesses that have a significant (ie large cost) and/or time sensitive logistics operation. If no, skip the below; if yes:</p> <ul style="list-style-type: none"> - How does your supply chain work? Please quantify number of movements, access and exit points to site, key roads used. Please also specify key origins for raw products and/or key destinations for intermediate/final products? - Is your supply chain time sensitive? - Are there any seasonal variations in the demand for your goods or services that affect your supply chain? 	Answer
Q9. Are you planning any major changes to your business over the next 5 years?	Answer
Q10. Do you have any important commercial relationships with nearby businesses? Please explain	Answer
Q11. Do you hold environmental permits or other licences for this site? If yes , what are they?	Answer
Q12. What was your turnover in the last financial year? – <\$500k, \$500k – \$1m, \$1m – \$5m, \$5m – \$10m, \$10m – \$20m, >\$20m Is the stated turnover expected to continue in the future?	Answer

Customers

Q13. On average, how many people/customers come to the property each week? Is your business seasonal? If so, how does it vary during the year?	Answer
Q14. Where are your customers located? On a map, how far does your customer base extend?	Answer
Q15. Do you know how your customers travel to your business?	Answer
Q16. Do you believe you benefit from passing trade? If yes , can you estimate the proportion of your customers that are passing trade? Do you have signage on the nearby major roads? If so, where?	Answer

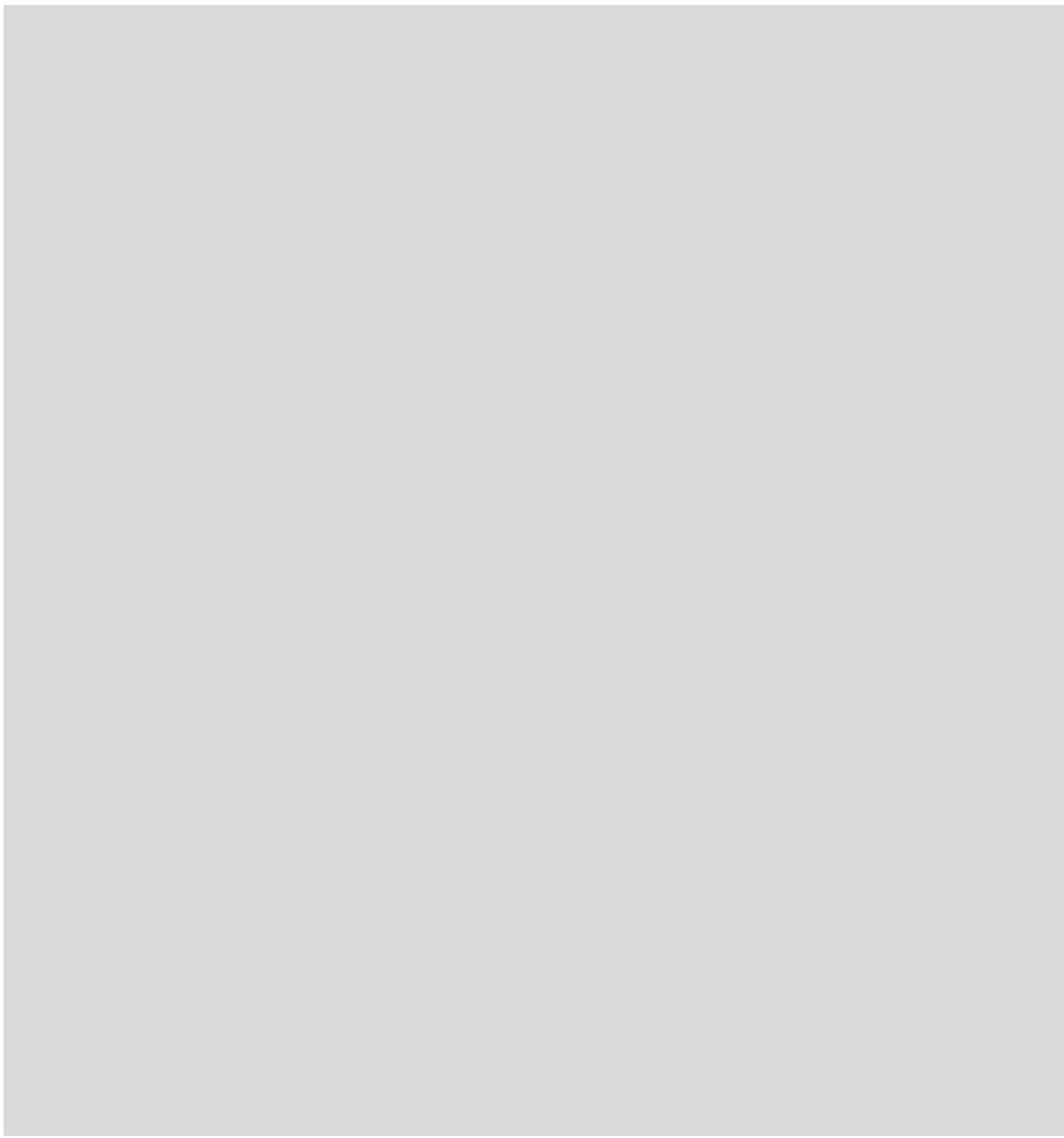
Construction impacts

Q17. Would acquisition of any nearby businesses, but not your own, impact your business? If yes , how?	Answer
Q18. If it were necessary, would relocation be a viable option? If no: -Why not? -What actions could be taken that might make it viable? If yes: -How far away would you consider relocating? -What would you need to do to relocate and how long would it take for you to relocate? -What challenges and/or opportunities can you foresee with the relocation, and how would these impact your costs and revenue?	Answer
Q19. Are there any legislative or business compliance issues that could arise from relocation or changes to access, amenity or other foreseeable impacts?	Answer
Q20. Can you explain any construction impacts that you can think of that could positively or negatively affect your business? <ul style="list-style-type: none"> - Changed road access - Benefits that may be realised - Travel time impacts - Customer impacts - Staff impacts - Supplier impacts - Dust - Noise - Vibration 	Answer
Q21. Do you have suggestions as to how these impacts could be reduced?	Answer

Operation Impacts

Q22. Assuming your business remains on your current site or close to your current site, can you explain any impacts that you can think of that could positively or negatively affect your business when the road/tunnel is completed? <ul style="list-style-type: none"> - Changed road access - Benefits that may be realised - Travel time impacts - Customer impacts - Staff impacts - Supplier impacts - Noise - Vibration 	Answer
Q23. Do you have any suggestions as to how these impacts could be reduced?	Answer
Q24. Any other comments or suggestions?	Answer

Appendix 4: REMPLAN Business Survey – Questionnaires and response results



Appendix A

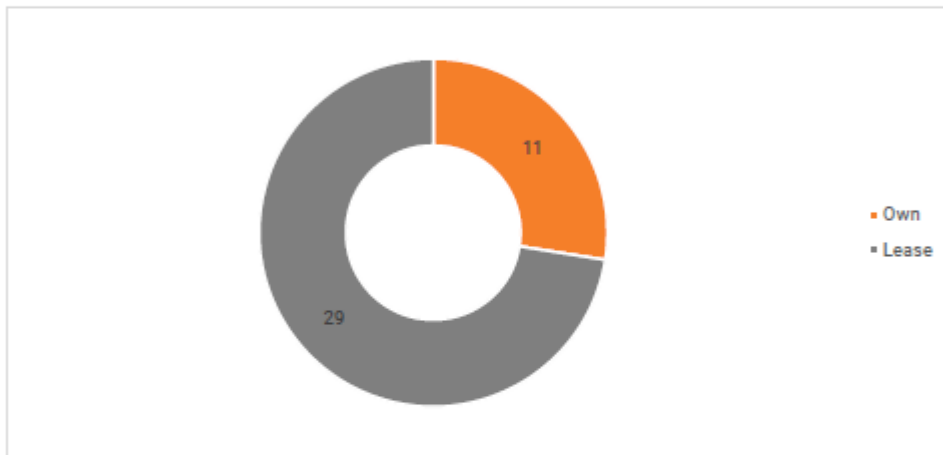
Business survey questions and response results

The online business survey included logic so that respondents answered relevant questions based on a previous response. Therefore, not all respondents answered each question. For example, a respondent who answered that they ‘...will be moving the business to another location and already know where that is’ in question 6 did not see question 7 which asked, ‘Why would you be closing the business?’.

Question 1 – Business name:

[Various answers. Responses not presented here]

Question 2 – Does your business own or lease your premises in Bulleen?



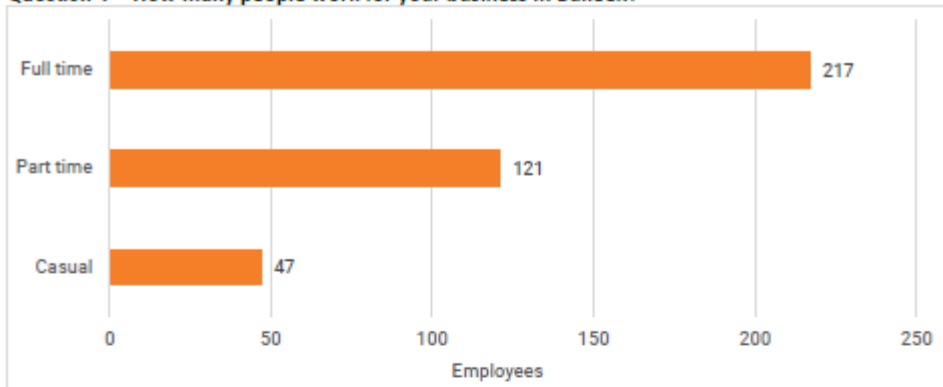
Question 3 – What does your business do? (main activity) [Some businesses will be involved in various activities, however your ‘main activity’ is the one which is your main source of income. E.g. ‘manufacture pallets’ or ‘commercial vehicle repair’]

[the graph represents the industries to which respondents have been assigned under ANZSIC classifications]



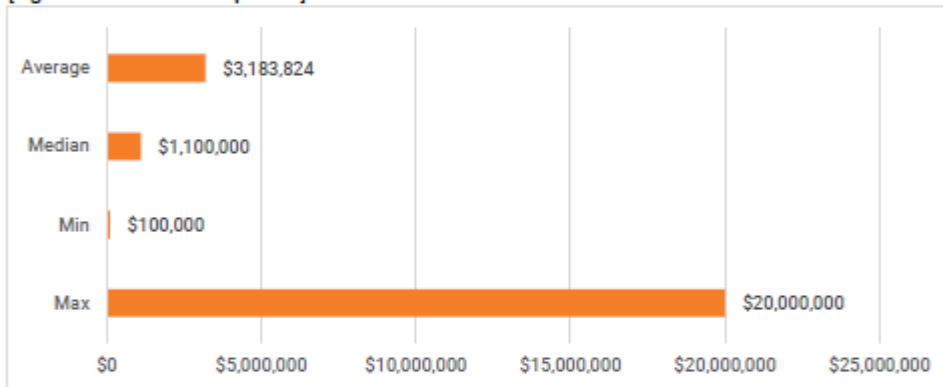
Bulleen Industrial Precinct – North East Link – Economic Impact Assessment

Question 4 – How many people work for your business in Bulleen?

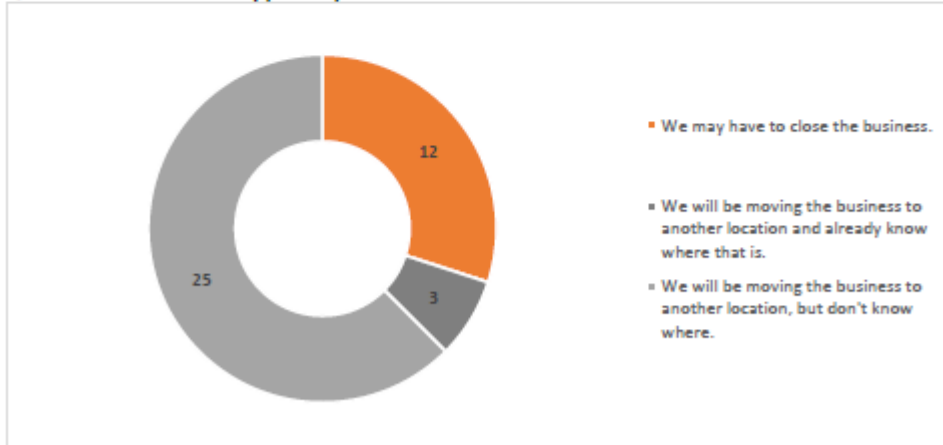


Question 5 – What is your business' current annual gross turnover? (optional)

[Figures based on 18 responses]



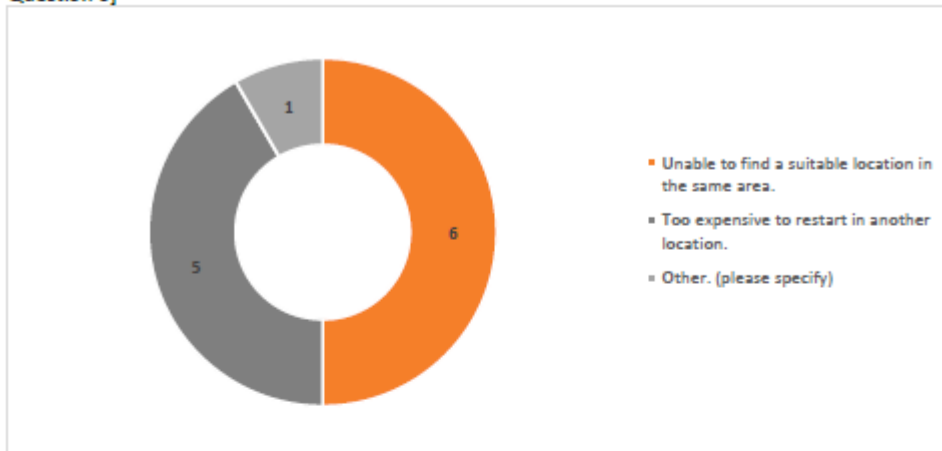
Question 6 – What will happen to your business once construction commences on North East Link?



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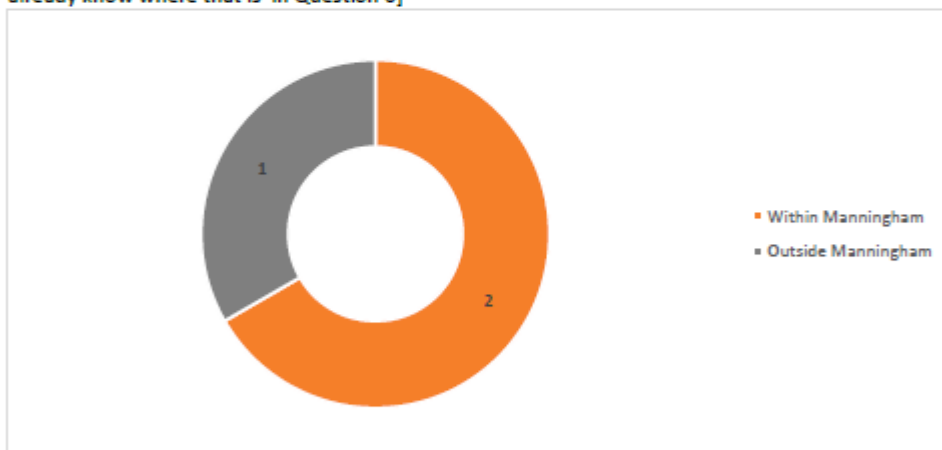
Question 7 – Why would you be closing the business?

[This question was only answered by those who responded 'We may have to close the business' in Question 6]



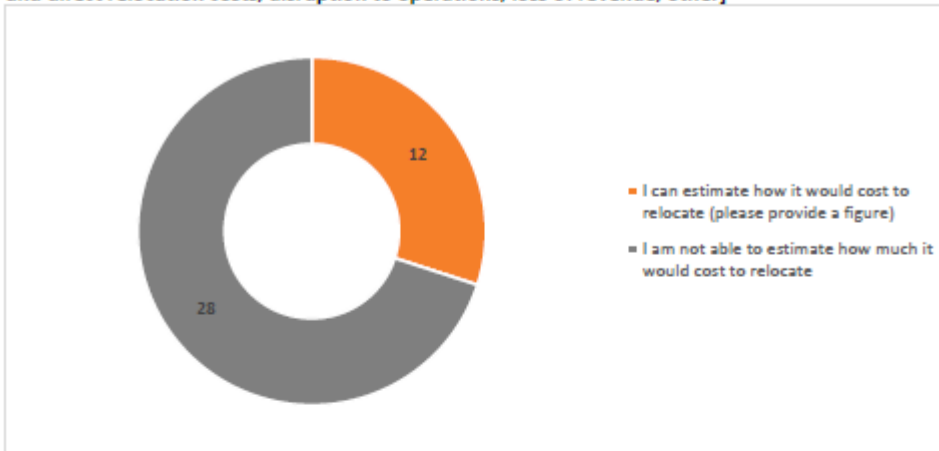
Question 8 – Where will you relocate your business to? (please refer to image)

[This question was only answered by those who responded 'We will be moving the business and already know where that is' in Question 6]

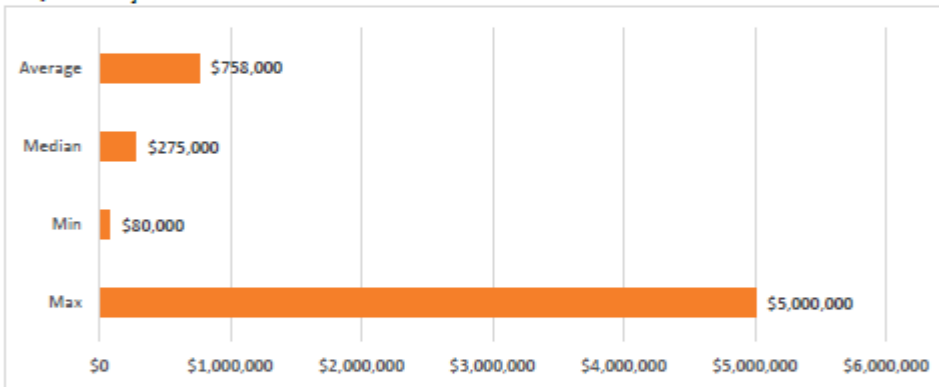


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Question 9 – What is the estimated overall cost of relocating your business? [this may include: time and direct relocation costs, disruption to operations, loss of revenue, other]

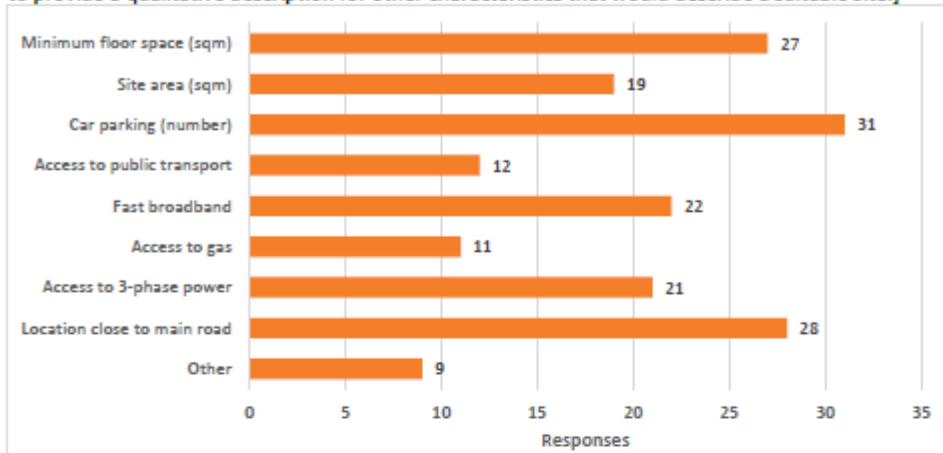


[Based on 12 responses to 'I can estimate how much it would cost to relocate (please provide a figure)' in Question 9]

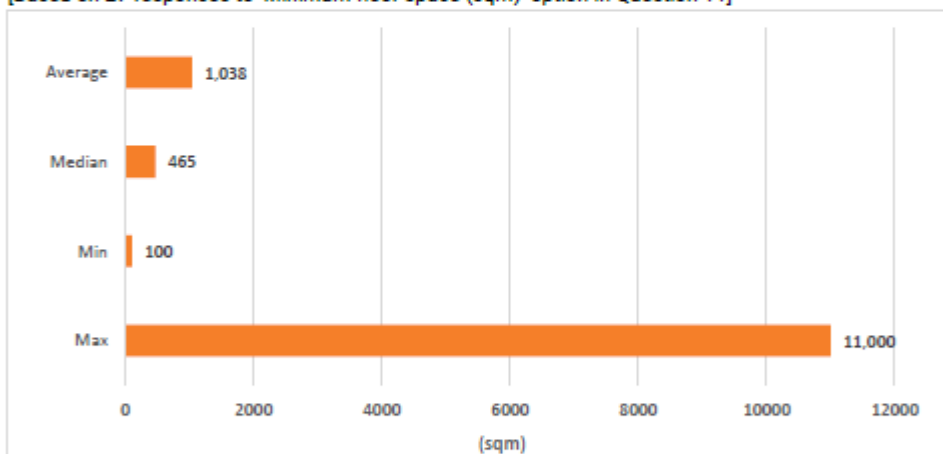


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Question 11 – Please describe a suitable location for your business. (select relevant options only)
 [Respondents were provided with a list of options that described what a suitable location might include. Respondents were given the option to quantify the size of floor space, site area and number of car parking spaces that would be suitable for their business. The ‘Other’ option allowed respondents to provide a qualitative description for other characteristics that would describe a suitable site.]

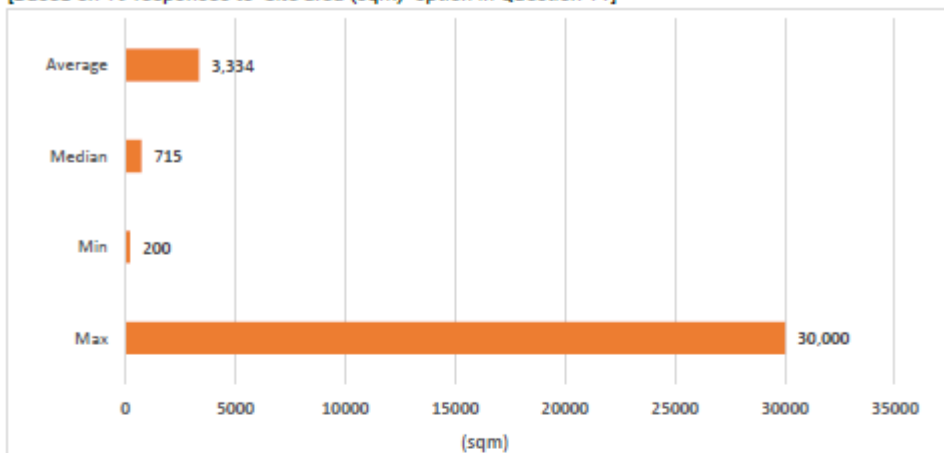


[Based on 27 responses to ‘Minimum floor space (sqm)’ option in Question 11]

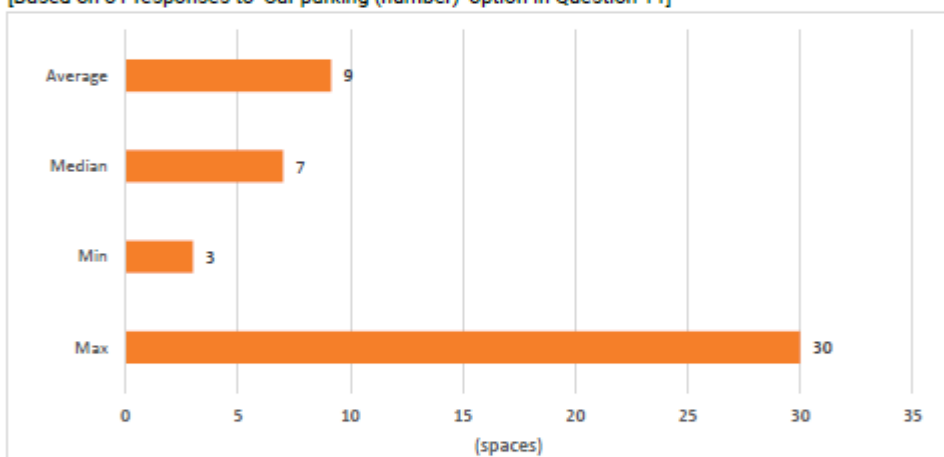


Bulleen Industrial Precinct – North East Link – Economic Impact Assessment

[Based on 19 responses to 'Site area (sqm)' option in Question 11]



[Based on 31 responses to 'Car parking (number)' option in Question 11]



[From 9 responses to 'Other' option in Question 11]

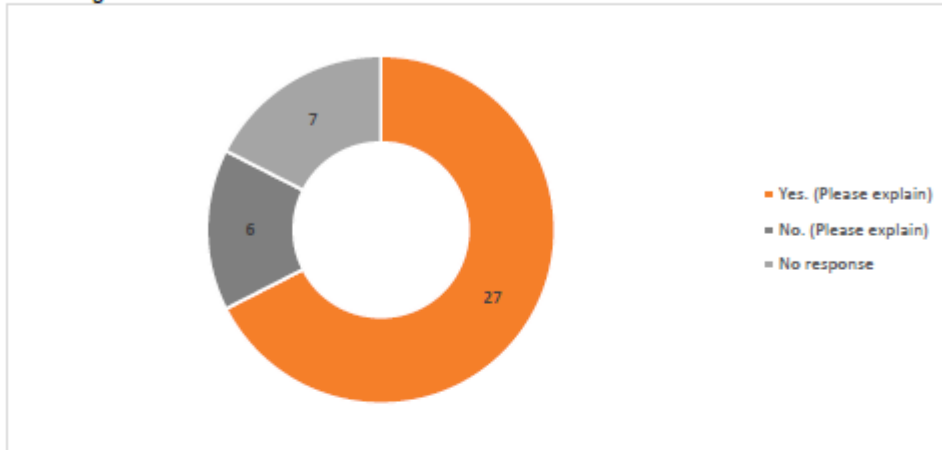
Text responses to 'Other' option in Question 11 (Identifying content removed and replaced with "[...]")
Difficulty of finding suitable affordable sites in the area. The current site is large, 7000 sq metres has high exposure with frontage to a very busy road, but a relatively low rent. The rent is low as it is based on flood prone land which has limits to nursery as a use. Profit margins are low for [...], and the fact that this site is not suitable for other commercial uses is the only way the business is viable. There are very few open sites with outdoor space to keep and sell [...] etc
City of manningham
To remain at current location [...] Bulleen, or relocation within bulleen or within 2 km radius similar location. we have been located in Bulleen since the late 1970"s. We have many long term staff with over 20 years experience and they come from all directions. If we move too far in any direction we will lose those staff as travel times will be unacceptable.
access to eastern freeway and close to 50% of existing clients
WASH DOWN PIT AND TRADE WASTE



Bulleen Industrial Precinct – North East Link – Economic Impact Assessment

Main Road Coverage
Close access to arterial roads. Centrally located.
extended semi trailer access

Question 12 – If there was a suitable location in Manningham (refer to image), would you consider relocating there?



[From 33 responses to 'Yes (Please explain)' and 'No (Please explain)' options in Question 12]

Text responses to 'Yes. (Please explain)' option in Question 12 (Identifying content removed and replaced with "[...]")
Cnr Fitzsimons Rd & Porter St
We would consider another area in Manningham, ideally close to our current location in Greenaway St
YES. We want to be very close to existing location as possible. Over the 36 years we have been on this site (and its 51 years as a [...]) we have built up a strong identity and customer base based on this locality. We have a strong connection to the Yarra River and parklands including the Bolin Bolin billabong (which we see as being a very special place and feel privileged to operate closely to it), contributing to many community and revegetation and education projects, and on being within the Valley of the Arts tourism precinct, having a close proximity to Heide Museum. Our identity is based on these connections.
What's to explain
existing customer base
As stated, long term staff from all directions and will be lost if travel times become unacceptable.
close to new freeway
TEMPLESTOWE ROAD OR BULLEEN ROAD
we would need a large area space with easy access for our customers and suppliers
CLOSE TO BULLEEN EXIT OF EASTERN FREEWAY
Needs to be in Bulleen Templestowe lower & Templestowe Area as my clientele is in this area and the business has been around since 1956
proximity to city & sounding areas
only if cost effective
if the location was close to bulleen

Bulleen Industrial Precinct – North East Link – Economic Impact Assessment

In an industrial estate west of Williamson Rd
DONCASTER HILL NEAR BMW DONCSATER
We have been doing business in the area for a long time
DONCASTER ROAD
we have been at our present location for 52 yrs, stying local is important as the majority of our work is eatern/inner eastern suburbs.
Similar industrial area to one we have now
Retail location
Prefer to stay locally if posiible
it would be good to stay where customers are familiar with us being
Convenience for staff
Yes we would like to retain our existing cutomer base in this region
Still needs to be far enough away from other [...] though
But only around Bulleen area
Text responses to 'No. (Please explain)' option in Question 12 (Identifying content removed and replaced with "[...]")
no other industrial parks that i know of and if we move out we will be too far away from most of clients adding to costs
Really needto be within Bulleen or maximum of 5 minutes drive away to retain client base.
Need to be close to Eastern Freeway
where?
Not able to answer, as not up to me
We are a destination shop to hard for people to get to us customer come to us

Question 13 – Is there anything else you would like to tell us about how the North East Link will impact your business? (optional)

Text responses to Question 13 (Identifying content removed and replaced with "[...]")
There is and has been a patch a land set aside for this link at the end of the Greensborough Bypass which should be used and wouldn't destroy countless family lives and businesses by using the Bulleen industrial estate option.
We planned to stay here to grow our business, there is nowhere better than here. we invest lots of money to set up this business facility, we want to stay forever. Our business is growing gradually, we just want to keep working without any interruptions. Relocation is not viable option, we do not have the financial capacity even after government compensation to relocate. it is impossible to find another standalone similar sized industrial/warehouse building within Manningham or neaby municipalities The only action that might make it viable is fi the government find us another building within Manningham with exact specs/land size/facilities and support us financially otherwise our business will collapse and all our staff will lose their jobs We can only stay in Manningham as moving out of Manningham will have too large of a long term impact on our lives spanning into the next 30 years plus years. We chose Bulleen's location stratgeically to maximise all 3 director's working hours, any reduction in working hours will have significant negative impact on our business There are too many challenges if our building gets demolished, so many we cannot calculate or foresee. We truly hope Manningham Council can support the Bulleen Industrial Zone businesses. Thank you very much
We only started up business here recently, and knew the North East Link would impact this. We may not continue with this aspect of our business, but appreciate any council support on offer.



Bulleen Industrial Precinct – North East Link – Economic Impact Assessment

<ul style="list-style-type: none"> • The uncertainty of what is likely to happen has the effect shifting all our creative energy, which should be used developing and progressing business innovation. to focusing on infrastructure. We found out that NE Link was likely in August 2017, but will not know definitely how we will be affected until late 2019 - more than 2 years during which we can plan, but not act. • We would prefer to remain on the current site, but do not know if this is possible due to the impacts if at least part of the land was acquired for NE Link and works were undertaken next to the business • Relocation would involve a huge amount of planning and work by the owners and staff and a large investment to get something which could work. It has taken 35 years of thought and work to develop the current site. It would be impossible to replicate the current setup. This has been needed to give our business its unique qualities and the current infrastructure is worth much more to the business than its financial value. • Difficulty of finding suitable affordable sites in the area. The current site has high exposure with frontage to a very busy road, a relatively low rent as it is based on flood prone land and conservations zone which has limited uses permitted. The area is large - current site is 7000 square metres. There are very few open sites with outdoor space to sell [...] etc. One sch site may become available for the first time in 40 years, however the costs are probably beyond us and we would not be able to access NE link compensation at this stage • Building up customer base. We have built up our customer base over more than 35 years. Even if we relocated to a site in the same area we could not expect to take all our customer base with us, or for them to know where we are located. We rely on a large customer base, many of whom only make occasional visits and most of whom we do not have contact details for. Many are local, but we often have customers travelling a larger distance less often who would have trouble finding us.
<p>The problem is not the north east link ,, it needs to be done but the route needs to be further investigated to use some of the bulleen flood lands by tunnel or overpass so as not to destroy 133 factories , 2000 odd jobs and countless Home relocations</p>
<p>May also lose employees if they need to travel further. unable to remain competitive with pricing due to additional travel time to client locations especially for production. High percentage of our clients are schools and local businesses in the local surrounding suburbs and we would not be able to respond in a timely manner.</p>
<p>TO MOVE A [...] COMPANY THE BUSINESS MUST BE LOCATED ON A MAIN THOROUGHFAIRE AND MUST BE IN A LIGHT INDUSTRIAL ZONE. IN MOVING WE WOULD LOOSE A MAJOR PORTION OF OUR CUSTOMER BASE, LEADING THE BUSINESS TO TAKE A SIGIFICANT HIT.</p>
<p>we need to stay within the bulleen and Doncaster zone for our business to survive ,as we have built up our customer base up over the last forty years</p>
<p>WE CANNOT AFFORD TO CLOSE FOR EVEN ONE WORKING DAY DUE TO COMPETITIVE INDUSTRY. WE ARE STRATEGICALLY PLACED NEAR INNER EASTERN EXIT OF EASTERN FREEWAY TO SUPPLY OUR CUSTOMER BASE AND BETWEEN OUR OWN RETAIL OUTLETS. WE WILL REQUIRE AT LEAST 1 YEAR TO MOVE AND WILL NEED TO OPERATE TWO SITES AT ONCE OVER AT LEAST THREE MONTHS. WE DON'T WANT TO MOVE.</p>
<p>Unlike several other Business operators in this industrial precinct, we are providing services and repairs on our site. We are reliant on clients coming to us. Therefore, our location is crucial to the survival of our business. If we can't set up locally, our business would be destroyed. This is a fairly simple equation to make. If we are not local, we are finished after 50 years of trading in Manningham.</p>
<p>The option that has been chosen will impact all business and also local people as they will have to travel further to get any work done, there is vacant land further out that it should go through rather than knock all business out and make everybody start again which may result in alot of people going Bank Rupt</p>



Bulleen Industrial Precinct – North East Link – Economic Impact Assessment

It will mean that I will need to relocate which does not appear to be a viable option. I think it be impossible to find a location as ideal as where I am at present
we would loose all local suppliers and turnover would be alot less
The Victorian State Government and the City of Manningham have a moral obligation to re-zone land within the municipality, to lessen the impact of the project to longstanding businesses in the area. Rezoning and creating an industrial pocket within the local area, allowing businesses to relocate with minimal impact to their operations, employees and financial security.
31 YEARS AT THIS LOCATION,GOT REGULAR CUSTOMERS,GOT AN \$[...] MORGAGE,WHERE WILL I FIND A LOCATION LIKE THIS&IAM [...]YEARS OLD,WHO GOING TO EMPLOYE ME & HOW COULD I WORK FOR SOMEBODY
We worry about the negative impact on our business because of relocation.
We have set things in place in order that my parents have an income from me in our rent and I have first option on the property if they choose to sell. With the relocation of the business we stand to lose all the advantageous planning and organisation set in place on top of the direct and indirect costs of relocation. I really do not know what we will do, where we will end up or how we will fund the inevitable shortfall of unforeseen costs. I do not trust that NELA will compensate us adequately as the relocation of our business is less than straightforward.
Need to relocate to similar location for distribution of products both south and north of present location. Disruption of business whilst finding and relocating to new premises. Communication of new location to existing customers. Merse
we will lose our advertising due to not being on a main road - this will impact us substantially we service all of Melbourne and this is a central point for us to run the business from to move will mean we have to travel further to certain parts of the city and suburbs
We will have no choice but to close due to the compulsory acquisition. Very difficult to re locate our type of business in this area.
In short, it would be devastating, on a personal as well as a business level. I certainly don't have the energy that I had when I set up in this location 35 years ago.
Loss of income, can't sell , no more good will and value in our business

Question 14 - Contact form.

[Responses not presented here]



Appendix 5: Employment Land Planning Study



Manningham City Council & North East Link Authority

Employment Lands Planning Study

FINAL DRAFT

Prepared by **MacroPlan**
For Manningham City Council and North East Link Authority

05 July 2019

macroplan



Important Notice

If you are a party other than Manningham City Council and North East Link Authority (the client), MacroPlan:

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If you are a party other than the client and you choose to rely upon the attached report or any part thereof, you do so entirely at your own risk.

Contact

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_Executive Summary

Introduction

This purpose of this report to explore opportunities within the Manningham Local Government Area to provide employment land given the impact that the proposed North East Link will have on the Bulleen Industrial Precinct.

The Manningham Planning Scheme was reviewed and the relevant clauses relating to employment land, in particular relating to industrial areas. Also Councils Economic Strategy was addressed.

All employment zones within the municipality were reviewed and assisting in determining suitable zones for future industrial land sites.

Future Employment Land

A number of sites were reviewed that could potentially be utilised as employment land. Whilst a number of sites were considered, there were several constraints imposed by the each sites existing conditions and ownership.

Potential Employment Land Sites

Manningham City Council Depot, Council owned quarry and Manningham Garden Waste Centre were found to be the most suitable sites for employment land. The Manningham Garden Waste Centre is located outside of the Urban Growth Boundary.

Overall, Manningham City Council Depot, Council owned quarry and Manningham Garden Waste Centre are considered as suitable sites to offset the loss of the Bulleen Industrial Precinct due to the proposed North-East Link. This will affect approximately 33% of the land affected. However, it will not account for:

- Proximity to customer base; and
- Clustering of the automotive and construction industries.

Accordingly, it is not known how many business will relocate. While the Garden Waste Centre is outside the Urban Growth Boundary, it is a Public Use Zone designated for local government use. This would require further advice to determine if it is possible. The report is appended.

1_Introduction



1_Introduction

1.1_Purpose

This Employment Lands Planning Study report was prepared by MacroPlan (the author) on behalf of Manningham City Council and North East Link Authority (the client).

This report will explore opportunities within the Manningham Local Government Area (LGA) to provide employment land to those businesses impacted by the proposed North East Link.

A number of sites will be reviewed as part of this study and the potential of these sites to be utilised as employment land.

1_Introduction

1.2_Scope of Work

The scope of this report involves the follows.

1. **Review background analysis and studies including industry surveys.**
2. **Review of existing employment land within Manningham Council considering the changes brought about NEL (including ability to accommodate businesses displaced from the Bulleen Industrial Precinct)**
 - Assess opportunities for offsetting the loss of employment land uses as a result of North East Link.
 - Assess if changes to existing land zoned for employment land uses would be required as a result of North East Link , including the application of the following criteria/filters to existing employment land:
 - Assess if changes to local policies and strategies would be required as a result of North East Link.
3. **Review land that is not currently zoned for employment land uses within Manningham Council which may be suitable in the future.**
4. **Provide planning recommendations for future growth to accommodate employment land use within Manningham Council.**
5. **Meetings and Presentation**

1_Introduction

1.3_References

The following literature and data have been referred to in preparing this report.

- Manningham Economic Development 2011-2030, 2018
- Manningham Planning Scheme
- MapInfo, 2019
- NearMaps, 2019

2_Existing Employment Land

An aerial rendering of a modern highway interchange. The main road is a multi-lane highway with a curved overpass structure. The surrounding area includes green spaces, a small stream, and some buildings in the distance. The overall scene is bright and clear.

2_Existing Employment Land

2.1_Planning Policy and Strategies

Manningham Planning Scheme

The following Clauses under the Manningham Planning Scheme (the Scheme) relate to industrial land:

Planning Policy Framework (PPF)

The following PPF are relevant:

Clause 21.02 Municipal Profile
Clause 21.02-10 Industry

There is approximately 19ha of land zoned for industrial purposes. Industry comprises small scale, light industries in older established areas and some newer small scale industrial estates. There is limited potential for industrial development with a lack of vacant land available. There are three industrial areas located in Bulleen, Doncaster and Templestowe, predominantly used for light industrial purposes. Key light industries include printing services, motor vehicle servicing, building and construction services.

It is envisaged that industrial uses within Doncaster Hill will be phased out over time as the area is developed for higher density living.

This clause provides an overview of the current state of industrial land and activity within municipality. Council has established that there is limited land supply to accommodate additional industrial zoned land. This report will explore potential sites that can be utilised as industrial land to offset the loss of the Bulleen Industrial Precinct due to the proposed North-East Link.

Clause 21.08 Industrial

Clause 21.08-1 Overview

Manningham has few areas zoned for industrial use. These areas are shown in Industrial Framework Plan 4. The industrial centres at Bulleen and Templestowe are located within high quality landscapes and vistas. A key challenge for Council is to ensure that the use and/or development of these industrial areas, does not have a detrimental impact on nearby residential areas and existing environment and/or landscape values.

Clause 21.08-2 Industrial Use

Key issues

- Consolidating the role of industrial areas.
- Impacts of industrial use and development on the environment and residential amenity.
- The changing role of the Doncaster Hill Activity Centre.

Within this clause, Council acknowledges the constraints imposed by the existing conditions of the surrounding area given that the municipality contains vast areas of residential development. These large areas of residential development impacts upon the areas that could be utilised for industrial uses and development. This is a key consideration during the review of land which would be suitable for industrial development.

Local Planning Policy (LPP)

The follow LPP are relevant:

Clause 22.10 Bulleen Gateway Policy

Clause 22.10-1 Policy basis

Bulleen is subject to a number of development pressures arising from industrial, commercial and retail development and transport-based impacts, including road development.

The above matters impact on the local environment, including open space. They also pose a threat to residential amenity.

Bulleen is a major gateway to Manningham and adjoins the Yarra Valley Parklands and the Yarra River.

The Municipal Strategic Statement encourages the improvement and enhancement of the visual amenity and function of the Bulleen Gateway area.

As a result of the proposed North-East Link, this clause will no longer be required. However, this clause provides an a basis into key issues and considerations Council undertakes when assessing use and development applications within this industrial precinct. This clause can be utilised during the assessment of potential sites.

2_Existing Employment Land

2.1_Planning Policy and Strategies cont.

Clause 22.16 Industrial Areas Policy

Clause 22.16-1 Policy basis

The industrial centres of Bulleen and Templestowe are located within high quality landscapes and vistas. These centres are also located in close proximity to residential neighbourhoods.

The industrial areas located within Doncaster Hill Activity Centre will be phased out over time as the area is developed for higher density living.

Clause 21.08 of the Municipal Strategic Statement recognises that there are no further opportunities for the development of new industrial centres within the municipality. It is therefore important to discourage the establishment of non-industrial uses in the Bulleen and Templestowe industrial centres and consolidate the industrial role of these centres. It is also important that use and development in the industrial centres does not have a detrimental impact on existing landscape and/or environmental values and/or nearby residential areas.

Clause 22.16-2 Objectives

The objectives of this policy are:

- *To ensure that land use and development in industrial centres is compatible with the surrounding landscape and/or environmental qualities.*
- *To ensure that abutting residential neighbourhoods are protected from amenity impacts and the safety of local communities is protected.*

- *To ensure that use, development and/or redevelopment of sites within the industrial centres are for industrial uses.*
- *To promote lot sizes and layouts which are appropriate to the needs of industry.*
- *To ensure that development is site responsive and achieves a high standard of sustainable urban design.*
- *To ensure that land used for vehicle access and parking is properly designed, constructed and drained.*
- *To ensure that subdivisions are designed to:*
 - *Include appropriate allocation of car parking*
 - *Provide suitable access*
 - *Ensure adequate provision of services.*

This policy provides an overview into Council strategic vision for industrial areas within the municipality. Whilst this clause would need to be reviewed under a planning scheme amendment, it provides criteria that will assist in reviewing sites suitable for industrial use and development.

Manningham Economic Development Strategy 2011-2030 (2018)

The Manningham Economic Development Strategy 2011-2030 (2018) provides an overview of Councils economic vision for the municipality over the next 19 years.

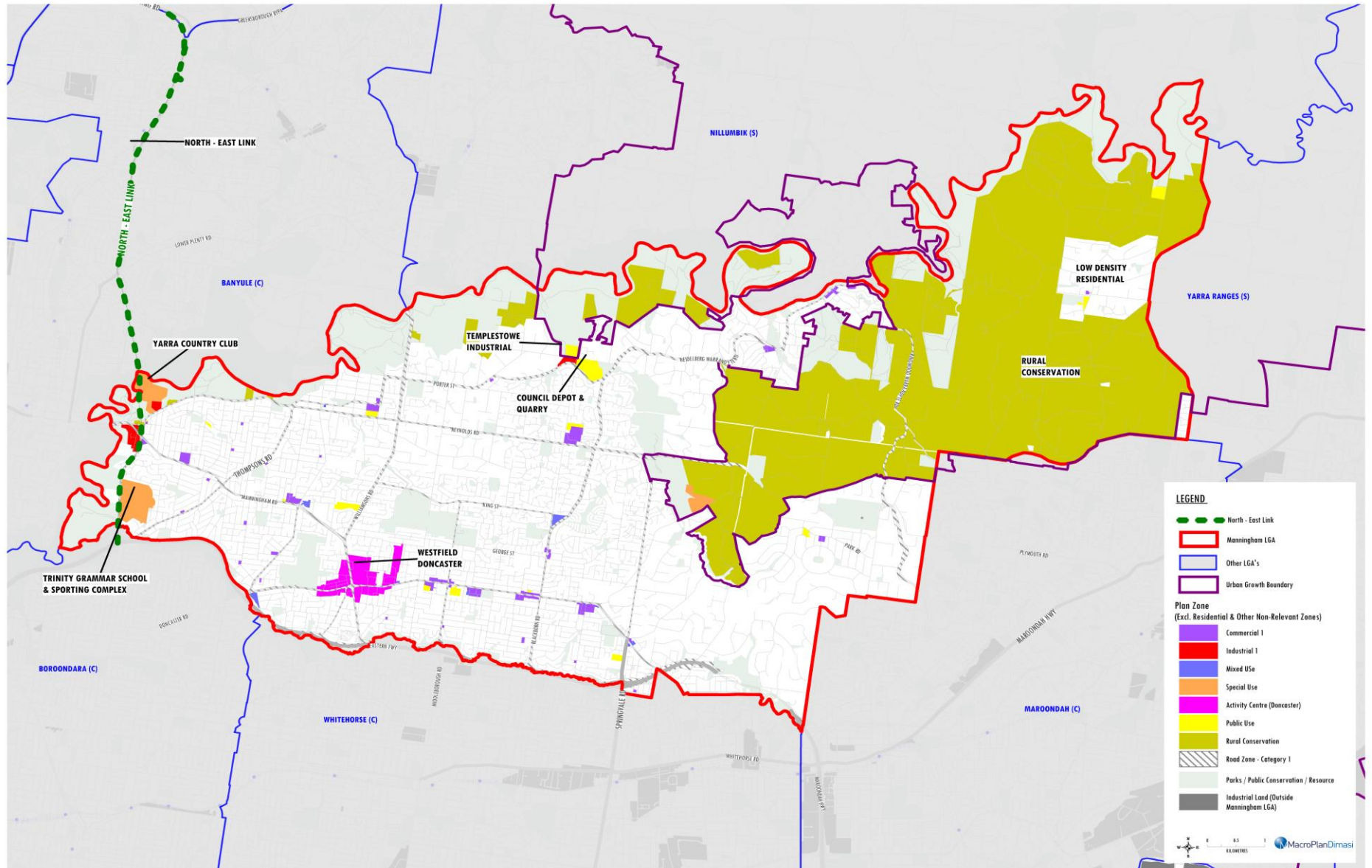
This strategy acknowledges the proposed North-East Link and views the development of this proposed freeway was an opportunity to expand employment generating zones.

Further to this, the strategy contains a number of five strategic directions with the first objective being:

- Attracting and retaining businesses.

This key strategic direction listed above will be impacted as a result of the proposed North-East Link given the Bulleen Industrial Precinct will be acquired. The acquisition of this land area will displace a number of businesses which it would be a priority to retain these businesses within the municipality as the economic strategy.

2_Existing Employment Land



2_Existing Employment Land

2.2_Existing Employment Land

The Manningham LGA contains the following employment zones:

- Industrial 1 Zone
 - Bulleen Industrial Precinct; and
 - Templestowe Industrial Precinct.

Templestowe Industrial Precinct does not have additional land to extend the site. This is due to the constraints imposed by the existing surrounding conditions such as residential development, vegetation and location.

- Commercial 1 Zone
 - Bulleen Village, Bulleen
 - Commercial strip on the corner of Bulleen Road and Manningham Road, Bulleen
 - Lilian Street Commercial Strip, Bulleen
 - Templestowe Road Commercial Strip, Bulleen
 - Thompsons Road Commercial Strip, Bulleen
 - Ary Street Commercial Strip, Doncaster
 - Doncaster Commercial Strip, Doncaster
 - The Pine Shopping Centre, Doncaster East
 - Tunstall Square, Doncaster East
 - Devon Plaza, Donvale
 - Chatsworth Quadrant Commercial Strip, Templestowe Lower
 - Gertrude Street Commercial Strip, Templestowe Lower
 - Feathertop Avenue Commercial Strip, Templestowe Lower
 - Horsfall Street Commercial Strip, Templestowe Lower

- Macedon Plaza, Templestowe Lower
- Anderson Street Retail Strip, Templestowe
- James Street Retail Precinct, Templestowe
- Goldfields Plaza, Warrandyte
- Yarra Street Retail Strip, Warrandyte

The sites listed contain existing developments. These sites are also highly constrained by site size, built form and residential development.

- Mixed Use Zone
 - Doncaster Park and Ride, Doncaster
 - Pockets of mixed use development along Doncaster Road
 - Mixed use development Anderson Creek Road and Blackburn Road, Doncaster East
 - Mixed use development High Street, Templestowe Lower

Each mixed use area listed above contains a development that would not be able to be used for industrial purposes.

- Activity Centre Zone
 - Doncaster Hill Major Activity Centre.

Upon a review of the Manningham Planning Scheme, industrial has been phased out of this area. The primary focus of this area is to provide commercial, retail and high density residential development. It would not be suitable to locate industrial within the Doncaster Hill Major Activity Centre. Also within this area, there are no vacant sites that could be utilised for industrial land.

- Special Use Zone
 - Schedule 1 – Private Education Centres, Golf Courses and Sports Grounds
 - Schedule 3 – Donvale Christian College

Sites located under these schedules to the Special Use Zone would be unable to provide industrial land as these sites are in private ownership, not vacant land and would be difficult to relocate.

- Public Use Zone
 - Schedule 2 – Education
 - Schedule 3 – Health and Community
 - Schedule 4 - Transport
 - Schedule 6 – Local Government

Sites under the schedule to the Public Use Zone may have the potential to provide industrial land depending on the use operating on the land and the ownership of the land.

3_Future Employment Land

An aerial rendering of a modern highway interchange. The main road is a multi-lane highway with several lanes in each direction. A prominent feature is a curved overpass that crosses over the highway. The surrounding area includes green trees, a small stream or canal, and some buildings in the distance. The overall scene is bright and clear, suggesting a sunny day.

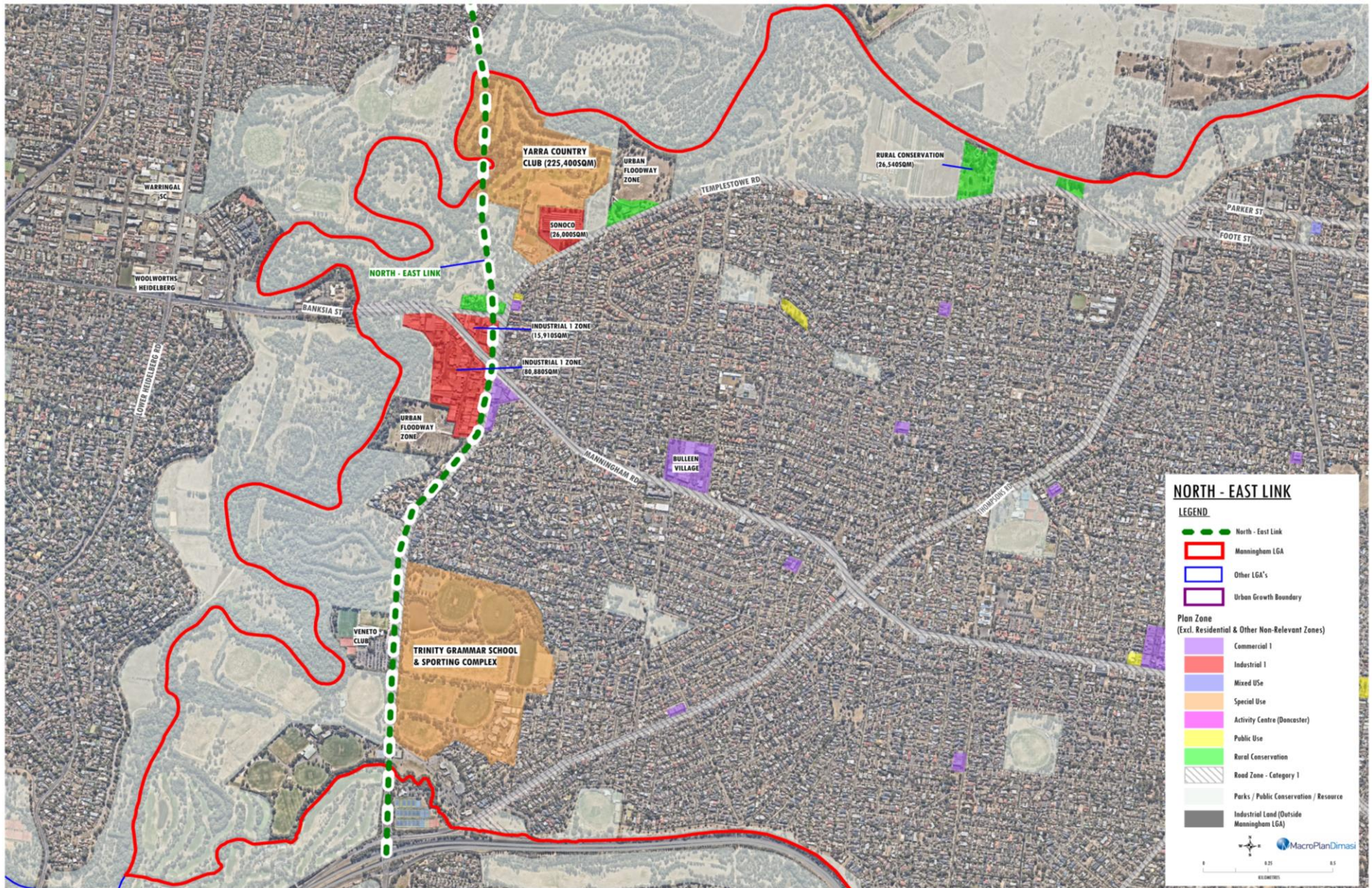
3_Future Employment Land

3.1_Overview

The following criteria was used to the identified a number of site within the Manningham LGA that could potentially to utilised for industrial use and development:

- Methodology is to use Geographical Information System (GIS) to identify appropriate zoned/potential sites in approximate areas and dimensions. Identify candidates specified, including Websters Road, Council Depot and Council owned quarry.
- Hectare and above.
- Non-residential zone, including:
 - Commercial Zone;
 - Special Use Zone;
 - Public Use Zone; and
 - Industrial Zone.
- Under-utilised land.

3_Future Employment Land



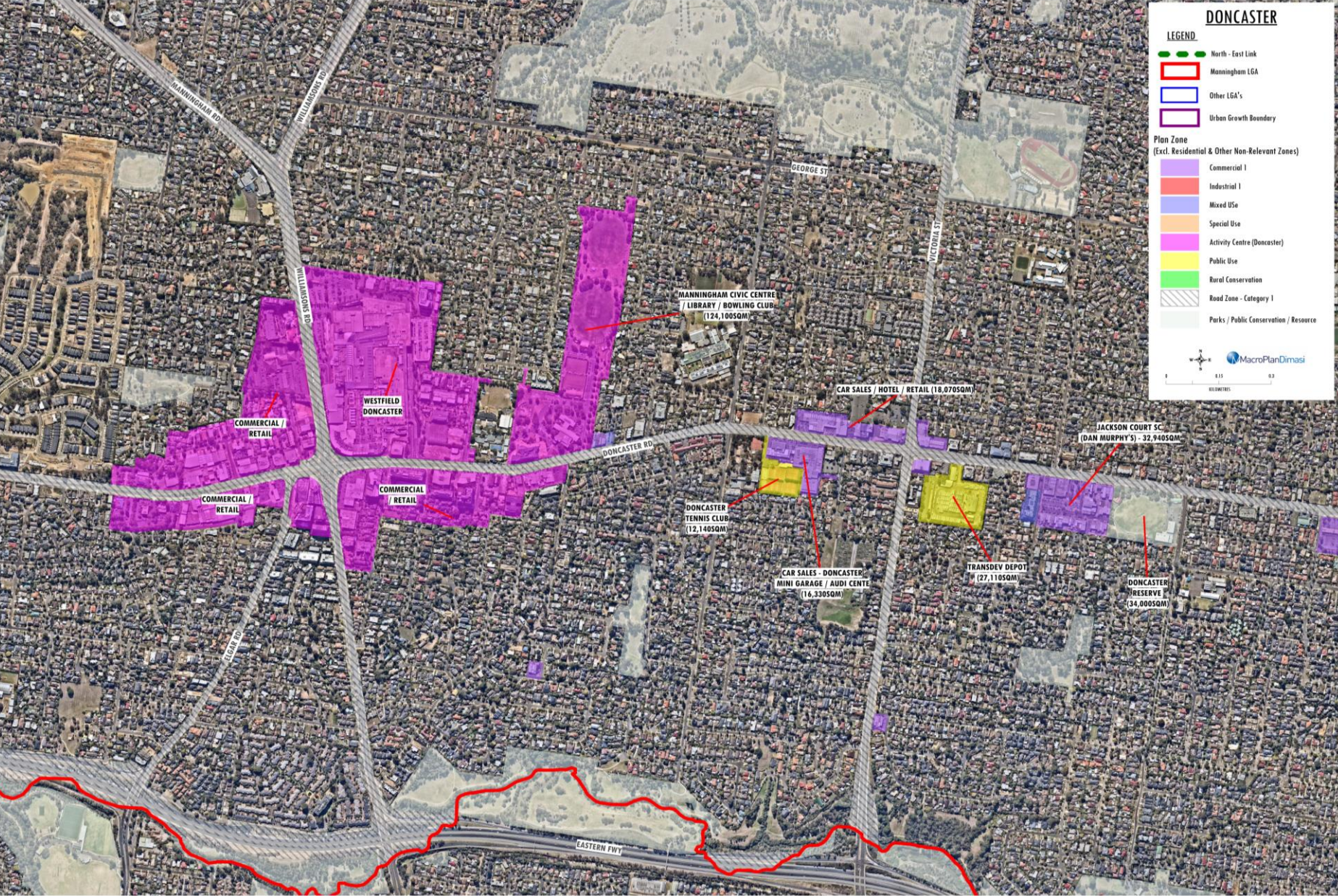
MacroPlan, 2019

3_Future Employment Land

3.2_Bulleen

Site Name	Area	Current Zone	Current Use	Commentary	Overall Score
Pleasant Reserve, Bulleen	5,878sqm (0.58 hectares)	Public Use Zone (Schedule 6 – Local Government)	Park	<ul style="list-style-type: none">• Site area is less than a hectare;• No access to a Road Zone (Category 1);• Narrow site;• Directly adjoins residential to the north, east and south; and• Would require a rezoning of the land.	N

3_Future Employment Land



MacroPlan, 2019

3_Future Employment Land

3.3_Doncaster

Site Name	Area	Current Zone	Current Use	Commentary	Overall Score
Doncaster Tennis Club, Doncaster	12,140sqm (1.21 hectares)	Public Use Zone (Schedule 6 – Local Government)	Tennis Club	<ul style="list-style-type: none"> • Adjoins an existing Commercial zone; • Existing community asset • Does not have a direct frontage to Doncaster Road • Only contains one point of access to and from the site • Adjoins residential zones to the east, south and west • Relocation of the tennis club • Would require a rezoning of the land 	N
Transdev Depot, Doncaster	27,110sqm (2.71 hectares)	Public Use Zone (Schedule 4 - Transport)	Bus depot	<ul style="list-style-type: none"> • State owned/ lease/ operator lease • Relocation of bus depot to an alternate site • Narrow frontage to Doncaster Road • Contains access to and from the site • Adjoins residential zones to the north, east, south and west • Would require a rezoning of the land 	M
Doncaster Reserve, Doncaster	34,000sqm (3.40 hectares)	Public Park and Recreation Zone	Park	<ul style="list-style-type: none"> • Existing community assets • Relocation of community facilities • Would require a rezoning; and • Adjoins a sensitive residential interface to the south. 	N

3_Future Employment Land



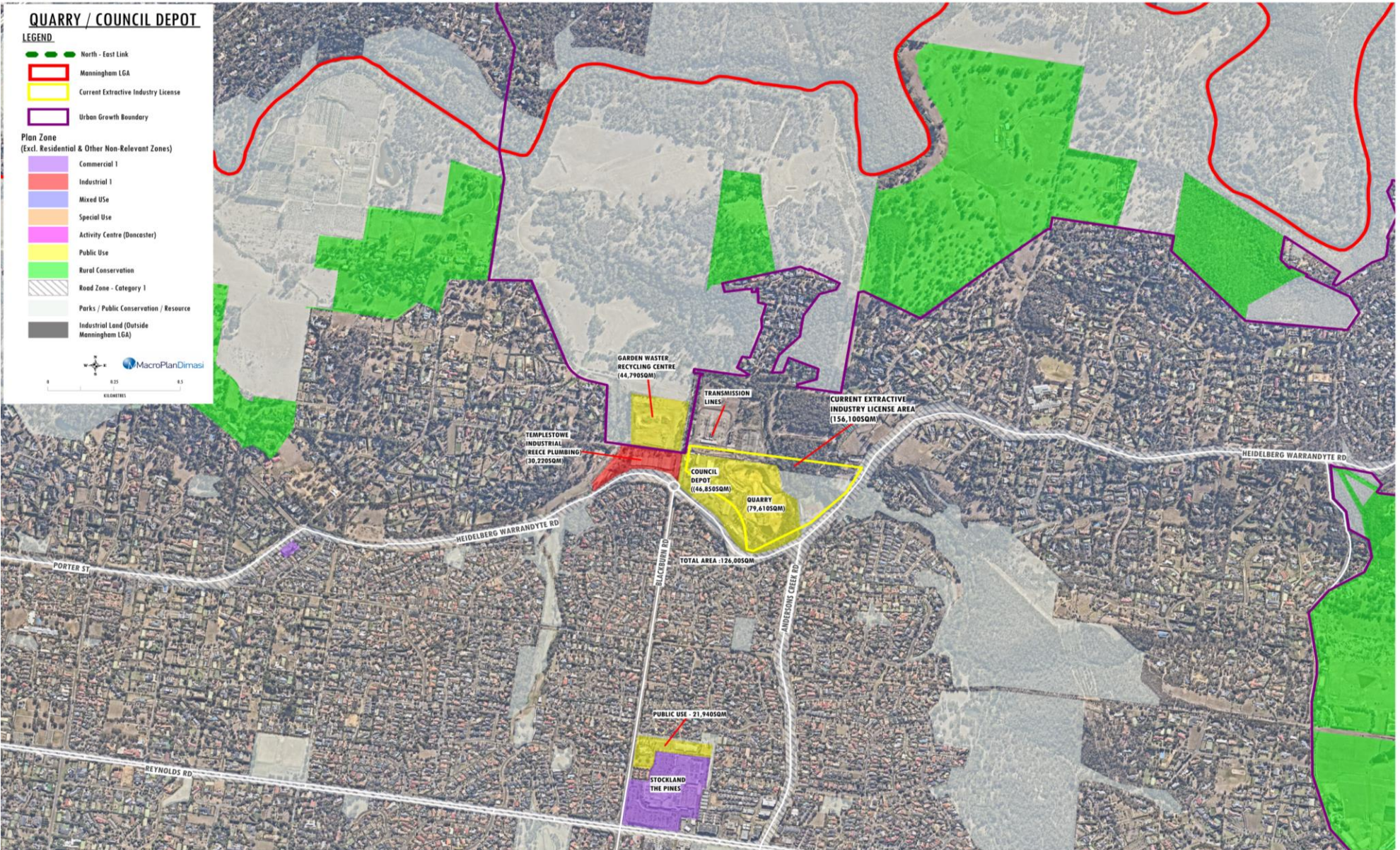
MacroPlan, 2019

3_Future Employment Land

3.4_Donvale and Doncaster East

Site Name	Area	Current Zone	Current Use	Commentary	Overall Score
Donvale Indoor Sports Centre, Donvale	22,100sqm (2.21 hectares)	Public Use Zone (Schedule 6 – Local Government)	Indoor sports centre	<ul style="list-style-type: none"> Existing community asset Adjoins residential to the north and west; Adjoins are primary school to the south; and Would require a rezoning of the land. 	N
Montgomery Street Reserve and Doncaster East Preschool, Doncaster East	2,630sqm (0.26 hectares)	Public Use Zone (Schedule 6 – Local Government)	Park	<ul style="list-style-type: none"> Existing community asset; No access to a Road Zone (Category 1); No main road frontage; Site area is less than a hectare; Would require the pre school to be relocated; and Sensitive residential interface to the north and west. 	N

3_Future Employment Land



MacroPlan, 2019

3_Future Employment Land

3.5_Doncaster East and Templestowe

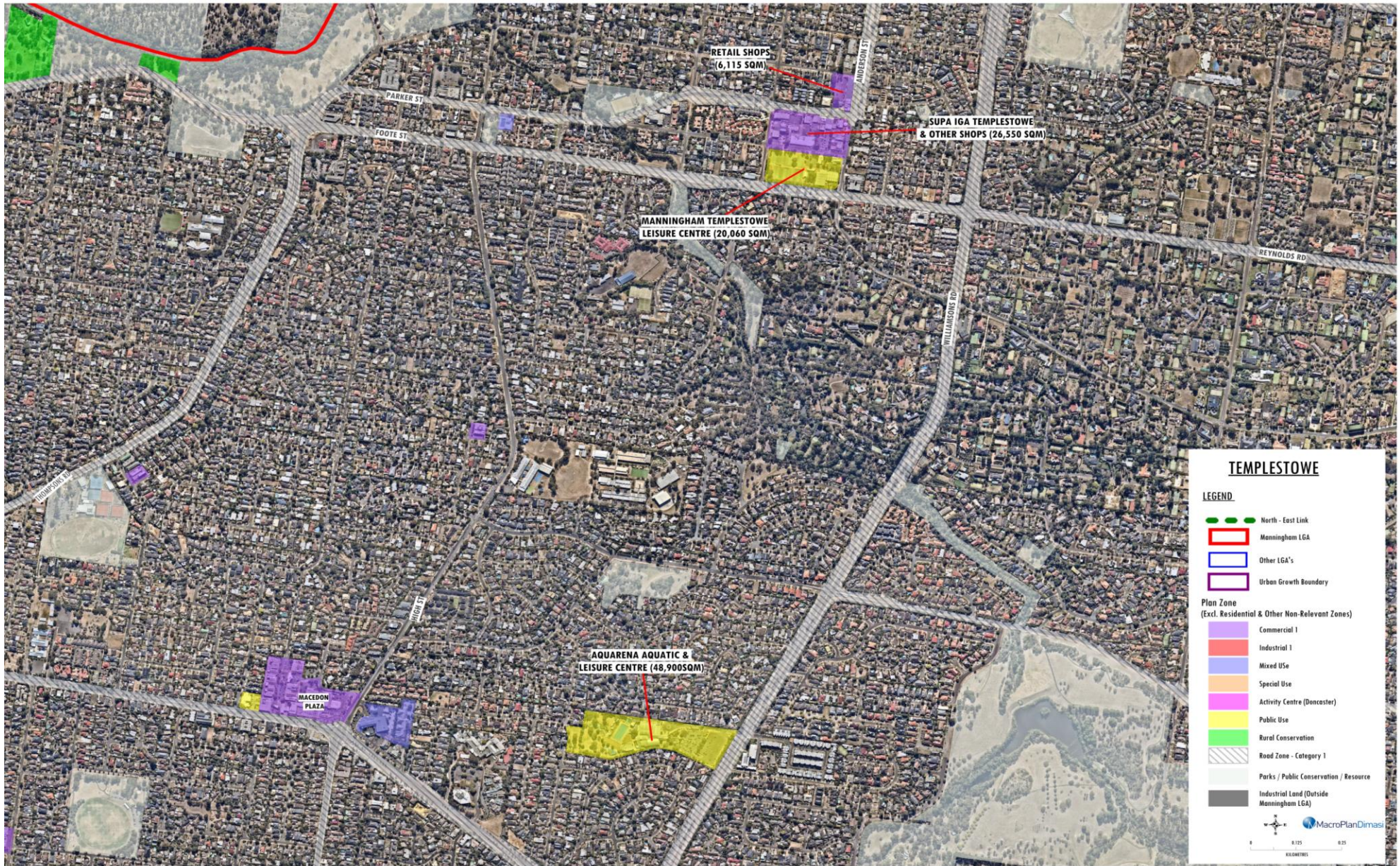
Site Name	Area	Current Zone	Current Use	Commentary	Overall Score
Manningham City Council Depot, Doncaster East	46,850sqm (4.68 hectares)	Public Use Zone (Schedule 6 – Local Government)	Depot	<ul style="list-style-type: none"> • Council owned land • Adjacent the to the existing Templestowe Industrial Precinct. • Would require a rezoning of the land; and • Relocation of the depot. • Does not have direct abuttal to residential zoning 	Y
Council owned quarry, Doncaster East	79,610sqm (7.96 hectares)	Public Use Zone (Schedule 6 – Local Government)	Quarry	<ul style="list-style-type: none"> • Council owned land • Adjacent the to the existing Templestowe Industrial Precinct. • Does not have direct abuttal to residential zoning • Potential contamination; • Quarry voids will need to be filled; • Site rehabilitation required; • Site preparation to be suitable for use; and • Would require a rezoning of the land. 	N – Pending further consideration by Council
Manningham Garden Waste Centre, Templestowe	44,790sqm (4.47 hectares)	Public Use Zone (Schedule 6 – Local Government)	Garden waste centre	<ul style="list-style-type: none"> • Council owned land • Adjacent the to the existing Templestowe Industrial Precinct. • Does not have direct abuttal to residential zoning • Outside the Urban Growth Boundary; • Would require a rezoning of the land; • Relocation of the waste centre; • The site is covered by the Environmental Significance Overlay (Schedule 3 – Buffer Conservation Areas Supporting Sites of Biological Significance) 	Y

3_Future Employment Land

3.5_Doncaster East and Templestowe cont.

Site Name	Area	Current Zone	Current Use	Commentary	Overall Score
Deep Creek Child Care, Deep Creek Preschool and Pines Learning Inc., Doncaster East	21,940sqm (2.19 hectares)	Public Use Zone (Schedule 6 – Local Government)	Child care, preschool and learning centre	<ul style="list-style-type: none"> • Would require a rezoning; • Relocation of existing community facilities; 	N
Paddles Land (excluding the Garden Waste Site), Templestowe	151,367sqm (15.31 hectares)	Public Park and Recreation Zone	Park land	<ul style="list-style-type: none"> • Outside the Urban Growth Boundary; • Would require a rezoning of the land; • Covered by the following overlays: <ul style="list-style-type: none"> • Bushfire Management Overlay; • Environmental Significance Overlay (Schedule 2 and 3) • Land Subject to Inundation; • Significant Landscape Overlay (Schedule 2); ad • Special Building Overlay. • No main road frontage or access; • Abuts residential development; • The land parcel to the north-west is landlocked; and • Contains a number of trees that may considered as native vegetation. 	N

3_Future Employment Land



3_Future Employment Land

3.6_Templestowe

Site Name	Area	Current Zone	Current Use	Commentary	Overall Score
Lower Templestowe Community Centre, Templestowe Lower	2,731sqm (0.27 hectares)	Public Use Zone (Schedule 6 – Local Government)	Community centre	<ul style="list-style-type: none">• Adjoins residential to the north• Has a residential interface to the west• Relocation of the community centre• Site is less than a hectare	N



4_Potential Employment Land Sites

4_Potential Employment Land Sites

4.1_Potential Sites

Site Name	Constraints	Recommendations
Manningham City Council Depot, Doncaster East	<ul style="list-style-type: none"> • Current zoning 	<ul style="list-style-type: none"> • Rezone the land for employment purposes such as an Industrial 1 Zone; • Preparation of an indicative master plan to view the potential developable yield the land can offer; and • Relocate the Manningham City Council depot to the Garden Waste site.
Council owned quarry, Doncaster East	<ul style="list-style-type: none"> • Current zoning • Timing of preparing the site for future use • Timing to determine the future use of the quarry which will/may be subject to EPA regulations/ planning amendments and/or consultation 	<ul style="list-style-type: none"> • Determine the future use of the quarry; and • Preparation of an indicative master plan to view the potential yield the land can offer.
Manningham Garden Waste Centre, Templestowe	<ul style="list-style-type: none"> • Current zoning • Amount of developable area impacted by the transmission line easements • The site does not have access to a Road Zone • Located outside the Urban Growth Boundary (UGB) 	<ul style="list-style-type: none"> • Review the potential to relocate the Council Depot to this site: <ul style="list-style-type: none"> • No rezoning is required as the land is zoned for local government purposes; and • Clause 51.02 (Metropolitan Green Wedge Land: Core Planning Provisions) does not apply to the site. This allows for the office component of the Council Depot to be allowed. • Preparation of an indicative master plan to explore the developable yield.

4_Potential Employment Land Sites

4.2_ Site Options

Through the identification of sites that could be utilised as potential employment land, the following options are provided:

Number	Option	Total land area
1.	Manningham City Council Depot and Council owned quarry rezoned for industrial use whilst relocating non-sensitive uses such as Council depot/ storage/loading facilities with Garden Waste.	128,200sqm (12.82 hectares)
2.	Manningham Garden Waste Centre rezoned for industrial use (subject to UGB test) with appropriate buffers; with Manningham City Council Depot and Council owned quarry retained as Council Depot/expansion area and possible future rezoning of part of Council owned quarry.	44,700sqm (4.47hectares) with possible potential to partially rezone the Council owned quarry.
3.	Retaining Council Depot with Council owned quarry & Manningham Garden Waste Centre (subject to UGB test) rezoned industrial use – separate ingress arrangements for Council owned quarry at Andersons Creek Road.	124,300sqm (12.43 hectares)

4_Potential Employment Land Sites

4.3_Site Option 1

Manningham City Council Depot and Council owned quarry rezoned for industrial use whilst relocating non-sensitive uses such as Council depot/ storage/loading facilities with Garden Waste.

Manningham City Council Depot (Site 6) and Council owned quarry (Site 7) - Rezoned for industrial use

Each site has the following site areas:

- Manningham City Council Depot - 4.86 hectares ; and
- Council owned quarry - 7.96 hectares

When combining the two sites, a total site area of 12.82 hectares could be utilised for industrial purposes.

Furthermore, when combining Manningham City Council Depot and Council owned quarry, the following distances from sensitive zones are provided:

- North – Neighbourhood Residential Zone (Schedule 1) – Approximately 343m
- East – Low Density Residential Zone – Approximately 335m and General Residential Zone (Schedule 3) – Approximately 80m
- South – General Residential Zone (Schedule 3) – Approximately between 55m – 118m
- West – Low Density Residential Zone – Approximately 295m

Both sites contain existing ingress and egress to and from the site.

Site 8 – Manningham Garden Waste Centre – Maintained as Public Use Zone (Schedule 6 – Local Government)

Under the Manningham Planning Scheme, the purpose of the Public Use Zone (Schedule 6) is for local government use. The relocation of the Council depot/storage/loading facilities and garden waste to this site will be able to occur as it will be used for local government purposes. Utilising the existing zoning of the land of the Manningham Garden Waste to accommodate the Manningham City Council Depot does not require a rezoning to occur. A planning permit application would be required. However, the planning application process can commence to be undertaken given the current zoning of the site. This option will allow the Manningham City Council Depot to vacate the site and relocate within a two year period subject to planning approval.

4_Potential Employment Land Sites

4.4_ Option 2

Manningham Garden Waste Centre rezoned for industrial use (subject to Urban Growth Boundary test) with appropriate buffers; with Manningham City Council Depot and Council owned quarry retained as Council Depot/expansion area and possible future rezoning of part of Council owned quarry.

As part of this option, Manningham City Council Depot is to be retained.

The Council owned quarry will be retained with potential to part rezone the land to an industrial zone in the future, if required.

The Manningham Garden Waste Centre to be rezoned for industrial purposes. However, this is subject to Urban Growth Test (pages 33-34) for further details.

The Manningham Garden Waste Centre is located the following distances from sensitive zones :

- North – Neighbourhood Residential Zone (Schedule 1) – Approximately 132.89m
- East – Low Density Residential Zone – Approximately 563.56m
- South – General Residential Zone (Schedule 3) – Approximately 135.59m
- West – Low Density Residential Zone – Approximately 99.40m

This option provides a total of 4.47 hectares of industrial land. However, the transmission line easement to the rear of the property may reduce the developable area of the land. Also, in future there is potential to rezone the Council owned quarry to provide additional industrial land.

4_Potential Employment Land Sites

4.5_ Option 3

Retaining Manningham Council Depot with Council owned quarry & Manningham Garden Waste Centre (subject to Urban Growth Boundary test) rezoned industrial use – separate ingress arrangements for Council owned quarry at Andersons Creek Road.

Under this option, the Manningham City Council Depot to be retained as is with the Council owned quarry and Manningham Garden Waste Centre (subject to UGB test) to be rezoned for industrial use.

Each site has the following site areas:

- Council owned quarry - 7.96 hectares; and
- Manningham Garden Waste Centre – 4.47 hectares.

When combining the two sites, a total site area of 12.43 hectares could be utilised for industrial purposes.

The Manningham Garden Waste Centre is located the following distances from sensitive zones :

- North – Neighbourhood Residential Zone (Schedule 1) – Approximately 132.89m
- East – Low Density Residential Zone – Approximately 563.56m
- South – General Residential Zone (Schedule 3) – Approximately 135.59
- West – Low Density Residential Zone – Approximately 99.40m

Whilst the Council owned quarry is located the following distances from sensitive zones :

- North – Neighbourhood Residential Zone (Schedule 1) – Approximately 340.83m
- East – Low Density Residential Zone – Approximately 436.68m
- South – General Residential Zone (Schedule 3) – Approximately 30.97 – 54m
- West – Low Density Residential Zone – Partially adjoins the zone for 21.37m and separated by 333.4m.

4_Potential Employment Land Sites

4.6_Planning Process

The following planning processes can be undertaken by Council:

- Option 1- Rezoning of the land and obtaining approval for subdivision and development.
 - Indicative timeframe
 - Rezoning – 18 – 24 months
 - Subdivision and development application – 3 – 12 months
 - Timeframe is 21 – 36 (1 ½ years to 3 years)
- Option 2 – A combined rezoning and planning permit application under Section 96A of the *Planning and Environment Act 1987*.
 - Indicative timeframe of 18 – 24 months.
- Option 3 - A combined rezoning and planning permit application under Section 96A of the *Planning and Environment Act 1987* with a request for a 20(4) of the *Planning and Environment Act 1987*.
 - Indicative timeframe of 18 – 24 months.

4_Potential Employment Land Sites

4.7_Urban Growth Boundary Test

Manningham Garden Waste Centre is located outside the Urban Growth Boundary. The land is currently zoned Public Use Zone (Schedule 6) for Local Government purposes. If this site was to be utilised

The Urban Growth Boundary Test will utilise the three standards and decision criteria set out by the Growth Area and Logical Inclusion Advisory Committee was established by the Former Minister for Planning in 2011.

In order for the land to be considered as a logical inclusion, at minimum, the following standards are required to be met:

- *Be located within a growth area municipality;*
- *Be adjacent to or on the existing Urban Growth Boundary – land located away from the Urban Growth Boundary cannot be incorporated unless intervening land is also included; and*
- *Be proposed for residential or employment development – a critical Government objective is to encourage new housing developments as well as land supply for local employment opportunities.*

Manningham Garden Waste Centre (Site 8) is not located within a growth area municipality. However, the site is adjacent the existing Urban Growth Boundary and is proposed to be used for employment purposes.

The following decision criteria is outlined:

- The State Planning Policy Framework (now known as Planning Policy Framework (PPF)) and any Ministerial Directions;

The following clauses are relevant:

Clause 11.01-1S - Settlement

Objective

To promote the sustainable growth and development of Victoria and deliver choice and opportunity for all Victorians through a network of settlements.

Clause 11.02-1S - Supply of urban land

Objective

To ensure a sufficient supply of land is available for residential, commercial, retail, industrial, recreational, institutional and other community uses.

Clause 17.01-1S - Diversified economy

Objective

To strengthen and diversify the economy.

Clause 17.01-1R - Diversified economy - Metropolitan Melbourne

Strategies

Plan for industrial land in suitable locations to support employment and investment opportunities

Clause 17.03-1S - Industrial land supply

Objective

To ensure availability of land for industry.

Clause 17.03-2S - Industrial development siting

Objective

To facilitate the sustainable development and operation of industry.

The inclusion of the Manningham Garden Waste Centre would be considered in accordance with the relevant listed PPF for the following reasons:

- The site will to used to provide and maintain employment within the Manningham LGA;
- The municipality does not contain many sites that will be able to accommodate industrial development; and
- The site does not have a direct interface with residential.
- *An analysis of the following categories of opportunities:*
 - *Local connectivity to existing areas;*
 - *Sustainable neighbourhoods;*
 - *Transport; and*
 - *Trunk services (including water services, sewerage, electricity, gas and telecommunications).*

The site is adjacent to the existing Templestowe Industrial Precinct which will support and provide connectivity to an existing industrial precinct. The nearest bus route is located on Blackburn Road and Heidelberg-Warrandyte Road. Given that the site is located within an established area, these services are be provided.

4_Potential Employment Land Sites

4.7_Urban Growth Boundary Test cont.

- An analysis of the following categories of constraints:
 - Agricultural activities;
 - Biodiversity;
 - Drainage corridors;
 - Extractive industry;
 - Heritage (including Aboriginal cultural heritage and post contact heritage);
 - Landscape features;
 - Land use;
 - Salinity;
 - Soil capability; and
 - Wildfire.

There is no agricultural activity within close proximity to the site. The Garden Waste Centre is surrounded by park land. The site contains no biodiversity value given the current use of the site.

There are no flooding overlays that cover the site. Drainage measures can be incorporated into the future development of the site.

The site was not used as a quarry. The nearest quarry to the site is located to the east of the site.

The site does contain areas of Aboriginal cultural heritage. Further investigation will be required to be undertaken.

The site does not contain any significant landscape features.

Does not impact on the flights paths of Melbourne Airport.

Salinity, soil capability and wildfire could potentially be a constraint to the site. These aspects would need to be further investigated by Council.

Overall, the Manningham Garden Waste Centre does have potential to be included within the Urban Growth Boundary. There still requires to be further investigation undertaken within the site to further confirm the condition of the site and the suitable for industrial development.

5_Conclusion

An aerial rendering of a modern highway interchange. The main road is a multi-lane highway with several lanes in each direction. A prominent feature is a curved overpass that crosses over the highway. The surrounding area includes green spaces, a small stream or canal, and some buildings in the distance. The overall scene is presented in a clean, digital style.

5_Conclusion

Due to the impact of the proposed North-East Link on the Bulleen Industrial Precinct, there is a need to review the potential to provide employment land within the Manningham Local Government Area to offset the loss of the Bulleen Industrial Precinct. The Manningham Planning Scheme and Economic Development Strategy provided an overview into Councils strategic direction, in particular to industrial areas.

There are a number of employment zones within the municipality that would potentially to utilised for employment purposes. However, many of these zones are occupied to by development and may not be suitable candidates due to existing site conditions and land ownership.

A number of sites were reviewed and the Manningham City Council Depot, Council owned quarry and Manningham Garden Waste Centre were considered to be the most suitable sites to accommodate industrial use and development.

Overall, there is potential within the municipality to provide employment land to offset the loss of the Bulleen Industrial Precinct due to the proposed North-East Link.

Appendix 6: NEL BIP Economic & Social Opportunities Analysis

North East Link Bulleen Industrial Precinct

Economic & Social Opportunities Analysis

FINAL

Prepared by **MacroPlan Dimasi**
For **Harwood Andrews Lawyers**

5 July 2019

macroplan

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Executive Summary

Study Context

This report was prepared by MacroPlan Dimasi (the author) for Harwood Andrews Lawyers (the client) on behalf of Manningham City Council (Council). This report presents an economic and social opportunities analysis in relation to the Bulleen Industrial Precinct (BIP), a 12.5 ha industrial precinct located at the intersection of Manningham Road and Bulleen Road in the suburb of Bulleen.

The BIP is one of the few zoned industrial parcels in the municipality of Manningham. It currently hosts approximately **110 businesses** in a built form of 1-2 storey warehouses, including automotive / repairs, construction, industrial material retailers, eateries, dry cleaners, fitness centres and garden nursery retail businesses. It provides **960-1,000 direct jobs** to workers who mainly live in surrounding suburbs in the municipalities of Manningham and Banyule.

The North East Link (NEL) was proposed to connect the 'missing link' in Melbourne's cross-city orbital road network between M80 Ring Road (M80) and Eastern Freeway, creating a continuous freeway-standard road for traffic flows and offloading significant pressure from current arterial and local road network. Construction work is scheduled to commence in 2020 and complete in 2027.

The preferred route option for the NEL is from M80 to Eastern Freeway at Bulleen via Greensborough Road in Watsonia and Rosanna and underground tunnel through Heidelberg. This option involves a major interchange at the intersection of Manningham Road and Bulleen Road and a large portion of the land at BIP is to be acquired to enable the construction of this major interchange.

This will result in displacement of an estimate of approximately **80 businesses** currently operating at BIP and a loss of up to **830 local jobs** on site.

The recently released North East Link Project Environment Effects Statement (EES, 2019) indicates two construction design options in relation to the proposed Manningham Road interchange, resulting different scales of residual land which may be available for future redevelopment post construction:

- **Option 1:** approximately **6.2 ha** residual land;
- **Option 2:** approximately **4.5 ha** residual land.

The objective of this assessment is to identify the highest and best use (HBU) in terms of economic and social outcomes for residual land created by the development and completion of the NEL.

This report presents key issues addressing the following issues:

- **Site context**, including context of NEL, BIP and scale of residual land based on current construction design, regional context such as Austin Health Precinct, Doncaster Hill, La Trobe National Employment Innovation Cluster (NEIC), and relevant policies.
- **Current situation assessment**, including population, demographics, economy and employment within a defined study area (refer to Map 8_Study Area on page 22).
- **Future opportunities assessment**, including a HBU assessment on a range of uses such as industrial, commercial office, residential, retail, short-stay accommodation and convention centre, health services, retirement living and aged care, as well as childcare services.
- **Conclusions and key considerations**, including recommended land use options, potential economic and social impacts, key considerations regarding to ingress / egress, employment and integrated transport outcomes and financial viability, and development concept specification.

A summary of the key findings from the HBU assessment and overall market potential of each candidate use is presented overleaf.

_Executive Summary

Highest & Best Use Potential



Industrial

Overall Market Potential: **LOW**

- Generally low demand and limited supply for industrial uses in the study area
- The site is highly constrained for industrial uses due to land size, fragmentation and capacity for buffer / expansion
- Industrial uses are not likely to support continuing employment growth and meet the demand of a growing population in the future
- Industrial uses are more likely to move out to larger industrial precincts and benefit from clusters of established supply chain links and networks



Commercial Office

Overall Market Potential: **HIGH / MODERATE**

- Gap analysis indicates up to 20,000 sqm GFA theoretical market gap within the study area during the forecast period of 2016-36
- The site has great potential to absorb a large portion of this gap given limited employment land available in the area
- Flexible / coworking spaces can be made available to attract SEMs
- It is important to seek pre-commitment from a coworking space operator and understand their specific requirements



Residential

Overall Market Potential: **HIGH**

- Gap analysis indicates a theoretical market gap of approx. 524 dwellings in Bulleen and 1,556 dwelling in the overall study area by 2036
- This gap is likely to moderate in the long term due to low population growth
- The site has great potential to accommodate a large portion of this gap owing to its locational attributes, proximity to the Yarra River and parklands, and improved transport connectivity with the delivery of NEL, noting the site will not be available after 2027 when NEL is completed



Retail

Overall Market Potential: **MODERATE / LOW**

- A sub-regional centre is supportable at the site, however, is dependent on whether Kmart locates to the site and the ability to attract a major supermarket operator as a co-anchor



Short-stay Accommodation & Convention Centre

Overall Market Potential: **LOW**

- Gap analysis indicates current demand for short-stay accommodation can be met by current supply
- There is unlikely to be a 'demand driven' requirement for additional short-stay accommodation, in absence of a substantial change in the current visitation patterns and/or major tourism destinations that drive significant underlying tourist accommodation demand



Health Services

Overall Market Potential: **LOW / MODERATE**

- Gap analysis indicates a significant high level of health service provision and this is expected to support the demand from future population growth and ageing
- There is some / limited potential for medical and allied health services to locate on site given close proximity to Austin Health Precinct



Retirement Living & Aged Care

Overall Market Potential: Retirement Living – **HIGH**, Aged Care – **LOW / MODERATE**

- Gap analysis for retirement living facilities indicates a theoretical market gap of up to 330 ILUs by 2036
- The site has great potential to accommodate a large portion of this retirement living gap owing to its locational attributes and amenities
- Gap analysis for aged care facilities indicates limited market gap of up to 30 beds during the forecast period
- Given no existing facilities in Bulleen, there is still some potential for aged care services of unique types with a point of difference



Childcare

Overall Market Potential: **LOW**

- Gap analysis indicates there is currently an oversupply of childcare centres and this is expected to continue due to low population growth in the 0-4 years age cohort and large number of existing and future supply

Executive Summary

Recommended Land Use Options

Considering the site's gateway location, improved transport connectivity, policy alignment, market conditions and potential gaps, maximising local employment, and complementing key existing employment nodes, **a commercial mixed use development** could be constructed at the residual land of Bulleen Industrial Precinct.

This commercial mixed use development could be anchored by a new office park with coworking space and some incubator space and could also comprise a major share of affordable housing and retirement living complemented by various amenities on site and surrounds.

The development could involve the following uses:

- **Office:** up to 20,000 sqm office park, coworking space and some incubator space;
- **Residential, affordable housing and retirement living:** approximately 1,000-1,500 dwellings;
- **Retail** of two potential options:
 - **Option 1 – a small shopping centre** with a small range of shops such as a small super market (approximately 1,000 sqm), convenience stores, bottle shops, specialty shops and food and beverage (F&B) totalling approximately 2,500 sqm, or

- **Option 2 – a sub-regional shopping centre** of up to 15,000 sqm which is considered opportunistically depending on whether Kmart (approximately 5,000-7,000 sqm) locates to the site and the ability to attract a major full line supermarket (approximately 3,000-5,000 sqm) operator as a co-anchor.

The potential development at the site could also provide a gateway to the Yarra River, major parks, end of trip facilities and picnic facilities.

There is strong alignment with Council's policies and a range of economic and social benefits in developing this commercial mixed use development on the residual land. It will utilise the residual land effectively, create a gateway landmark and local employment node at the Southern Portal of NEL, minimise negative impact of job loss due to land acquisition, and maximise local employment and economic outcomes.

Based on assumptions for average employment density for various uses, the total direct on-site employment potentially generated upon completion is estimated at approximately **1,114 FTE jobs** (with retail option 1) up to **1,530 FTE jobs** (with retail option 2).

Some of the existing uses which are to be displaced may potentially locate back on site within the proposed commercial mixed use development, such as eateries, dry cleaners and fitness centres.

This would be likely to result a southern anchor along the NEL corridor with improved transport access and connectivity. This development would be likely to fill the market gap and complement existing employment nodes instead of directly competing and conflicting with the existing retail hierarchy such as Doncaster Hill which is outside of the defined study area.

A summary of the recommended land uses is presented below.



20,000 sqm

office park, coworking space & incubator space



1,000-1,500 dwellings

residential, affordable housing & retirement living



2,500 sqm

small shopping centre

OR

15,000 sqm

sub-regional shopping centre

1_Introduction



1_Introduction

1.1_Purpose

This report was prepared by MacroPlan Dimasi (the author) for Harwood Andrews Lawyers (the client) on behalf of Manningham City Council (Council). This report presents an economic and social opportunities analysis in relation to the Bulleen Industrial Precinct (BIP), a 12.5 ha industrial precinct located at the intersection of Manningham Road and Bulleen Road in the suburb of Bulleen.

The North East Link (NEL) has been announced by the Victorian Government to connect the 'missing link' in Melbourne's cross-city orbital road network between the M80 Ring Road (M80) and the Eastern Freeway / EastLink, creating a continuous freeway-standard road for traffic flows and offloading significant pressure from the current arterial and local road network. Construction work is scheduled to commence in 2020 and complete in 2027.

The preferred route option for the NEL is from M80 to Eastern Freeway at Bulleen via Greensborough Road in Watsonia and Rosanna and underground tunnel through Heidelberg. This option involves a major interchange at the intersection of Manningham Road and Bulleen Road and a large portion of the land at BIP is to be acquired to enable the construction of this major interchange. This will result in displacement of the businesses currently operating at BIP and loss of local jobs to the Manningham Local Government Area (LGA).

The objective of this report is to identify the highest and best use (HBU) in terms of economic and social outcomes for residual land created by the development and completion of the NEL.

1.2_Scope of Work

The scope of this report involves the follows.

1. Identify at a concept level the scale of residual land which may become available post construction of the NEL. If necessary, identify upper and lower land areas which may be available.
2. Identify the range of uses and the HBU on the residual land having regard to:
 - Maximizing local employment and economic outcomes,
 - Complementing Doncaster Hill,
 - Meeting social and environmental objectives,
 - Operating in the context of the La Trobe National Economic and Innovation Cluster (NEIC), and
 - Financial viability.
3. On the basis of the highest and best use identify the implications in terms of the ingress and egress to the project which could optimize the functionality and viability of the project.
4. Recommend the optimal suite of strategic land use options to mitigate the economic and employment impacts of the North East Link having particular regard to optimising ingress and egress to the Bulleen Road Industrial Precinct.
5. Recommend how the project could best deliver Manningham City Council objectives particularly in terms of employment and integrated transport outcomes.
6. Identify potential economic and social benefits of the project.
7. Prepare a development concept specification which can form the basis for concept designs to communicate project outcomes.
8. Meetings and Presentation.
9. Report Preparation.

This report addresses all items as outlined above.

1_Introduction

1.3 References

The following literature and data have been referred to in preparing this report.

- Australian Bureau of Statistics (ABS), Cat. 3218, Regional Population Growth, Australia, 2017-18
- ABS, Cat. 5209, Australian National Accounts: Input-Output Tables, 2014-15
- ABS, Cat. 8165, Counts of Australian Businesses, including Entries and Exits, 2014-18
- ABS Census 2016
- Amendment C104 to the Manningham Planning Scheme – Future Plans for Westfield Doncaster, 2019
- Australian Children's Education & Care Quality Authority
- Australian Institute of Health and Welfare
- CoreLogic Cordell
- CoreLogic RP Data
- Department of Environment, Land, Water and Planning (DELWP), Housing Development Data (HDD)
- Department of Health & Human Services Victoria
- Employment Density Guide, 2015
- Forecast.id, 2016
- Healthdirect.gov.au
- Knight Frank Melbourne Metropolitan Office Market Overview (2018)
- Market Info
- MapCloud, 2019
- Manningham Economic Development Strategy 2011-2030, 2018
- Manningham Planning Scheme
- Mychild.gov.au
- NearMap, 2019
- North East Link Project
- North East Link Project Environment Effects Statement (EES), 2019
- Plan Melbourne, 2017
- Planning Maps Online, 2019
- Property Council Australia Shopping Centres Online, 2019
- Remplan, 2019
- Tourism Research Australia, 2018
- Urban Development Program (UDP), 2005-2017
- VicRoads, 2015
- Wesfarmers Annual Reports
- Woolworths Group Annual Reports
- Yarra river – Bulleen Precinct Land Use Framework Plan Draft, 2019

2_Site Context

This section discusses the current context of the site and the surrounds, including:

- North East Link;
- Bulleen Industrial Park;
- Spatial context relating to the surrounding areas; and
- Relevant literature review and Council policies.

This section addresses the first point of the study scope and identifies the scale of residual land which may become available post construction of the North East Link based on current construction design options.

2_Site Context

2.1_North East Link

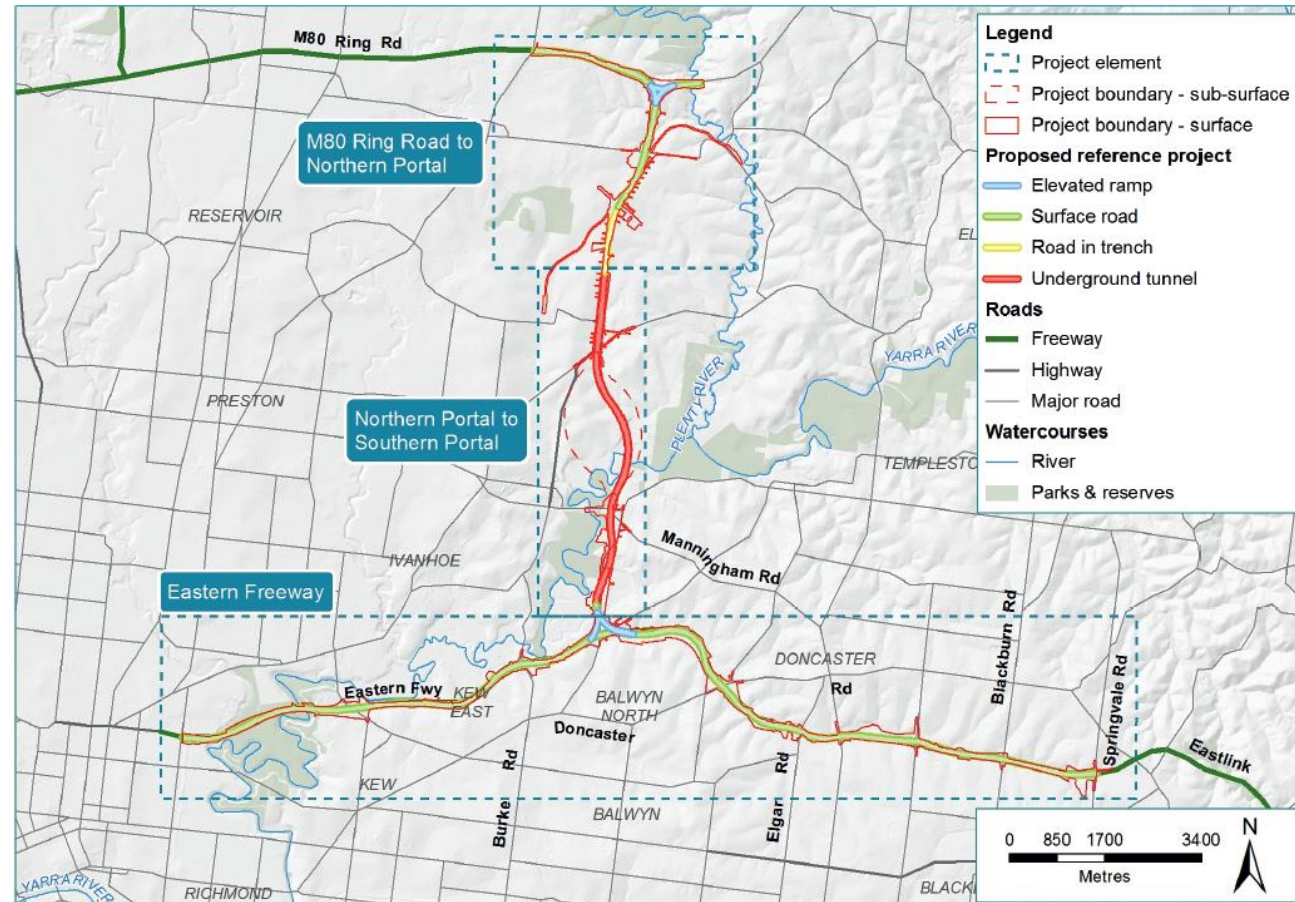
The North East Link (NEL) is currently the largest road project in Victoria and is nominated as a high priority infrastructure project for the state in the 30-Year Infrastructure Strategy (2016) released by Infrastructure Victoria. It will connect the 'missing link' in Melbourne's cross-city orbital road network between the M80 Ring Road and the Eastern Freeway, including:

- Three-lane twin tunnels of more than 6 km;
- Major interchanges at the M80 Ring Road, Grimshaw Street, Lower Plenty Road, Manningham Road and Bulleen Road;
- Dedicated busway with express lanes along the Eastern Freeway from Doncaster towards the city.

Construction work is scheduled to commence in 2020 and complete in 2027. The construction of NEL is expected to deliver significant benefits involving:

- Approximately 110,000-130,000 vehicles using NEL per day and taking 15,000 trucks off local roads;
- Slashing travel times between Melbourne's north and south-east by up to 30 minutes;
- Improving public transport and delivering more than 25 km of new and upgraded walking and cycling paths;
- Creating more than 10,000 jobs and \$427M economic growth per annum;
- Access to 56,000 more job opportunities for workers in the north-east.

Map 1_North East Link



Source: North East Link Project Environment Effects Statement (2019)

2_Site Context

2.2_Bulleen Industrial Precinct

Bulleen Industrial Precinct (BIP, the site) includes the industrial and commercial areas along Manningham Road, Bulleen Road and Bridge Road. It roughly covers a land area of approximately 12.5 ha.

The area to the west of Bulleen Road is currently zoned Industrial 1 Zone (IN1Z) and the area to the east of Bulleen Road is zoned Commercial 1 Zone (C1Z). The built form within the precinct is generally single or two-storey warehouses.

The BIP is a locally significant cluster of commercial and industrial land uses within the Manningham LGA. The recently released North East Link Project Environment Effects Statement (EES, 2019) indicates that based on business surveys and estimates, there are approximately **110 businesses** located within BIP providing **960-1,000 direct jobs** to workers who mainly live in surrounding suburbs in the municipalities of Manningham and Banyule.

Businesses clustered at BIP involves automotive / repairs, construction, industrial material retailers, eateries, dry cleaners, fitness centres and garden nursery retail businesses. It is reported that many of these businesses have been operating for a long time with relatively low rate of change in tenancies since the establishment of BIP in the 1950s.

There is limited public transport servicing the BIP, with Heidelberg Railway Station located approximately 1.8 kilometres away and Smart Bus route 903 running through Manningham Road. It is reported that almost all workers and customers access businesses in the precinct by private vehicle.

Due to land acquisition for the proposed Manningham Road interchange for the NEL, it is estimated that over **80 businesses** would be displaced from BIP, resulting in a potential job loss of up to **830 jobs** on site.

The EES indicates that the land acquisition would permanently change the land use from industrial to road corridor. This is contrary to local land use policies.

The EES also indicates there are currently two construction design options in relation to the proposed Manningham Road interchange, resulting in different scales of residual land which may be available for future redevelopment post construction:

- Option 1: approximately 6.2 ha residual land (to be confirmed);
- Option 2: approximately 4.5 ha residual land (to be confirmed).

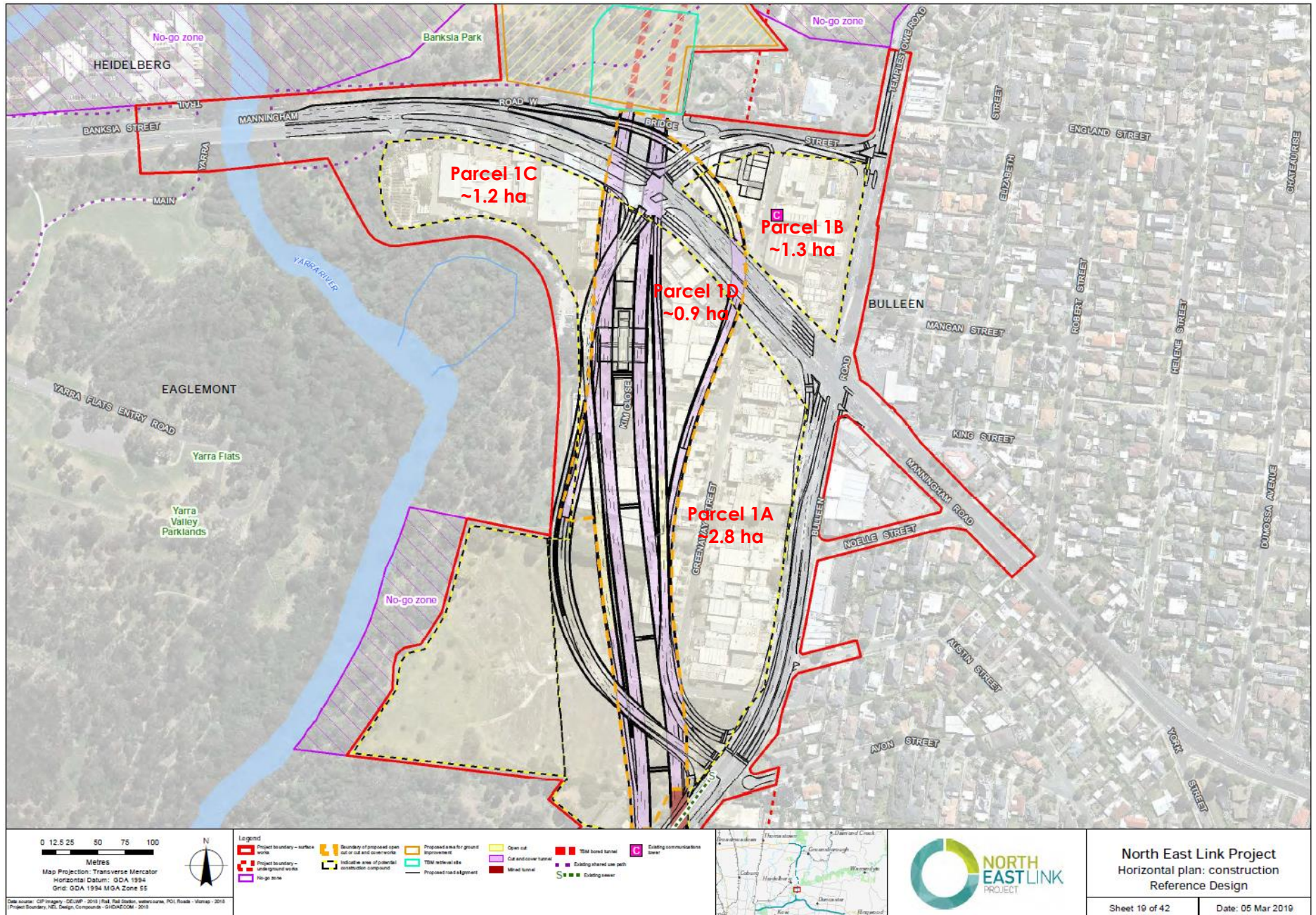
The horizontal plan and construction designs for both options as indicated in the EES and estimated residual land are presented in Map_3 and Map_4.

Map 2_Bulleen Industrial Precinct

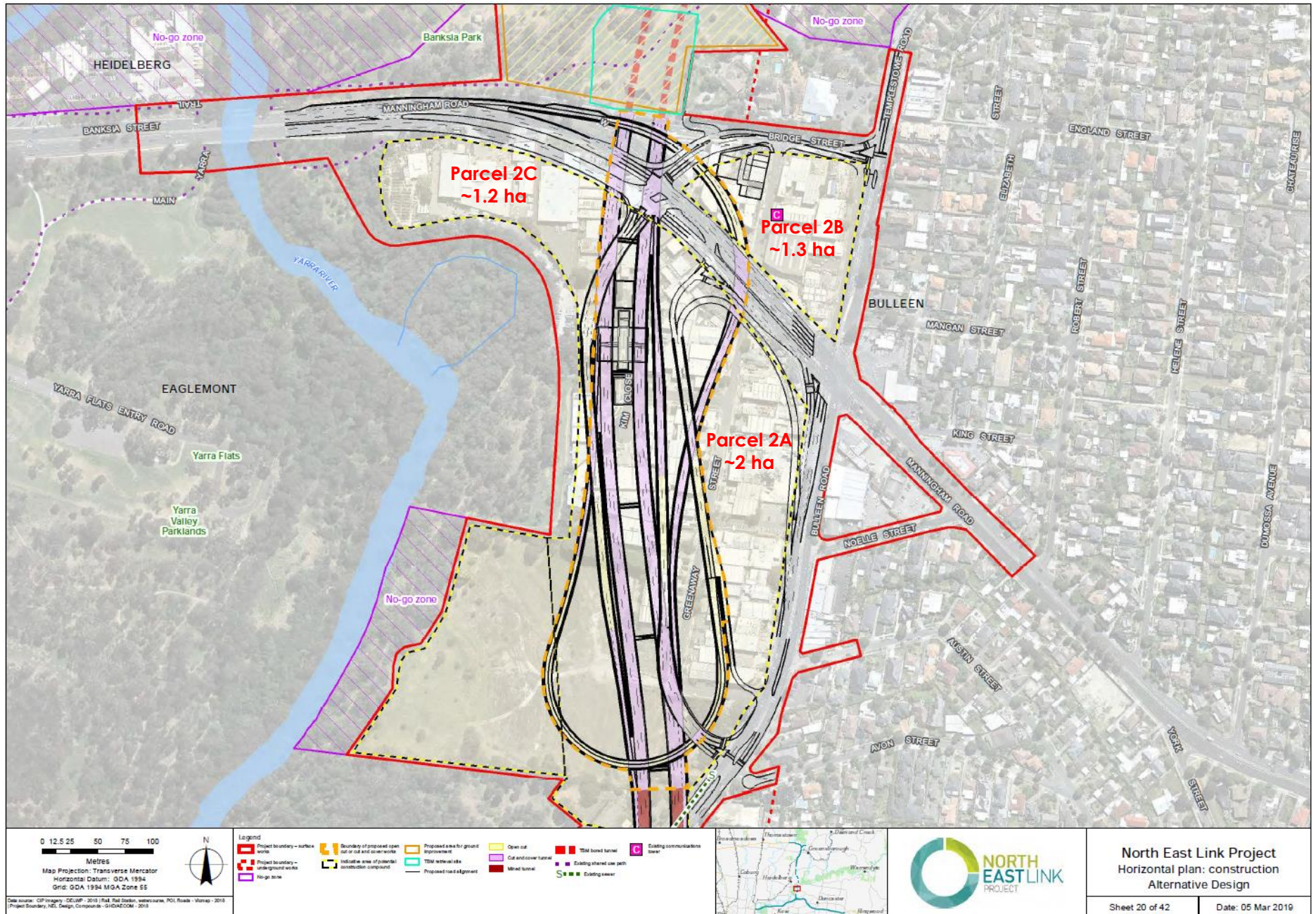


Source: NearMap (2019), Planning Maps Online (2019)

Map 3_Manningham Road Interchange Horizontal plan Option 1



Map 4_Manningham Road Interchange Horizontal plan Option 2



2_Site Context

2.3_Spatial Context

Bulleen Industrial Precinct is located to the east of the Yarra River and largely surrounded by residential areas.

There are significant parklands and a number of golf clubs plus scenic and cultural places along the Yarra River. This includes the Yarra Valley Country Club to the north of the site, part of which is potentially to be redeveloped with residential dwellings.

Heidelberg Activity Centre (AC), Warringal Shopping Centre (SC), Austin Health Precinct and Heidelberg Railway Station are also located within 2 km west of the site, accessing via Manningham Road. The Westfield Doncaster Shopping Centre is located approximately 5 km south-east of the site, accessing via Manningham Road. There are also a couple of smaller scale retail precincts along the Manningham Road including Bulleen Plaza and Lower Templestowe shopping precinct.

The Bulleen Bus Terminus is located at the intersection of Manningham Road and Thompsons Road, approximately 2 km south-east of the site. Doncaster Park and Ride is a significant interchange facility located at the intersection of Eastern Freeway and Doncaster Road, accommodating up to 400 parking bays. There is also a bus interchange at Doncaster Junction.

There are also a number of schools / colleges and sports grounds approximately 2 km the south of the site and north of the Eastern Freeway.

Map 5_Surrounding Context



Source: NearMap (2019), MacroPlan Dimasi

2_Site Context

Activity Centres

Key activity centres and employment nodes within the regional context include the follows.

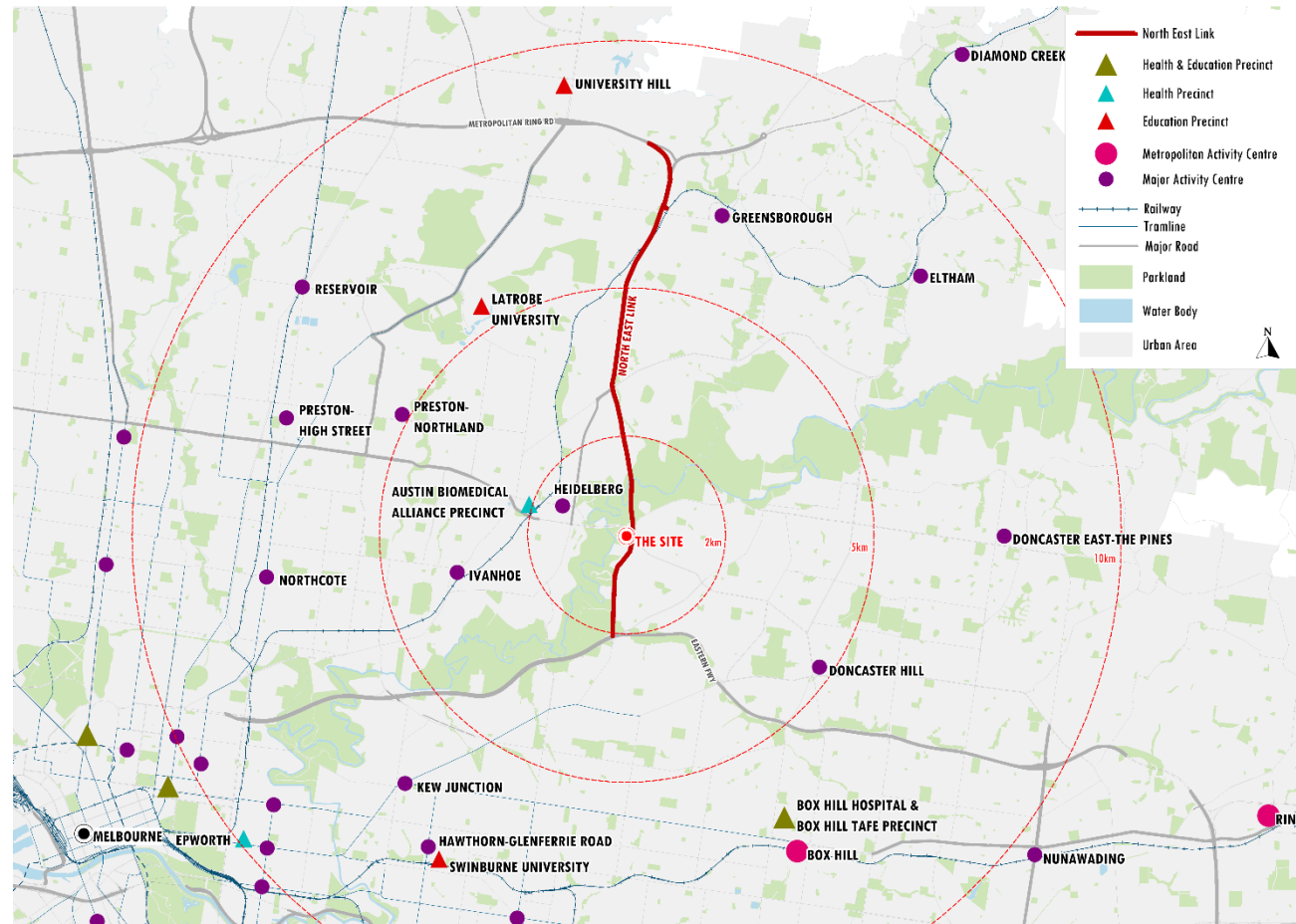
Within 2 km radius

- **Heidelberg Major Activity Centre (MAC)**, including Burgundy Street retail strip and Warringal Sub-regional Shopping Centre totalling gross leasable area (GLA) of approximately 11,820 sqm.
- **Austin Health Precinct**, including Austin Hospital, Mercy Hospital for Women, Warringal Private Hospital and Heidelberg Repatriation Hospital totalling 1,390 beds, as well as a range of associated health services.

Within 5 km radius

- **Ivanhoe MAC**, including Upper Heidelberg Road retail strip and Ivanhoe Plaza Neighbourhood Shopping Centre (5,350 sqm GLA).
- **Doncaster Hill MAC**, including Westfield Doncaster Super Regional Shopping Centre (122,150 sqm GLA) and a number of large format retail at the intersection of Doncaster Road and Williamsons Road.
- **Preston – Northland MAC**, including Northland Super Regional Shopping Centre (97,770 sqm GLA) and Northland Homemaker Centre (30,920 sqm GLA).
- **La Trobe NEIC**, which is based around La Trobe University stretching out to the surrounds with a focus on education, research, health and retail currently providing 28,700 jobs in the cluster.

Map 6_Activity Centres & Employment Nodes



Source: Plan Melbourne (2017), Property Council Australia Shopping Centres Online (2019), MacroPlan Dimasi

2_Site Context

Traffic Volumes

Map 7 illustrates average annual traffic volume (both ways) in the surrounding areas of the site.

As presented on the map, the Eastern Freeway and the M80 Ring Road are the major highways in the east and north of Melbourne with significant high volume of traffic – approximately 120,000-147,000 vehicles p.a. both ways for Eastern Highway and 45,000-103,000 vehicles p.a. both ways of the eastern section of M80 respectively.

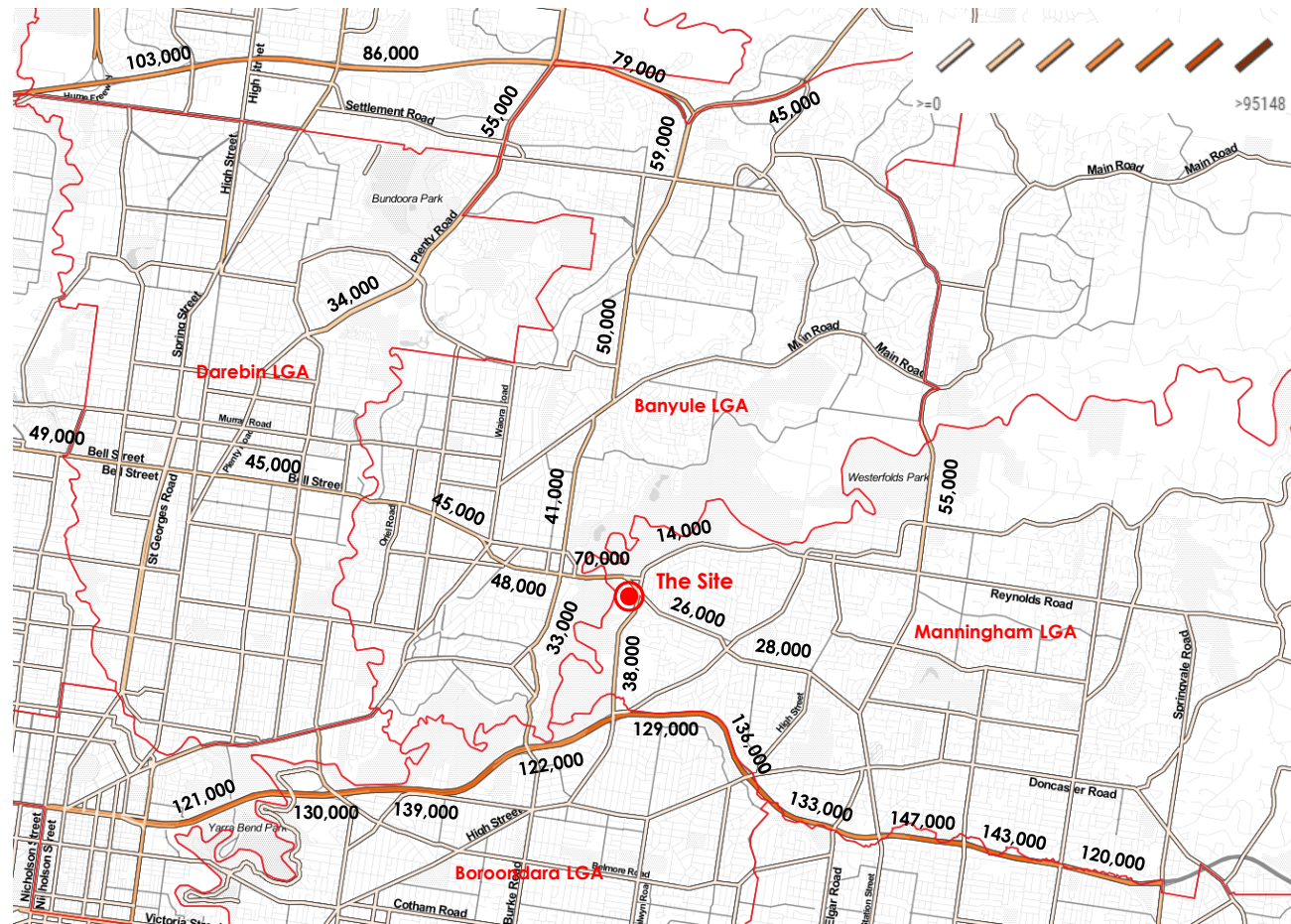
There are also a number of arterial roads and local roads carrying a large volume of traffic, including:

- Manningham Road – the section connecting Bulleen across Yarra River to Heidelberg: up to 70,000 vehicles p.a. both ways;
- Banksia Street: 48,000 vehicles p.a. both ways;
- Bell Street: 45,000-49,000 vehicles p.a. both ways;
- Bulleen Road: 38,000 vehicles p.a. both ways;
- Greensborough Road: 50,000-59,000 vehicles p.a. both ways;
- Rosanna Road: 41,000 vehicles p.a. both ways;
- Lower Heidelberg Road: 33,000 vehicles p.a. both ways;
- Plenty Road: 34,000-55,000 vehicles p.a. both ways.

It is expected the delivery of NEL has significant capacity to mitigate current traffic pressure from arterial / local roads.

It is also noted there are proposal plans for a Suburban Rail Loop (SRL) potentially connecting Box Hill, Doncaster, Heidelberg and Bundoora by heavy rail, which will further mitigate road traffic pressure and improve connectivity in this area.

Map 7_Average Annual Traffic Volume (Both Ways)



Source: MapCloud (2019), VicRoad (2015), MacroPlan Dimasi

2_Site Context

2.4 Literature Review & Council Policies

This section reviews relevant documents and council policies, including the follows:

- North East Link Environment Effects Statement (EES, 2019);
 - Chapter 14 Business, and
 - Technical report F – Business Impact Assessment (prepared by GHD, April 2019);
- Bulleen Employment Precinct Workforce Survey (prepared by Chorus Consulting);
- Bulleen Industrial Precinct: North East Link Economic Impact Assessment (prepared by Remplan, September 2018);
- Manningham Economic Development Strategy 2011-2030 (2018);
- Manningham Planning Scheme – Local Planning Policy Framework;
- Amendment C104 to the Manningham Planning Scheme – Future Plans for Westfield Doncaster (2019);
- Yarra River – Bulleen Precinct Land Use Framework Plan (Draft 2019).

The key findings, directions, and policies of these documents are summarised in this section.

North East Link Environment Effects Statement (2019)

Chapter 14 Business & Technical report F – Business Impact Assessment

Chapter 14 and Technical Report F of the EES provide an assessment of on businesses impacts associated with the construction and operation of NEL.

Over 150 businesses across the project were sent surveys and 74 responses were returned. A range of potential risks have been assessed and rated from 'low' to 'medium' according to the results.

A number of key observations have been made in relation to Chapter 14 and Technical Report 14 of the EES, including the follows:

- The 'northern portal to southern portal' section of Chapter 14 describes the issues with Bulleen Industrial Precinct but do not recommend a strategy or pathway for mitigation.
- The risk profile for 'local availability of employment', e.g. Risk BU03 – permanent acquisition of IN2Z land in Bulleen displaces businesses and reduces the number of jobs available for workers in this area, indicates a 'planned major consequence' but do not suggest how this might be addressed.

- The remainder of the risk profile appears to follow on from this finding, e.g. Risk BU05 – fill acquisition of land results in displacement of businesses along the alignment and therefore reduces availability of local jobs and services is rated a 'low' risk, whereas in reality it is a high risk.
- Other risks are incorrect, e.g. Risk BU09, BU10, BU11 and BU12.
- The key gap in the EES is the failure to produce an economic impact assessment. The statement in Technical Report F 'Overall, the displacement has the potential to create a shortfall of property and available sites further afield may not suit the businesses and their customer base' summarises the position put in the EES.
- NELP has stated 'NELP is actively working with the Manningham City Council to consider available sites across municipality and the potential to rezone or redevelop these sites. This has included consideration of the rezoning of 2-14 Webster Road in Templestowe, a 4.5-hectare council-owned land parcel. The site currently operates as an auxiliary storage site. It represents a significant development opportunity with potential to be transformed into a light industrial precinct that could accommodate a range of businesses. However, this site is located approximately 7.5 km from Bulleen and may require rezoning and amendment of the Urban Growth Boundary.' There is a requirement for an actual mitigation strategy.

2_Site Context

Bulleen Employment Precinct Workforce Survey

The Bulleen Employment Precinct Workforce Survey was prepared by Chorus Consulting for Council. It has surveyed 190 employees within the precinct and reported their demographics, economic status and sensitivity to unemployment.

This survey has indicated the following demographic and socio-economic characteristics of the employees surveyed within in the precinct:

- The combination of age (45+ years) and gender (predominately male) creates significant vulnerability for much of the workforce;
- Largely blue-collar / unskilled workforce with comparatively low wages / wealth and education levels indicates vulnerability to economic stress and less competitiveness in the job market;
- The workforce is largely settled and the relocation of Bulleen Industrial Precinct presents significant uncertainty to a large share of the workforce.

However, it is noted that the result of this survey is partial and incomplete. It may not present the overall accurate situation of the precinct due to small sample size – 190 employees surveyed only account for up to 20% of the total workers within the precinct. It may also over-represent professional / managerial employees due to literacies and computer access required to complete this survey.

Bulleen Industrial Precinct: North East Link Economic Impact Assessment (2018)

This assessment was prepared by Remplan for Council. It is a high-level document providing an indicative estimate of economic impacts under three scenarios based on a business survey undertaken (where 40 responses received from over 100 businesses). The key findings include the follows:

- Scenario 1: assumed all of the 588 existing jobs in BIP were removed from the local economy, resulting a total of 1,116 jobs and \$312.7 million economic output (both direct and indirect) lost in the local economy;
- Scenario 2: assumed a proportion of businesses could be potentially relocated within Manningham based on the survey results, where current availability of land remains unchanged, which resulted in a total of 612 jobs and \$168.5 M economic output lost in the local economy;
- Scenario 3: assumed a proportion of businesses could be potentially relocated within Manningham based on the survey results if suitable land was available within the municipality, which resulted in a total of 265 jobs and \$55.9 M economic output lost.

It is noted there is an inconsistency between the numbers of current on-site jobs at BIP indicated in this assessment (588 jobs) and in the EES (960-1,000 jobs).

Scenario 2 and 3 estimated job losses based on a small sample of businesses surveyed, which is highly subjective and does not account for the 'clustering' effect of businesses. Further only 3 businesses surveyed knows where they are relocating to when construction starts, suggesting that there is a high degree of uncertainty and few locations to choose from.

Manningham Economic Development Strategy 2011-2030 (2018)

This strategy sets out Councils economic direction until 2030. Within the municipality, the most common sectors were identified:

- Retail trade;
- Health Care and social assistance; and
- Professional, scientific and technical services.

The strategy outlines five strategic directions:

1. Attracting and retaining businesses;
2. Developing leading local businesses;
3. Enhancing Manningham tourism;
4. Activating and improving activity centres; and
5. Integrating economic development.

The purpose of this strategy is to attract and retain businesses within the Manningham municipality. The Bulleen Industrial Precinct will be impacted by the North East Link. However, there is opportunity for the residual land to provide employment generating uses as identified within this report.

2_Site Context

Manningham Planning Scheme

Local Planning Policy Framework

The relevant policy that applies to the subject site is Clause 22.10 Bulleen Gateway Policy. The subject site is located within the Map 1 of this policy. The basis of this policy under Clause 22.10-1 of the Manningham Planning Scheme (the Scheme) is to:

- Bulleen is subject to a number of development pressures arising from industrial, commercial and retail development and transport-based impacts, including road development.
- The above matters impact on the local environment, including open space. They also pose a threat to residential amenity.
- Bulleen is a major gateway to Manningham and adjoins the Yarra Valley Parklands and the Yarra River.
- The Municipal Strategic Statement encourages the improvement and enhancement of the visual amenity and function of the Bulleen Gateway area.

The policy identifies Bulleen as a major gateway site. The residual land as a result of the location of the North East Link could potentially be used as a gateway site to the municipality given that the subject site is located in close proximity to the entrance into Manningham from Banyule.

Amendment C104 to the Manningham Planning Scheme – Future Plans for Westfield Doncaster (2019)

Amendment C104 to the Manningham Planning Scheme has been approved by the Minister for Planning on 20 May 2019 to enable the expansion and development of Westfield Doncaster.

The approval will allow Scentre Group (as owners and operators of Westfield Doncaster) to apply for planning permits for the future development.

The proposed expansion is generally on the north side of the Westfield Doncaster site and includes:

- An additional 43,000sqm of retail floor space and 18,000sqm of commercial office space;
- A commercial building of up to 14 storeys positioned above a two level podium located in the north-west part of the site;
- An enhanced and expanded bus interchange;
- Improved vehicular and pedestrian access to and within the centre;
- Additional car parking; and
- Improved public realm.

The amendment also introduced the Development Plan Overlay (Schedule 4) and Road Closure Overlay. A range of other overlays were amended too.

No planning application has been submitted to Council.

Yarra River – Bulleen Precinct Land Use Framework Plan (Draft 2019)

The draft Yarra River – Bulleen Precinct Land Use Framework Plan was released May 2019. This document will provide a guide and vision for the future use and development of the Yarra River section located within Bulleen, Heidelberg and Lower Templestowe.

Under this document, it is acknowledged that the Bulleen Industrial Precinct will be impacted by the construction of the proposed North-East Link. It is viewed that the Bulleen Industrial Precinct has future potential for land use change and renewal once the North-East Link is completed. Further to this, the Bulleen Industrial Precinct is viewed as an area that could be utilised for:

- Community and employment uses through potential development opportunities; and
- A new cultural place.

This report will advise of the potential uses and development opportunities that are able to be utilised on the site.

3_Current Situation Assessment

This section assesses the current situation relating to the site and the defined study area, including:

- Resident population profile: population growth and demographic profile;
- Working population profile: industries of employment, occupation of employment, economic output, businesses and journey to work.

The current situation assessment paints a 'today' picture of the study area and establishes the basis for further investigation of possible opportunities for transitioning the site.

3_Current Situation Assessment

3.1_Overview

This section assesses the current economic and employment conditions relation to Bulleen Industrial Park and surrounds, involving:

- Population and demographic profile;
- Businesses and employment.

Given the location of the site, MacroPlan has defined a study area comprising a number of ABS Statistical Areas – Level 2 (SA2s) for analysis purposes, including:

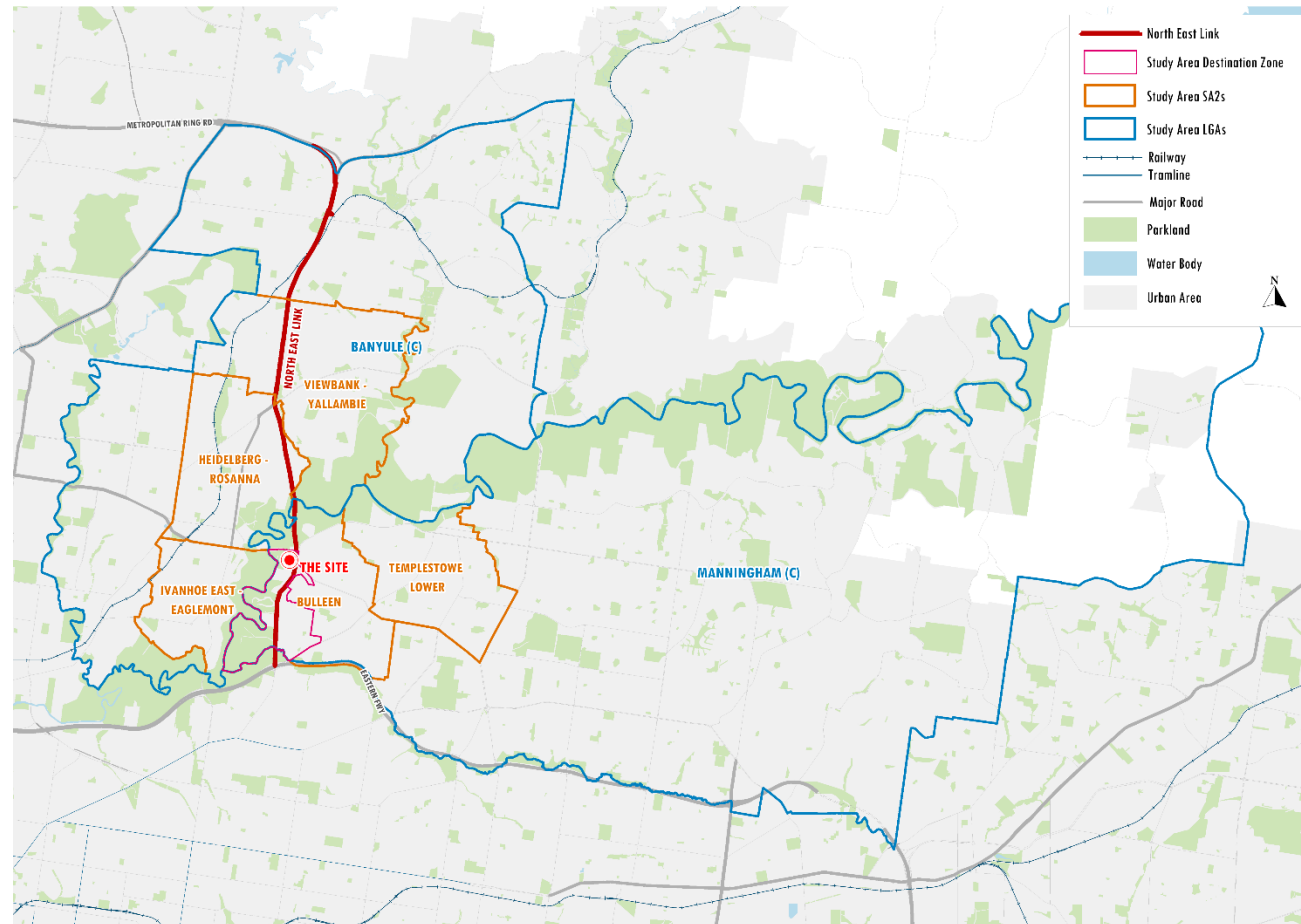
- **Bulleen SA2 and Templestowe Lower SA2 in the Manningham Local Government Area (LGA), and**
- **Ivanhoe East – Eaglemont SA2, Heidelberg – Rosanna SA2 and Viewbank – Yallambie SA2 in Banyule LGA.**

In particular, for the assessment of current employment conditions (i.e. workers at their place of work), Destination Zone (DZN) data is used to assess small area in the immediate surrounds of the site. The DZN as defined in ABS includes Bulleen Industrial Precinct and the area to the south where a number of schools and colleges are located.

The study area will be benchmarked again LGA averages where applicable. In case there absence of small area data, LGA level data will be used for analysis purposes.

The study area is illustrated in Map 8.

Map 8_Study Area



Source: ABS, MacroPlan Dimasi

3_Current Situation Assessment

3.2_Population & Demographics

Population Growth

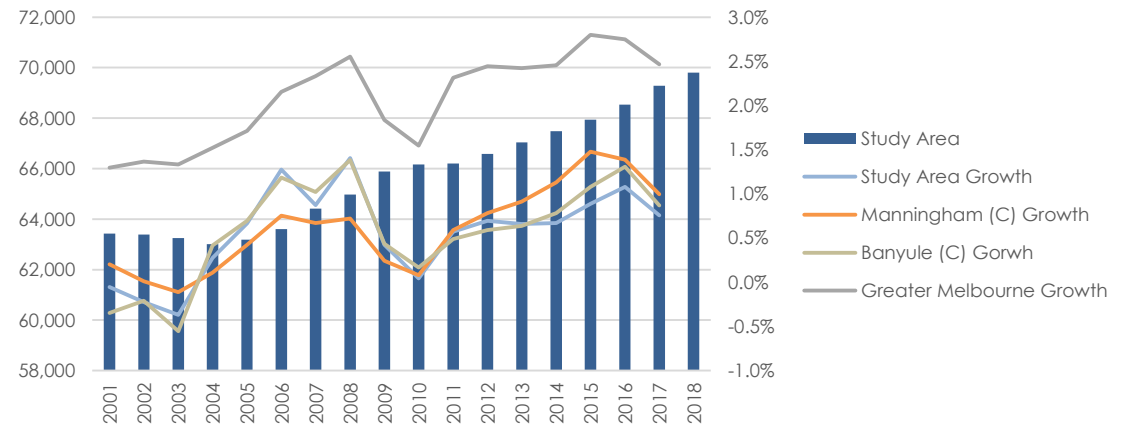
As at 2018, the study area had a total estimated resident population (ERP) of **69,804 persons**, 17% of which live in the SA2 of Bulleen. This indicates an average population density of 20.8 persons per ha for the study area and 17.6 persons per ha for Bulleen SA2.

The study area has experienced a steady population growth over the past decade, with annual growth rate (around 0.7% p.a.) largely on par with the averages of Manningham and Banyule LGAs. However, historically the study area's population growth has trended below metropolitan average population growth.

Population growth in the study area is expected to trend steadily in the short to mid term future to reach over approximately **80,000 residents** by 2036. Key drivers for population growth include overseas migration and internal migration from the neighbouring municipalities.

The forecast growth is mainly driven by Heidelberg – Rosanna SA2 which has been seeing significant densification with a number of mid to high density resident development being constructed, approved and/or proposed. The Bulleen SA2 is also projected moderate growth with an addition of 2,171 persons between 2018 and 2036.

Chart 1_Historic Population Growth, Study Area, 2001-18



Source: ABS 3218

Table 1_Forecast Population Growth, Study Area, 2018-36

SA2	2018	2021	2026	2031	2036	Growth 2018-36
Bulleen	11,763	12,608	13,389	13,682	13,934	2,171
Templestowe Lower	14,449	14,784	14,974	15,174	15,392	943
Heidelberg - Rosanna	16,127	17,755	19,138	20,453	21,742	5,615
Ivanhoe East - Eaglemont	8,251	8,523	8,581	8,658	8,803	552
Viewbank - Yallambie	19,214	19,426	19,606	19,892	20,259	1,045
Total Study Area	69,804	73,096	75,688	77,859	80,130	10,326
Manningham (C)	125,508	132,794	139,282	144,701	148,933	23,425
Banyule (C)	130,237	135,406	139,754	143,114	146,846	16,609

Source: ABS 3218, Forecast.id

3_Current Situation Assessment

Demographic Profile

The socio-demographic profile of residents in Bulleen SA2 and the overall study area has been benchmarked against the averages of Manningham LGA, Banyule LGA and Greater Melbourne. Key findings include the follows.

- Bulleen SA2, as well as the overall study area, has a significant high share of **older age groups** of the 65-74 years (10.4%) and the 75+ years (13.6%), with median age (44 years) substantially higher than Greater Melbourne average.
- There is also a large share of the 5-19 years cohort and the 45-54 years cohort, reflecting large share of **traditional family households** comprising of couples with children (37.6%).
- In line with the wider municipalities and Greater Melbourne, couples with no children (28.6%) and lone person households (37.6) also present large shares in Bulleen as well as the overall study area, reflecting large shares of **empty nesters and senior lone residents** given the age distribution.
- However, detailed demographic profile by SA2 indicates relatively different characteristics in Heidelberg – Rosanna which has a younger age profile with median age at 39 years.
- There is also a level of cultural diversity in Bulleen as well as the overall study area.
- The study area has a **higher average household income** (\$123,224) than Greater Melbourne average.

A detailed demographic profile for all the SA2s in the study area is contained in the Annexure A1_Data Pack.

Table 2_Demographic Profile, 2016

Census 2016	Bulleen SA2	Total Study Area	Manningham LGA	Banyule LGA	Greater Melbourne
ERP 2018	11,763	69,804	125,508	130,237	4,963,349
<i>Population Density (persons/ha)</i>	17.6	20.8	11.1	20.8	5.0
Age Distribution (% ERP)					
0-4	5.1%	5.9%	4.8%	6.4%	6.4%
5-19	15.6%	17.2%	17.8%	17.3%	17.9%
20-24	5.8%	5.6%	6.2%	6.1%	7.4%
25-34	11.3%	11.5%	11.1%	13.3%	16.3%
35-44	12.3%	13.7%	12.1%	14.3%	14.2%
45-54	14.7%	13.7%	14.3%	13.3%	13.1%
55-64	11.3%	11.3%	12.4%	11.9%	10.6%
65-74	10.4%	10.0%	10.6%	9.4%	7.7%
75+	13.6%	11.1%	10.7%	8.0%	6.4%
<i>Median Age (years)</i>	44	42	39	43	36
Birthplace (% ERP)					
Australian	57.9%	68.5%	58.3%	75.4%	63.9%
Overseas	42.1%	31.5%	41.7%	24.6%	36.1%
Household Composition (% Households)					
Couples with no children	28.6%	26.3%	27.1%	25.1%	24.2%
Couples with children	37.6%	38.3%	41.1%	35.7%	35.4%
One parent families	9.5%	9.6%	9.8%	10.8%	10.6%
Other families	1.1%	1.2%	1.2%	1.4%	1.5%
Lone person	20.7%	22.2%	18.6%	23.8%	23.2%
Group households	2.4%	2.4%	2.2%	3.2%	5.0%
<i>Average Household Size (persons)</i>	2.7	2.6	2.6	2.8	2.7
Average Household Income (\$ pa)	\$115,935	\$123,224	\$125,317	\$114,421	\$108,488
<i>Variation from Greater Melbourne</i>	6.9%	13.6%	15.5%	5.5%	-

Source: ABS Census 2016

3_Current Situation Assessment

Resident Workforce Profile

Of all resident population (aged 15+ years) in Bulleen SA2, approximately 5,242 persons were in the labour force and **4,921** persons were employed as at 2016. This indicates a **participation rate of 55.9%** and an **employment rate of 93.9%**. The participation rate in Bulleen appears to be low compared to the study area, two LGAs and the Greater Melbourne average. The employment rate in Bulleen is largely in line with the Manningham LGA average and the Greater Melbourne average, but below the other SA2s in the study area.

Approximately 74% of Bulleen's employed residents were working in the services sectors, particularly in **retail trade** (12.6%), **health care and social assistance** (11.6%), and **professional, scientific and technical services** (10.4%). This is largely consistent with the overall study area and Manningham LGA but above the Greater Melbourne average.

Over half of Bulleen's employed residents were white collar workers, particularly **professionals** (27.3%), **managers** (15.7%), and **clerical and administrative workers** (14.3%).

A detailed resident workforce profile for all the SA2s in the study area is contained in the Annexure A1_Data Pack.

Table 3_Resident Workforce Profile, 2016

Census 2016	Bulleen	Total Study Area	Manningham LGA	Banyule LGA	Greater Melbourne
Employed Residents	4,921	30,505	52,818	58,915	2,115,493
Resident Workforce	5,242	32,294	56,269	62,344	2,269,119
Employment Rate (%)	93.9%	94.5%	93.9%	94.5%	93.2%
Participation Rate (%)	55.9%	60.0%	57.7%	62.4%	61.9%
Industry of Employment (% employed residents)					
Agriculture, Forestry and Fishing	0.2%	0.3%	0.3%	0.3%	0.6%
Mining	0.1%	0.2%	0.2%	0.2%	0.2%
Manufacturing	5.8%	5.5%	5.6%	5.8%	7.7%
Electricity, Gas, Water and Waste Services	0.8%	0.9%	0.8%	0.9%	1.0%
Construction	7.0%	7.0%	7.7%	8.3%	8.2%
Wholesale Trade	3.8%	3.3%	4.2%	3.0%	3.5%
Retail Trade	12.6%	10.1%	11.9%	8.9%	10.1%
Accommodation and Food Services	7.2%	5.6%	7.0%	5.0%	6.5%
Transport, Postal and Warehousing	3.3%	3.2%	3.3%	3.6%	5.0%
Information Media and Telecommunications	2.2%	2.3%	2.2%	2.2%	2.2%
Financial and Insurance Services	5.4%	5.3%	5.3%	4.6%	4.5%
Rental, Hiring and Real Estate Services	2.2%	1.8%	2.2%	1.6%	1.7%
Professional, Scientific and Technical Services	10.4%	11.1%	10.5%	9.8%	9.0%
Administrative and Support Services	3.5%	2.9%	3.5%	3.0%	3.6%
Public Administration and Safety	4.6%	6.8%	4.0%	7.1%	5.0%
Education and Training	8.7%	10.8%	8.6%	11.3%	8.6%
Health Care and Social Assistance	11.6%	13.9%	12.7%	15.1%	12.0%
Arts and Recreation Services	1.8%	2.1%	1.8%	2.2%	2.1%
Other Services	3.7%	3.1%	3.6%	3.3%	3.6%
Other	5.0%	3.9%	4.7%	3.8%	4.9%
Occupation of Employment (% employed residents)					
Managers	15.7%	15.4%	16.8%	13.6%	13.2%
Professionals	27.3%	32.4%	28.5%	30.2%	25.0%
Technicians and Trades Workers	10.6%	10.4%	10.5%	12.2%	12.6%
Community and Personal Service Workers	9.4%	8.9%	8.9%	10.1%	10.2%
Clerical and Administrative Workers	14.3%	14.3%	14.3%	14.8%	13.9%
Sales Workers	11.9%	9.7%	11.1%	8.7%	9.7%
Machinery Operators and Drivers	2.8%	2.4%	2.6%	3.1%	5.6%
Labourers	6.0%	5.1%	5.6%	5.8%	8.1%
Other	2.0%	1.5%	1.7%	1.5%	1.7%

Source: ABS Census 2016

3_Current Situation Assessment

3.3_Economy & Employment

Workers' Profile

As at 2016, there were a total of **23,334 workers** working in the study area, 12% of which work in Bulleen SA2.

The study area has relatively **high job density** (7.0 jobs per ha) and employment servicing ratio (0.34 workers per resident) supported by the key employment node of Austin Health Precinct located in Heidelberg – Rosanna. The scale of the precinct attracts significant concentration of professionals in the health care and social assistance sector.

Detailed analysis on small area (i.e. Destination Zone) indicates there were 1,140 workers in total within the DZN, most of which were working at Bulleen Industrial Precinct (up to 1,000 workers) with a small number of workers working in the schools / colleges and other businesses.

The largest employing sectors within the DZN include **education and training** (22.3%), **construction** (13.6%), **retail trade** (11.8%), accommodation and food services (11.5%) and other services (9.2%). Other than education and training, these sectors largely reflect the current businesses operating at the Bulleen Industrial Precinct. There is also a higher share of **technicians and trade workers** (18.2%) and **labourers** (10.2%), and a lower share of **professionals** (18.3%), compared to the overall study area and Greater Melbourne.

A detailed worker profile for all the SA2s in the study area is contained in the Annexure A1_Data Pack.

Table 4_Workers' Profile, 2016

Census 2016	DZN	Bulleen SA2	Total Study Area	Manningham LGA	Banyule LGA	Greater Melbourne
Workers	1,142	2,710	23,334	28,927	40,353	2,046,163
Job Density (workers/ha)	5.4	4.1	7.0	2.6	6.5	2.0
Job Servicing Ratio (workers/resident)	-	0.23	0.34	0.34	0.32	0.43
Industry of Workers (% workers)						
Agriculture, Forestry & Fishing	0.4%	0.3%	0.2%	0.4%	0.2%	0.6%
Mining	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%
Manufacturing	3.5%	5.1%	1.5%	2.5%	5.4%	7.9%
Electricity, Gas, Water & Waste Services	0.5%	0.2%	0.1%	0.1%	0.2%	1.0%
Construction	13.6%	9.8%	4.9%	8.4%	6.8%	6.7%
Wholesale Trade	4.0%	2.4%	1.4%	2.3%	1.9%	3.6%
Retail Trade	11.8%	12.2%	7.0%	18.8%	9.7%	10.4%
Accommodation & Food Services	11.5%	8.7%	5.2%	8.5%	5.7%	6.6%
Transport, Postal & Warehousing	2.4%	2.3%	0.8%	2.4%	1.6%	5.0%
Information Media & Telecommunications	0.5%	1.1%	0.6%	1.2%	0.8%	2.2%
Financial & Insurance Services	0.5%	1.6%	1.2%	2.3%	1.4%	4.7%
Rental, Hiring & Real Estate Services	1.3%	1.1%	0.8%	2.5%	1.2%	1.8%
Professional, Scientific & Technical Services	4.1%	6.0%	5.7%	7.8%	6.0%	9.3%
Administrative & Support Services	3.7%	3.1%	1.9%	2.9%	2.5%	3.3%
Public Administration & Safety	0.5%	0.9%	6.3%	3.1%	5.9%	5.2%
Education & Training	22.3%	17.9%	9.8%	11.3%	10.8%	8.8%
Health Care & Social Assistance	1.0%	10.8%	45.0%	15.2%	31.2%	12.1%
Arts & Recreation Services	3.9%	4.7%	1.7%	1.9%	1.5%	2.1%
Other Services	9.2%	7.0%	2.7%	4.4%	3.5%	3.6%
Occupation of Workers (% workers)						
Managers	13.5%	13.2%	8.8%	12.1%	9.4%	13.5%
Professionals	18.3%	21.3%	37.9%	20.7%	31.5%	25.5%
Technicians and Trades Workers	18.2%	14.6%	10.2%	11.9%	12.9%	11.5%
Community and Personal Service Workers	13.3%	15.2%	15.7%	15.7%	13.7%	10.3%
Clerical and Administrative Workers	13.5%	13.0%	12.7%	11.2%	12.7%	14.3%
Sales Workers	7.0%	9.3%	5.9%	16.8%	8.8%	9.9%
Machinery Operators and Drivers	4.5%	3.9%	1.8%	2.8%	3.1%	5.6%
Labourers	10.2%	8.1%	5.6%	7.3%	6.6%	7.6%
Other	1.5%	1.5%	1.4%	1.4%	1.4%	1.7%

Source: ABS Census 2016

3_Current Situation Assessment

Economic Output

It is estimated that the study area had a total economic output of approximately **\$5 billion** in 2017.

Owing to Austin Health Precinct, **health care and social assistance** contributed up to 29% (\$1.4 billion) of total economic output within the study area in 2017. This is followed by rental, hiring and real estate services (12.6%) and construction (11.8%).

However, the largest economic contributor within the specific Destination Zone where the site is located is **construction**, representing over 30% of the total estimated output. This is followed by **rental, hiring and real estate services** (11.8%) and **education and training** (10.0%). This is largely consistent in the Bulleen SA2.

It is also noted that both the DZN and Bulleen SA2 have a higher share of output from the manufacturing sector compared to the overall study area and Manningham LGA. However, there is significant low output from financial and insurance services, and professional, scientific and technical services in the DZN and Bulleen compared to Greater Melbourne.

Detailed output by industry for all the SA2s in the study area is contained in the Annexure A1_Data Pack.

Table 5_Output by Industry, 2017

Output by Industry 2017	DZN	Bulleen SA2	Total Study Area	Manningham LGA	Banyule LGA	Greater Melbourne
Agriculture, Forestry & Fishing	0.6%	1.1%	0.4%	0.5%	0.2%	0.7%
Mining	0.0%	0.0%	0.2%	0.1%	0.2%	0.6%
Manufacturing	8.2%	13.3%	3.1%	5.0%	12.2%	18.1%
Electricity, Gas, Water & Waste Services	0.0%	0.0%	0.4%	0.4%	0.6%	2.8%
Construction	30.8%	21.5%	11.8%	20.3%	15.8%	12.8%
Wholesale Trade	8.0%	3.9%	2.2%	3.4%	2.9%	4.3%
Retail Trade	5.2%	5.6%	3.7%	8.4%	4.5%	3.7%
Accommodation & Food Services	5.3%	3.8%	2.7%	4.0%	2.8%	2.7%
Transport, Postal & Warehousing	3.2%	2.7%	1.1%	2.4%	2.0%	5.6%
Information Media & Telecommunications	2.1%	1.6%	1.4%	2.7%	1.7%	4.3%
Financial & Insurance Services	1.1%	3.7%	3.5%	5.4%	3.3%	9.2%
Rental, Hiring & Real Estate Services	11.8%	12.7%	12.6%	17.1%	12.7%	9.3%
Professional, Scientific & Technical Services	4.1%	6.5%	7.6%	8.3%	6.5%	7.7%
Administrative & Support Services	1.5%	2.3%	2.3%	3.3%	3.1%	3.3%
Public Administration & Safety	0.2%	0.3%	9.9%	2.3%	6.6%	3.2%
Education & Training	10.0%	8.6%	5.5%	5.3%	5.6%	4.0%
Health Care & Social Assistance	0.4%	5.1%	28.8%	7.5%	16.3%	4.7%
Arts & Recreation Services	2.8%	3.4%	1.6%	1.3%	1.1%	1.5%
Other Services	4.9%	4.0%	1.5%	2.3%	2.0%	1.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Remplan (2019)

3_Current Situation Assessment

Business Count

As at June 2018, there were a total of **6,314 businesses** located within the study area, 21% of which were located in Bulleen.

The vast majority of the businesses in the study area appears to be small to medium enterprises (SMEs). Among all business in the study area, non-employing business and small businesses (employing 1-19 employees) account for over 97% of the total.

The majority of the current businesses within Bulleen SA2 include **rental, hiring and real estate services, construction, professional, scientific and technical services, financial and insurance services and health care and social assistance**. This is largely consistent with the overall study area and the municipality of Manningham.

It is noted that whilst approximately half of businesses currently operating in Bulleen are services industries (i.e. real estate, professional, financial and health care services), only up to 20% of workers are employed in these industries. This indicates these service businesses are generally small in scale.

Given limited employment land within the study area, most of the businesses are located within the current key employment nodes, activity centres and main streets.

A detailed business counts for all the SA2s in the study area are contained in the Annexure A1_Data Pack.

Table 6_Business Count, 2018

2018	Bulleen	Total Study Area	Manningham LGA	Banyule LGA
Business Count	1,332	6,314	13,979	11,048
Business by Employemnt Size				
Non employing	899	4,233	9,282	7,050
1-19 Employees	415	2,004	4,565	3,835
20-199 Employees	18	77	128	159
200+ Employees	0	0	4	4
Business by Industry				
Agriculture, Forestry & Fishing	0.6%	0.9%	0.9%	0.9%
Mining	0.0%	0.1%	0.0%	0.1%
Manufacturing	2.8%	2.2%	2.1%	3.5%
Electricity, Gas, Water & Waste Services	0.2%	0.3%	0.2%	0.2%
Construction	15.9%	16.0%	16.8%	19.5%
Wholesale Trade	4.1%	3.6%	5.0%	3.4%
Retail Trade	5.7%	5.4%	6.0%	5.6%
Accommodation & Food Services	3.7%	3.7%	4.7%	3.4%
Transport, Postal & Warehousing	5.4%	5.0%	5.1%	6.0%
Information Media & Telecommunications	0.7%	0.9%	0.7%	0.8%
Financial & Insurance Services	10.2%	11.1%	12.0%	10.1%
Rental, Hiring & Real Estate Services	18.8%	13.9%	15.5%	10.4%
Professional, Scientific & Technical Services	11.7%	15.6%	13.6%	15.3%
Administrative & Support Services	2.1%	3.2%	3.3%	3.7%
Public Administration & Safety	0.2%	0.4%	0.2%	0.3%
Education & Training	1.5%	1.9%	1.4%	1.7%
Health Care & Social Assistance	9.3%	10.3%	7.3%	8.6%
Arts & Recreation Services	1.2%	1.3%	1.0%	1.3%
Other Services	4.9%	3.4%	3.2%	4.2%
Other	1.0%	0.9%	1.0%	1.0%

Source: ABS 8165

3_Current Situation Assessment

Journey to Work

Manningham LGA

The journey to work (JTW) data indicates that of all employed residents in Manningham, **23%** of them work within the same municipality, whilst **19%** travel to Melbourne for work.

There are also almost 20% of employed residents travelling to the neighbouring LGAs for work including Whitehorse, Boroondara and Maroondah. In total almost **58%** of employed residents works in the eastern metropolitan municipalities including Manningham, Whitehorse, Boroondara, Yarra, Maroondah, Monash, Knox, Port Phillip and Stonnington. This reflects a relatively **high level of employment self-containment** in the eastern metropolitan region.

It is noted that whilst Austin Health Precinct and La Trobe NEIC are located not far from Manningham in terms of distance, there is not noticeably high share of employed residents working in those regions – with only 3.2% working in Banyule.

Manningham also has a relatively **high level of employment self-sufficiency** with **42%** of workers also living locally within the same municipality. Approximately 34% of workers in Manningham live in the neighbouring municipalities of Whitehorse, Maroondah, Banyule, Boroondara, Nillumbik and Yarra Ranges.

Table 7_Employed Residents' Places of Work, Manningham LGA, 2016

Manningham LGA Employed Residents' Place of Work 2016	# of Employed Residents Persons	% of Employed Residents % Residents
Manningham (C)	12,104	23.0%
Melbourne (C)	9,950	18.9%
Whitehorse (C)	4,888	9.3%
Boroondara (C)	3,343	6.4%
Yarra (C)	2,198	4.2%
No Fixed Address (Vic.)	2,139	4.1%
Maroondah (C)	2,134	4.1%
Monash (C)	2,099	4.0%
Banyule (C)	1,691	3.2%
Knox (C)	1,441	2.7%
Darebin (C)	1,326	2.5%
Port Phillip (C)	1,183	2.3%
Stonnington (C)	898	1.7%
Greater Dandenong (C)	884	1.7%
Hume (C)	836	1.6%
Whittlesea (C)	830	1.6%
Moreland (C)	672	1.3%
Yarra Ranges (S)	643	1.2%
Kingston (C)	560	1.1%
Other LGAs	2,709	5.2%

Source: ABS Census 2016

Table 8_Workers' Places of Residence, Manningham LGA, 2016

Manningham LGA Workers' Place of Residence 2016	# of Workers Persons	% of Workers % Workers
Manningham (C)	12,104	42.0%
Whitehorse (C)	2,416	8.4%
Maroondah (C)	1,809	6.3%
Banyule (C)	1,615	5.6%
Boroondara (C)	1,418	4.9%
Nillumbik (S)	1,344	4.7%
Yarra Ranges (S)	1,094	3.8%
Whittlesea (C)	1,071	3.7%
Knox (C)	913	3.2%
Darebin (C)	744	2.6%
Monash (C)	598	2.1%
Casey (C)	396	1.4%
Moreland (C)	381	1.3%
Yarra (C)	280	1.0%
Greater Dandenong (C)	278	1.0%
Other LGAs	2,374	8.2%

Source: ABS Census 2016

3_Current Situation Assessment

Banyule LGA

Of all employed residents in Banyule, almost **25%** also works in the same municipality, whilst **21%** travels to Melbourne for work.

Approximately 19% travel to the neighbouring municipalities which are located to the west of Banyule including Darebin, Whittlesea and Yarra. However, fewer employed residents in Banyule travel to the neighbouring municipalities to the east of Banyule for work, such as Manningham (2.8%).

Of all workers in Banyule, approximately **36%** lives in the same municipality, whilst 14% lives in the neighbouring municipality of Whittlesea. In total there are 39% of workers in Banyule living in the neighbouring municipalities of Whittlesea, Nillumbik, Darebin and Manningham. Again, consistently the share of workers in Banyule living in Manningham does not appear to be significant.

This indicates that, despite of jobs opportunities from key employment nodes such as Austin Health Precinct and La Trobe NEIC and relatively short distance between Manningham and Banyule, there is not significantly large number of people who live in Manningham and travel to those employment nodes in Banyule for work. The delivery of NEL is likely to improve connectivity of the areas and accessibility of jobs from these key employment nodes.

Table 9_Employed Residents' Places of Work, Banyule LGA, 2016

Banyule LGA Employed Residents' Place of Work 2016	# of Employed Residents Persons	% of Employed Residents % Residents
Banyule (C)	14,472	24.7%
Melbourne (C)	12,065	20.6%
Darebin (C)	4,586	7.8%
Whittlesea (C)	3,630	6.2%
Yarra (C)	2,863	4.9%
No Fixed Address (Vic.)	2,495	4.3%
Boroondara (C)	2,387	4.1%
Hume (C)	2,258	3.9%
Nillumbik (S)	1,784	3.0%
Manningham (C)	1,615	2.8%
Whitehorse (C)	1,591	2.7%
Port Phillip (C)	1,262	2.2%
Moreland (C)	1,186	2.0%
Monash (C)	985	1.7%
Stonnington (C)	657	1.1%
Brimbank (C)	649	1.1%
Other LGAs	4,098	7.0%

Source: ABS Census 2016

Table 10_Workers' Places of Residence, Banyule LGA, 2016

Banyule LGA Workers' Place of Residence 2016	# of Workers Persons	% of Workers % Workers
Banyule (C)	14,472	36.0%
Whittlesea (C)	5,801	14.4%
Nillumbik (S)	3,823	9.5%
Darebin (C)	3,136	7.8%
Manningham (C)	1,691	4.2%
Boroondara (C)	1,320	3.3%
Moreland (C)	1,229	3.1%
Hume (C)	1,076	2.7%
Whitehorse (C)	919	2.3%
Yarra (C)	756	1.9%
Maroondah (C)	570	1.4%
Moonee Valley (C)	472	1.2%
Brimbank (C)	438	1.1%
Yarra Ranges (S)	400	1.0%
Other LGAs	4,075	10.1%

Source: ABS Census 2016

3_Current Situation Assessment

3.4_Key Findings

The current situation assessment indicates the following key findings.

- The study area has steady population growth trending below the average growth rate of Greater Melbourne.
- Future population growth in the study area is mainly driven by Heidelberg – Rosanna SA2 which has been seeing significant densification particularly surrounding the Austin Health Precinct as well as a number of Activity Centres.
- The study area has a relatively older age profile (with exception of Heidelberg – Rosanna) with a large share of empty nesters and senior lone residents. There are also a large share of traditional families within the study area.
- The study area has a higher average household income than the Greater Melbourne average.
- Current resident workforce in Bulleen and the study area has a large share of white collar / skilled / services workers, particularly in the retail, health and professional / technical services.
- There are limited employment land uses within the study area with key employment nodes at Austin Health Precinct and Heidelberg MAC. Other key employment nodes in the surrounds mainly include a number of Activity Centres such as Doncaster Hill MAC, as well as La Trobe NEIC.
- Within the Destination Zone where the site is located, there is a large share of technicians, trade workers, and labourers, particularly in the construction sector, retail trade and food services, but a lower share of professionals in the service sectors, reflecting current industrial focused uses at Bulleen Industrial Precinct.
- The comparison between current resident workforce and local works in Bulleen indicates there appears a level of mismatch between the resident workforce's skills and employment opportunities provided locally, particularly high skill and knowledge based services:
 - Professional, scientific and technical services, and financial and insurance services: a large share of employed residents working in these industries but limited local job opportunities;
 - Education and training: a large number of workers in Bulleen but a low share of local residents employed in this industry.
- Construction is the largest economic contributor in the Destination Zone, with relatively low economic output from the service sector.
- The vast majority of the businesses in the study area are SMEs, particularly those in services industries.
- There is a relatively high levels of employment self-containment and self-sufficiency within the eastern metropolitan region with a large share of people both living and working in the region.
- However, there appears to be limited live / work links between Manningham and Banyule, despite of short distances and key employment nodes such as Austin Health Precinct and La Trobe NEIC located in Banyule, with only a small proportion of residents in Manningham travelling to Banyule for work. The delivery of NEL is likely to improve connectivity of these areas and accessibility of jobs from these key employment nodes.

Bulleen Industrial Precinct currently provides up to 1,000 direct jobs on site. Due to land acquisition for the proposed Manningham Road interchange for the NEL, it is estimated that 80 businesses would be displaced from BIP, resulting in a potential job loss of up to 830 jobs on site.

4_Future Opportunities Assessment

This section explores potential future opportunities for the site using a highest and best use assessment approach. A range of uses have been identified and examined in terms of current and future supply, likely demand and potential market gap, including:

- Industrial,
- Commercial office,
- Residential,
- Retail,
- Short-stay accommodation and convention centre,
- Health services,
- Retirement living and aged care, and
- Childcare.

The section addresses the key issues relating to the second and the fourth points of the study scope.



4_Future Opportunities Assessment

4.1_Overview

The EES indicates that the land acquisition would permanently change the land use from industrial to road corridor. This will result in displacement of most businesses at Bulleen Industrial Precinct and loss of a large number of jobs. The current design indicates from 4.5 ha up to 6.2 ha residual land after the construction of the Manningham Road interchange, which may be available for future redevelopment.

This section identifies a range of potential uses and explores possible highest and best uses on the residual land. The uses assessed include the follows:

- Industrial,
- Commercial office,
- Residential,
- Retail,
- Short-stay accommodation and convention centre,
- Health services,
- Retirement living and aged care, and
- Childcare.

The assessment of each candidate use involves current supply and likely demand in the study area and potential market gap for the site.

4.2_Industrial

Industrial Land Supply

Sitting outside of major industrial precincts of Melbourne (i.e. State Significant Industrial Precincts, SSIPs), there is limited zoned industrial land within the study area as well as both Manningham and Banyule LGAs.

As at 2017, there was a total of **13.1 gross ha zoned industrial land** in Manningham and 117.9 gross ha in Banyule. As illustrated on Map 9 overleaf, the majority of large industrial parcels are located in Heidelberg West and Bundoora.

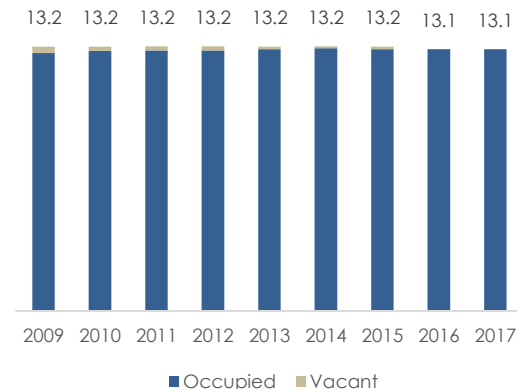
All of zoned industrial land in Manningham and 99% in Banyule were occupied as at 2017, indicating minimal existing supply in both municipalities.

It is also noted that both Manningham and Banyule have seen decline of total zoned industrial land during the past decade. This means some previously industrial zoned land has been rezoned to other uses, reflecting declining demand for industrial uses.

Industrial Land Consumption

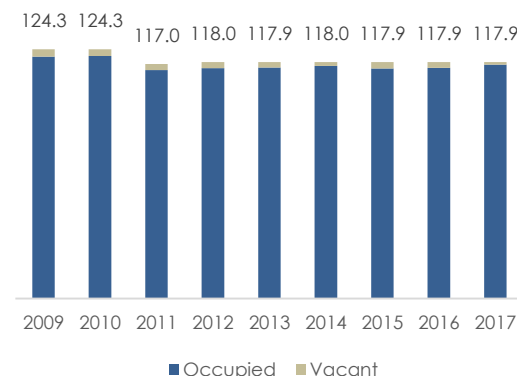
Historic data indicates that consumption of industrial land Manningham has remained at **0 ha** during 2012-17 whilst consumption in Banyule has been limited, averaging at 1.4 ha p.a. during 2012-17. This also indicates limited demand for industrial land within both municipalities.

Chart 2_Zoned Industrial Land (Gross Ha), Manningham LGA, 2009-2017



Source: UDP 2009-2017

Chart 3_Zoned Industrial Land (Gross Ha), Banyule LGA, 2009-2017



Source: UDP 2009-2017



4_Future Opportunities Assessment

Implications

Historic industrial land stock and consumption data indicates there is limited supply and minimal demand for industrial land in the study area, particularly in the Manningham LGA.

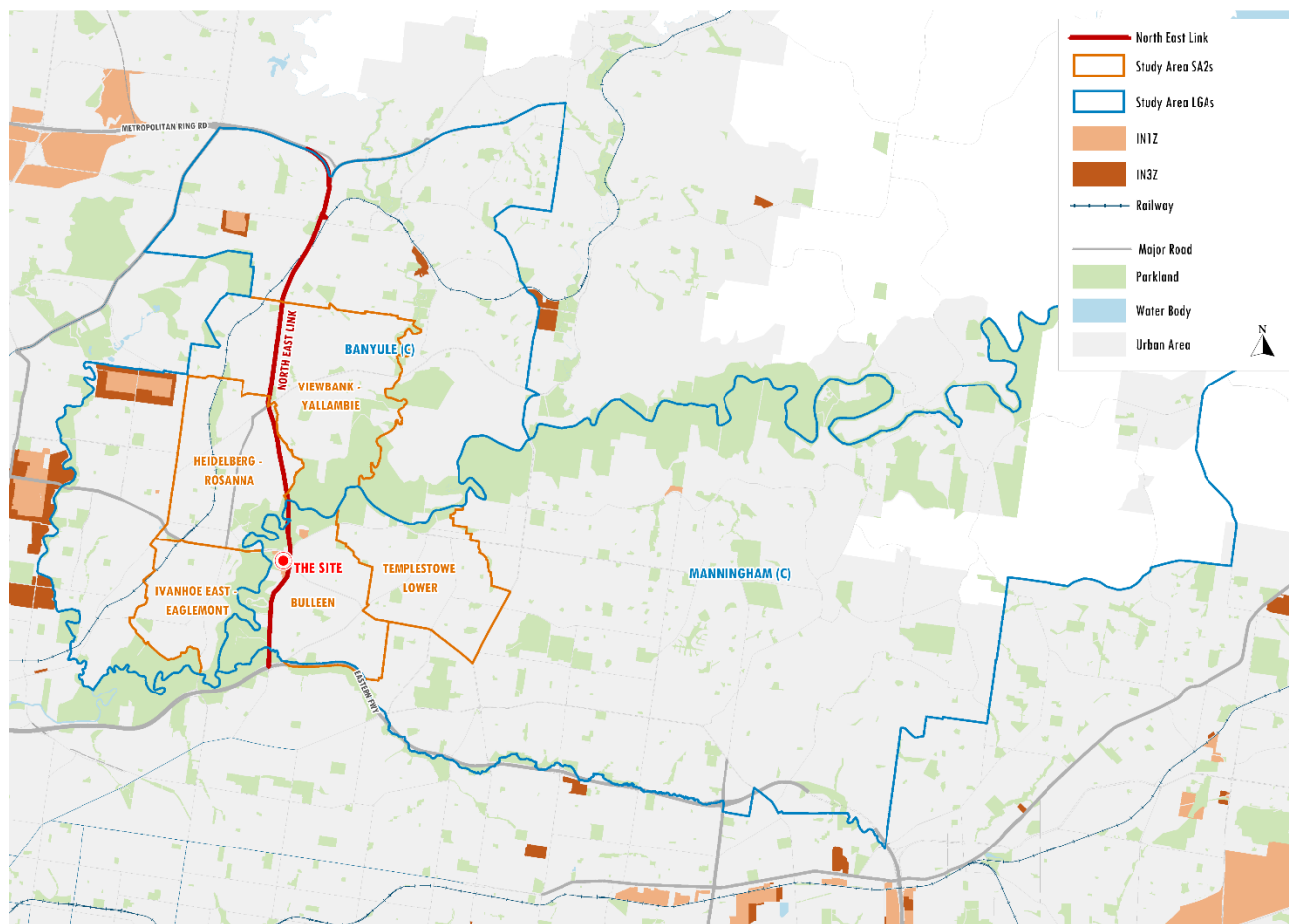
The majority of Melbourne's industrial land uses are predominantly located within the SSIPs in Melbourne's North, West and Southeast. Municipalities like Manningham and Banyule do not have a strong economic focus on industrial related sectors. Instead, as established residential areas with a number of MACs and the La Trobe NEIC, both municipalities show significant concentration of employment in the service sectors such as health, education and retail. It is unlikely that industrial uses will be able to support continuing employment growth and meet the demand of growing population in the future.

BIP is surrounded by residential areas and parklands, and the land appears to be highly constrained for industrial uses. With the construction of the proposed Manningham Road interchange for the NEL, land constraints will be exacerbated with limited and fragmented residual land for industrial uses. Current industrial uses are likely to move out to larger industrial precincts where land is larger and lower cost within clusters of established supply chain links and distribution networks.

It is also noted that Council is currently looking at opportunities to provide alternative industrial land to relocate BIP within the municipality.

The assessment indicates that industrial use does not appear to be the highest and best use for the residual land of the site.

Map 9_Industrial Land Supply, Study Area LGAs



Source: ABS, UDP 2017, MacroPlan Dimasi

4_Future Opportunities Assessment

4.3 Commercial Office

Melbourne Metropolitan Office Overview

The bulk of metropolitan Melbourne's commercial office space (particularly prime grade) is located in the CBD and city fringe precincts including Docklands, Southbank, St Kilda Road and East Melbourne.

Commercial office space outside of the CBD and city fringe tends to be located in highly accessible locations close to pools of educated workers and with relatively good access via public transport and freeway network. Much of the office space in suburban areas exists in the form of lower density suburban office / industrial parks.

Major demand drivers for non-CBD and suburban office space include lower costs, less constraint on buildings (i.e. floorplate, loading, ceiling height, etc), flexibility for expansion, purpose-built facilities, accessibility to freeways and public transport, and car parking provision.

The site is located in the upper corner of the Outer East region, sitting outside of the eastern suburban office supply hubs such as Doncaster and Box Hill.

There is approximately a total of 889,200 sqm office stock in the Outer East region as at March 2018, which is the second largest office space stock outside the CBD. During the 12 months till March 2018 the Outer East region has shown significant net absorption at approximately 46,700sqm, ahead of all other suburban office regions. This indicates generally strong demand for office floorspace in this region.

Map 10_Melbourne Metropolitan Office Regions



Source: Knight Frank Melbourne Metropolitan Office Market Overview (2018)

Table 11_Melbourne Metropolitan Office Indicators, March 2018

Region	Total Stock	Vacancy Rate	12 Month Net Absorption	Average Prime Net Face Rent	Average Prime Incentive	Average Secondary Net Face Rent	Average Prime Core Market Yield	Average Secondary Core Market Yield
	sqm	%	sqm	\$/sqm	%	\$/sqm	%	%
City Fringe	1,026,119	2.5%	-1,795	\$450-500	8-12%	\$350-400	5.00-5.50%	6.00-6.50%
Inner East	553,949	4.0%	10,495	\$380-410	10-20%	\$300-330	5.25-5.75%	6.25-6.75%
Outer East	889,207	7.6%	46,721	\$290-340	20-30%	\$220-270	6.25-6.75%	7.00-7.75%
South East	348,583	8.8%	16,231	\$250-280	20-30%	\$185-220	6.25-7.00%	7.00-7.25%
North & West	238,189	5.9%	2,129	\$310-350	15-25%	\$180-240	5.75-6.50%	7.00-7.75%
Total	3,056,047	5.2%	73,781	\$356	19%	\$270	6.00%	6.93%

Source: Knight Frank Melbourne Metropolitan Office Market Overview (2018)



4_Future Opportunities Assessment

Commercial Office Supply

Within Study Area

The office market within the study area remains largely undeveloped with very limited provision of prime office stock. The vast majority of commercial office space are commercial shopfronts (e.g. bank branches, medical centres, accountants, travel agents) in activity centres and commercial suites co-located with industrial units and warehouses. This commercial office space is usually small scale, relatively low quality and largely categorised as 'B' or 'C' Grade.

There are two existing office projects identified within the study area LGAs, both of which are serviced office.

Table 12_Existing Office Supply, Study Area LGAs

Project Name	Address	Suburb	Type
Regus Heidelberg	486 Lower Heidelberg Rd	Heidelberg	Serviced Office
Victory Realty	135 Bamfield Rd	Heidelberg West	Serviced Office

Source: Various Websites

Table 13_Potential Office Pipeline, Study Area LGAs, 2019+

Project Name	Address	Suburb	Status	Est. GFA sqm	Est. Completion
Berkeley Street Office Building	13 Berkeley St	Doncaster	DA	~3,000	2020
Upper Heidelberg Road Mixed Use Development	154 Upper Heidelberg Rd	Ivanhoe	DA	~900	2020
Lower Heidelberg Road Mixed Use Development	244 Lower Heidelberg Rd	Ivanhoe East	DA	230	2020

Source: Cordell

There appears to be limited pipeline for major office supply within the study area LGAs. There are three projects currently approved for office development as listed in table 12. Two of them are mid-rise mixed use development which comprise of small scale office space whilst the Berkeley Street project includes a four-storey office building. There is limited information regarding to the floorspace of these projects. However, based on available information provided as well as various general assumptions, it is estimated these proposed projects may provide approximately **4,130 sqm GFA** office floorspace.

There are a few other proposed projects with planned office spaces are currently applying development permits. Most of them are expected to be small scale and located either in Banyule or Doncaster. It is noted the proposed future expansion for Doncaster SC includes up to 18,000 sqm new office space which requires planning permit.

Outside Study Area

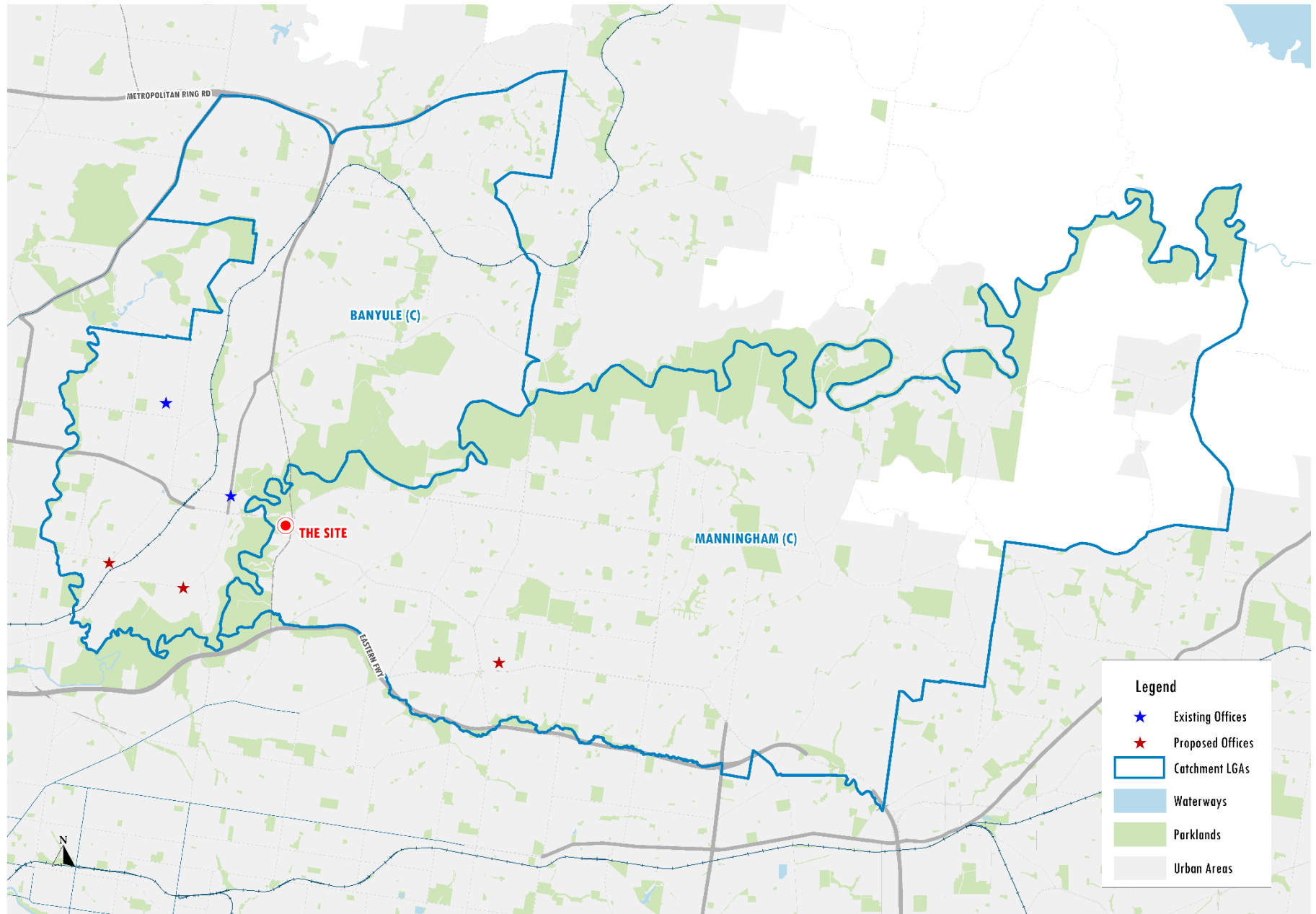
The current most commanding prime commercial office development in Northern Melbourne is the University Hill development located in Bundoora, approximately 9 km north of the site. University Hill provides campus style office accommodation across a number of standalone office buildings. The GFA of these buildings ranges from 2,000 sqm up to 6,125 sqm, totalling 32,300 sqm GFA office floor space.

Most of the office space at University Hill is sold or leased, except the recently completed building 1 Janefield Drive. Completed in 2018, 1 Janefield Drive has a total GFA of 4,775 sqm and is currently leasing with flexible floor plates from 275 sqm to the whole floor of 2,250 sqm.

Current annual rents for commercial office space at University Hill are largely between \$200/sqm (NLA) to \$330/sqm. Historic sales prices were between \$3,800/sqm (NLA) to \$5,000/sqm.

Current tenants at University Hill include some high-profile local, national and international companies across a variety of industries such as health, education, finance and insurance, professional services, technologies and personal services.

Plans for University Hill show the future development of office space to be built at the northern section of the precinct. Upon completion there will be 45,000 sqm of commercial space in the precinct hosting 155 businesses and employing 4,000 people.



4_Future Opportunities Assessment

Shared Office / Coworking Space

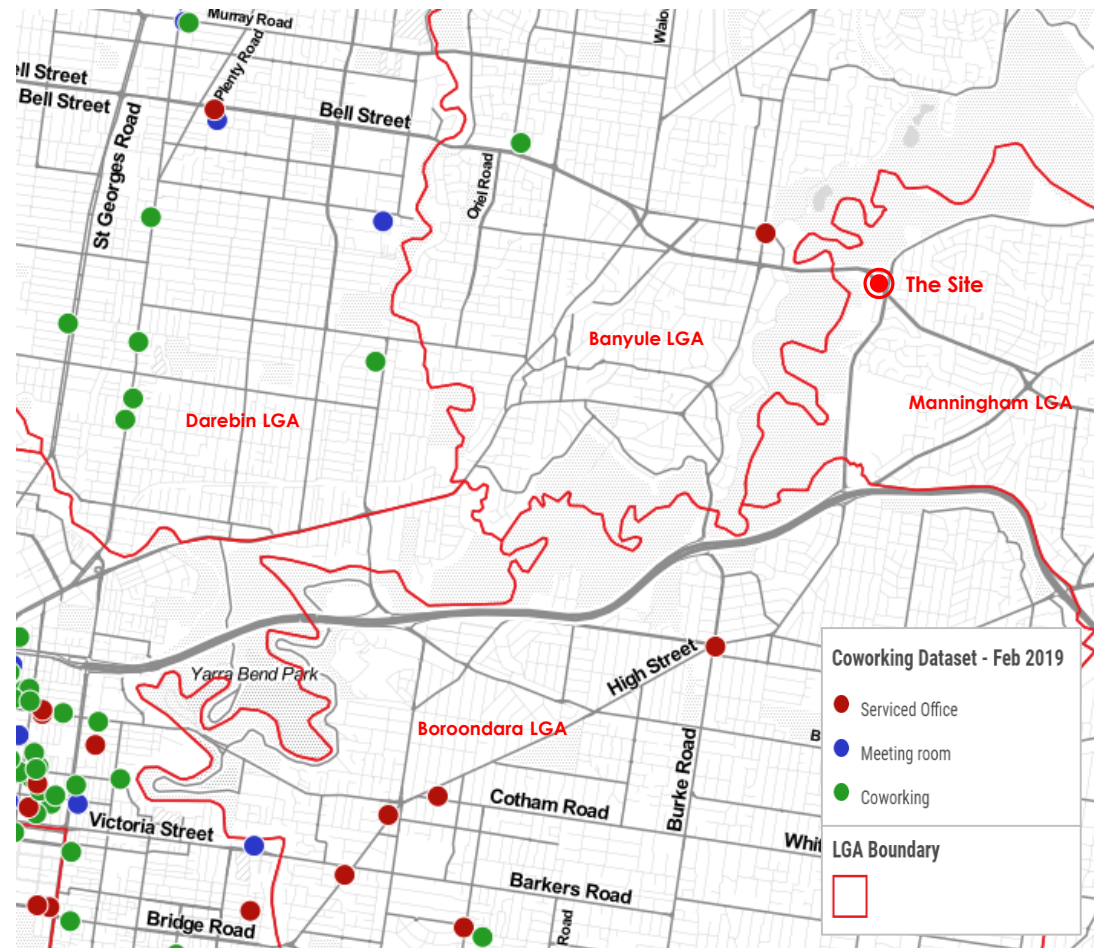
Shared office / coworking space is a relatively new concept to the Australian office market. It is a business services provision model for the use of working spaces by self-employed workers, freelance workers, start-up businesses and/or small and medium-sized enterprises (SMEs).

The owner of a shared office / co-working space provides a work environment as well as office equipment and amenities found in a typical office. Typical features of co-working facilities include:

- Shared work spaces;
- 24/7 access;
- Reservable / rentable conference / boardrooms;
- Wi-Fi;
- Communal printer / copier / fax;
- Shared kitchens, bathrooms and lounges.

MacroPlan has undertaken extensive research into coworking and found that the majority of existing coworking space is located in the Melbourne CBD and inner eastern suburbs. There is a low level of coworking and private office space provision in the north and east including Heidelberg, Heidelberg West and Kew East.

Map 12_Coworking Space Supply, Study Area LGAs, 2018



Source: Various Websites, MacroPlan Dimasi 2019



4_Future Opportunities Assessment

Commercial Office Demand

As discussed the Current Situation Assessment section, the study area indicates the following key demand drivers for commercial office space.

- With a number of key employment nodes and activity centres located within the study area and surround, there is a relatively high level of job density and employment servicing ratio, which may support clustering of employment.
- There is a strong focus on the health sector due to the Austin Health Precinct which is located only 2km west of the site and directly connected via Manningham Road / Banksia Street.
- Whilst employment within the overall study area is more service based, Bulleen Industrial Precinct is currently used for industrial / commercial uses in 1-2 storey warehouse built form. However, industrial uses are not likely to support continuing employment growth and meet the demand of growing population in the future.
- There is a relatively high levels of employment self-containment and self-sufficiency within the eastern metropolitan region, indicating people tend to live close to their work.
- The vast majority of businesses in the study area are SMEs who may require more flexible office spaces. These SMEs may include a large number of local businesses, business services, population based services, and medical services / allied health supported by the health precinct.
- However, there is very limited employment land and adequate office space offerings within the study area.

In order to estimate the number of workers who may require office space, a cross-tabulation analysis has been conducted for the study area. For analysis purpose, office based workers can be defined as workers who work in the industries in the occupations as listed below:

Industries

- Information media and telecommunications,
- Financial and insurance services,
- Rental, hiring and real estate services,
- Professional, scientific and technical services,
- Administrative and support services,
- Public administration and safety,
- Education and training, and
- Health care and social assistance;

Occupations

- Managers,
- Professionals, and
- Clerical and administrative workers.

It is also noted that a proportion of workers in the education / training and health care / social assistance industries work in hospitals, communities or universities, schools and other educational campus, who may not require commercial office space. In this case, weights have been applied to adjust the number of office-based workers in these sectors.

Based on the definition above, the current office-based workers in the study area is estimated at approximately **7,295 persons** or **31.3%** of total workers.



4_Future Opportunities Assessment

Demand / Supply Gap

To estimate potential market gap for commercial office space within the study area, the following assumptions have been made:

- Employee demand for office based jobs increases in line with population growth through to 2036;
- Current average employment servicing ratio of the study area remains unchanged at 0.34 jobs per person during the forecast period;
- Current share of office workers remains unchanged at 31.3% during the forecast period;
- Office floorspace requirement averages at 30 sqm GFA per worker.

Based on the above assumptions, it is estimated that the theoretical demand for additional office floorspace within the study area is approximately 24,700 sqm GFA by 2036.

Considering approximately 4,130 sqm GFA potential supply in the foreseeable future, there is estimated up to **20,000 sqm GFA** theoretical market gap for commercial office space within the study area by 2036.

Given limited employment land available in the study area and surrounds and the site's strategic location, there is great potential for the site to absorb a large portion of this demand / supply gap. In particular, flexible spaces and/or coworking spaces can be made available to attract SEMs. It is important to seek pre-commitment from a coworking space operator and understand their specific requirements.

Table 14_ Theoretical Demand / Supply Gap for Commercial Office, Study Area, 2016-36

Study Area	2016-21	2021-26	2026-31	2031-36	Total 2016-36
Population Growth	4,557	2,593	2,171	2,271	11,591
Employment Servicing Ratio (job/person)					0.34
Workers Growth	1,551	883	739	773	3,946
Office Based Workers (%)					31.3%
Office Workers Growth	485	276	231	242	1,233
Office Floorspace Ratio (sqm GFA/worker)					20.0
Additional Office Floorspace Demand (sqm GFA)	9,698	5,518	4,620	4,833	24,669
Projected Office Floorspace Supply (sqm GFA)					4,130
Theoretical Demand / Supply Gap					20,539

Source: ABS Census 2016, Forecast.id, MacroPlan Dimasi



4_Future Opportunities Assessment

4.4_Residential

Current Dwelling Mix

According to the 2016 census, there are a total of **26,532 private dwellings** located within the five SA2s of the study area.

This equates to dwelling density at approximately 7.9 dwellings per ha across the study area SA2s. Bulleen has relatively low dwelling density compared to the study area average, whilst Heidelberg – Rosanna has an overall high dwelling density due to ongoing densification within the area particularly around Heidelberg Activity Centre, Heidelberg Railway Station and Austin Health Precinct.

The majority of current dwellings within the study area as well as both LGAs are separate houses. In particular, over 80% of current dwellings in Bulleen are separate houses. However, there has been increasing dwelling diversification in Heidelberg – Rosanna, with approximately 18% semi-detached / townhouses and 17% flats / units / apartments.

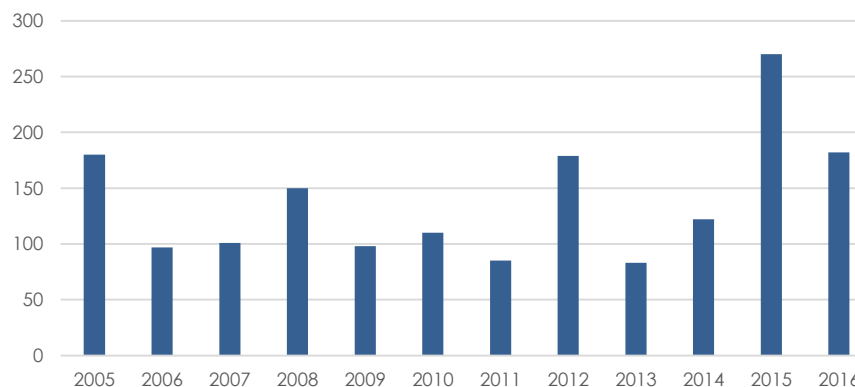
According to DELWP's Housing Development Data (HDD), there has been increasing housing development in the study area in recent years as presented in chart 4. Net dwelling creation takes both the number of dwellings developed and the number of dwelling demolished into considerations and reflects the actual development rate within an area. During the five years period from 2012 to 2016, the study area averaged at 167 net dwellings created p.a., 18 of which were located in Bulleen.

Table 15_Current Dwelling Situation, Study Area, 2016

2016	Bulleen	Templestowe Lower	Heidelberg - Rosanna	Ivanhoe East - Eaglemont	Viewbank - Yallambie	Banyule (C)	Manningham (C)	Greater Melbourne
Total Private Dwellings	4,506	5,316	6,399	3,057	7,254	50,243	45,414	1,834,361
<i>Dwelling Density (dwellings/ha)</i>	6.8	9.0	10.0	7.1	7.1	8.0	4.0	1.8
Separate House	80.4%	80.1%	63.7%	77.8%	84.0%	75.9%	75.4%	66.1%
Semi-detached / Townhouse	12.4%	17.7%	18.1%	3.8%	15.3%	16.4%	16.3%	16.9%
Flat / Unit / Apartment	6.8%	1.1%	17.3%	17.9%	0.2%	7.0%	7.7%	16.1%
Other	0.3%	1.1%	0.9%	0.5%	0.5%	0.6%	0.6%	1.0%

Source: ABS Census 2016, Macroplan Dimasi

Chart 4_Net Dwelling Creation, Study Area, 2005-2016



Source: DELWP HDD



4_Future Opportunities Assessment

Housing Tenure & Affordability

The study area has a generally higher level of household income and home wealth. There is also a relatively high level of home ownership in the study area.

Approximately 53% of households in Bulleen own their homes outright, which is significantly higher than the Greater Melbourne average, plus another 27% owning their homes with a mortgage. There is a relatively low share of renters in Bulleen.

Again, Heidelberg – Rosanna has different characteristics compared to other SA2s in the study area, with higher share of renters but lower share of home owners. This is consistent with its socio-demographic profile and dwelling mix.

The level of mortgage stress of households within the study area are generally lower than that of the Greater Melbourne area, despite higher median mortgage repayments. This may reflect generally higher household income among residents within the area.

Rental stress in the study area is also much lower than the Greater Melbourne average, despite higher than average median rent payments. The exception to this can be observed in Heidelberg-Rosanna, where rental stress and median rent is largely in line with the Greater Melbourne average, reflecting a number of key workers (e.g. health workers) living in the areas within proximity to their work.

Table 16_Housing Tenure & Affordability, Study Area, 2016

2016	Bulleen	Templestowe Lower	Heidelberg - Rosanna	Ivanhoe East - Eaglemont	Viewbank - Yallambie	Banyule (C)	Manningham (C)	Greater Melbourne
Housing Tenure (% households)								
Owned outright	53.1%	50.0%	38.2%	47.6%	41.1%	38.4%	47.0%	31.4%
Owned with a mortgage	26.7%	32.7%	30.2%	32.3%	37.3%	35.7%	33.0%	37.1%
Rented	19.9%	17.1%	30.7%	20.0%	21.0%	25.5%	19.1%	30.9%
Other	0.3%	0.2%	0.9%	0.1%	0.6%	0.4%	0.9%	0.6%
Mortgage Stress								
Median monthly mortgage repayments	\$2,000	\$2,064	\$2,106	\$2,500	\$1,950	\$1,950	\$2,050	\$1,800
Households with mortgage ≥ 30% of household income ¹	6.5%	8.2%	5.0%	6.0%	6.4%	6.5%	8.3%	8.1%
Rent Stress								
Median weekly rent	\$400	\$420	\$361	\$400	\$350	\$350	\$415	\$350
Households with rent ≥ 30% of household income ²	6.0%	6.0%	9.4%	5.9%	6.0%	8.2%	6.9%	11.0%

Source: ABS Census 2016, Macroplan Dimasi

¹ Proportions in this table are calculated by taking the number of households who own their dwelling, and whose mortgage payments were 30% or more of an imputed income measure and expressing this number as a proportion of the total number of households in an area, including those households which were renting their dwelling (excluding the small proportion of visitor only and other non-classifiable households).

² Proportions in this table are calculated by taking the number of households whose rent payments were 30% or more of an imputed income measure and expressing this number as a proportion of the total number of households in an area, including those households which are not renting their dwelling (excluding the small proportion of visitor only and other non-classifiable households).



4_Future Opportunities Assessment

Residential Sales & Pricing

In 2018, there were a total of 614 house sales and 465 unit sales reported in all suburbs in the study area.

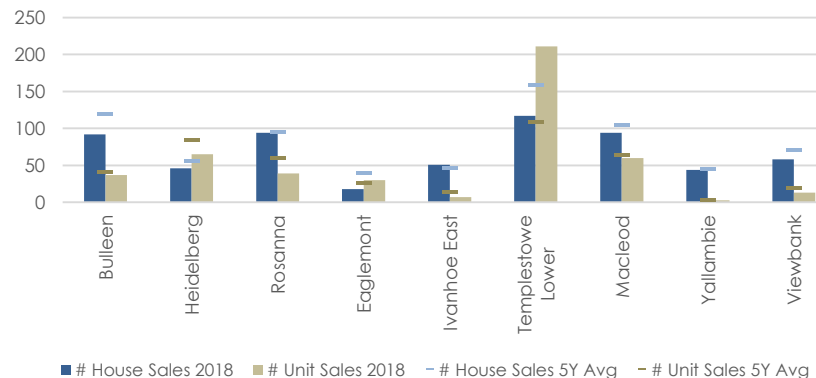
House sales appear to slow down in 2018 sitting behind the 5-year average sales rate of 737 houses p.a., whilst the number of units sold in 2018 exceeds the 5-year average of 420 units p.a. This is mainly driven by a large number unit sales in Templestowe Lower.

There were 92 houses and 37 units sold in Bulleen in 2018. This also appears to be slightly underperformed compared to the 5-year average sales rates of 120 houses and 41 units p.a. respectively.

Median sales prices (both houses and units) in most suburbs within the study area were recorded higher than the Melbourne metropolitan averages in 2018. This is particularly significant in some established affluent residential suburbs such as Eaglemont and Ivanhoe East, where median house prices were between \$1.7 to \$2 million. All suburbs have experiences solid price growth during the last 5 years.

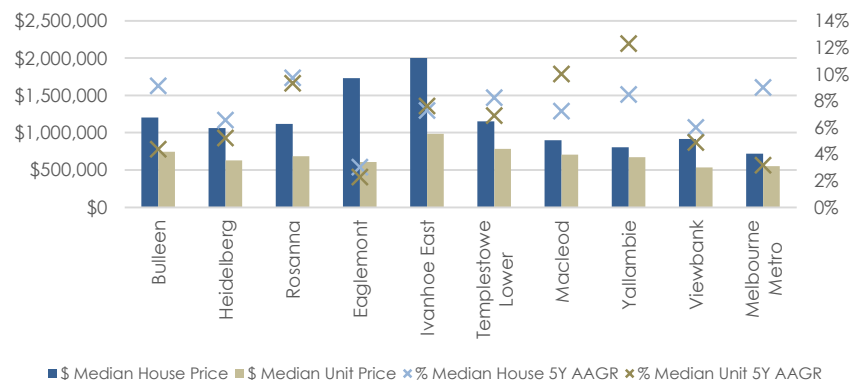
Median house price in Bulleen was reported at \$1.2 million in 2018 and median unit price was at \$745,000 during the same year, growing by 9.1% p.a. and 4.4% p.a. on average compared to five years ago. Both sit above the Melbourne metropolitan averages of \$720,000 and \$550,000 for houses and units respectively.

Chart 5_Number of Sales, Study Area, 2018



Source: RP Data, Macropian Dimasi

Chart 6_Median Sales Prices & Average Annual Growth Rates, Study Area, 2018



Source: RP Data, Macropian Dimasi



4_Future Opportunities Assessment

Potential Dwelling Supply

There were a total of 1,410 dwelling approvals in the study area during the past three years from 2016 to 2018, of which 928 dwelling approvals or 66% were other residential including semi-detached, townhouses, flats, units and apartments.

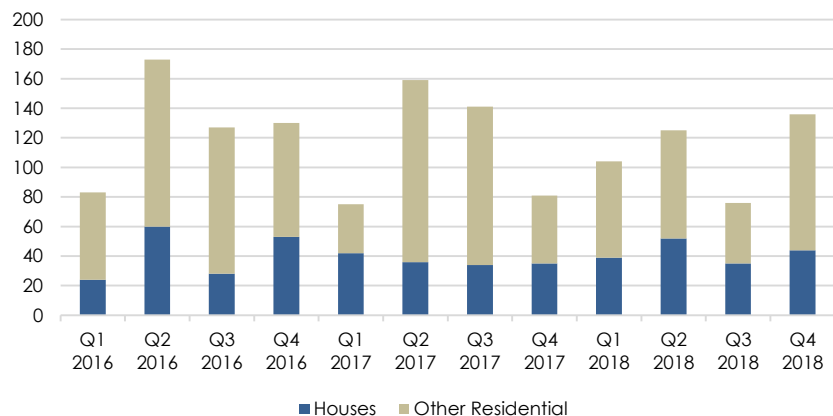
The Bullen SA2 recorded a total of 302 dwelling approvals during the same period, 176 (58%) of which were other residential products. This averaged at approximately 100 dwelling approvals p.a. on average during the past three years.

A majority of dwelling approvals within the study area were other residential dwellings, indicating an increasing diversification and trend towards medium to high density residential offerings.

It is also reported there are a total of **368 dwellings** in the development pipeline (i.e. commenced or firm) in the study area. This is largely driven by developments in Heidelberg – Rosanna and Ivanhoe East – Eaglemont. There is no residential projects in the pipeline in Bulleen.

Another 848 dwellings are reported potentially to be developed in the study area which have either been granted development approval or have begun the development application process. Again, a large number of these proposed dwellings are located in Heidelberg – Rosanna. In total there is estimated to be **1,216 potential dwellings** proposed in the study area.

Chart 7_Dwelling Approvals, Study Area, 2016-2018



Source: ABS Stat, Macroplan Dimasi

Table 17_Potential Dwellings Pipeline, Study Area, 2019+

SA2 By Commencement	Commenced 2019	Firm 2019	Total Pipeline	Possible			Total Potential
				2019	2020	2021	
Bulleen	0	0	0	50	72	6	128
Templestowe Lower	0	19	19	67	31	3	120
Heidelberg - Rosanna	35	191	226	301	184	6	717
Ivanhoe East - Eaglemont	118	0	118	51	0	0	169
Viewbank - Yallambie	5	0	5	34	43	0	82
Total	158	210	368	503	330	15	1,216

Source: Cordell, Macroplan Dimasi



4_Future Opportunities Assessment

Projected Dwelling Demand

According to forecast.id, population growth in the study area is expected to grow steadily during the short-mid term future. The projected ERP of the study area will grow to approximately 80,000 in 2036, an increase of over 10,000 from 2016. In order to accommodate this growth, an additional **5,247 dwellings** will be required by 2036 in the study area, or 262 dwellings per annum on average.

Demand / Supply Gap

To estimate a potential supply and demand gap for residential products, the following assumptions regarding to future supply are considered:

- The numbers of dwellings in the foreseen pipeline;
- The average net dwelling creation beyond the foreseen pipeline.

The gap analysis indicates that there is likely to be a market gap of approximately **524 dwellings** in Bulleen and up to **1,556 dwellings** in the overall study area during the forecast period of 2016-36. This potential gap appears to be more significant during the short to mid term future during 2016-26 with a low level of foreseeable future supply particularly in Bulleen. However this gap is likely to moderate in the long term due to low population growth in the area.

Given the site's locational attributes, proximity to the Yarra River and parklands, and improved transport connectivity with the NEL, there appears to be great potential for the site to accommodate a large portion of this demand / supply gap.

Table 18_Projected Dwelling Demand, Study Area, 2016-36

SA2	2016-21	2021-26	2026-31	2031-36	Total 2016-36	2016-36 pa
Bulleen	378	294	140	140	952	48
Templestowe Lower	214	127	94	100	535	27
Heidelberg - Rosanna	946	612	598	595	2,751	138
Ivanhoe East - Eaglemont	148	60	68	79	355	18
Viewbank - Yallambie	184	116	169	185	654	33
Study Area SA2s	1,870	1,209	1,069	1,099	5,247	262

Source: Forecast.id, Macroplan Dimasi

Table 19_Theoretical Residential Demand / Supply Gap, Bulleen & Study Area, 2016-2036

	2016-21	2021-26	2026-31	2031-36	Total 2016-36	2016-36 pa
Projected Additional Dwelling Demand						
Bulleen		378	294	140	952	48
Total Study Area SA2s		1,870	1,209	1,069	5,247	262
Projected Additional Dwelling Supply						
Bulleen		128	100	100	428	21
Total Study Area SA2s		1,216	825	825	3,691	185
Theoretical Demand / Supply Gap						
Bulleen		250	194	40	524	26
Total Study Area SA2s		654	384	274	1,556	78

Source: ABS, Cordell, DELWP HDD, Forecast.id, Macroplan Dimasi



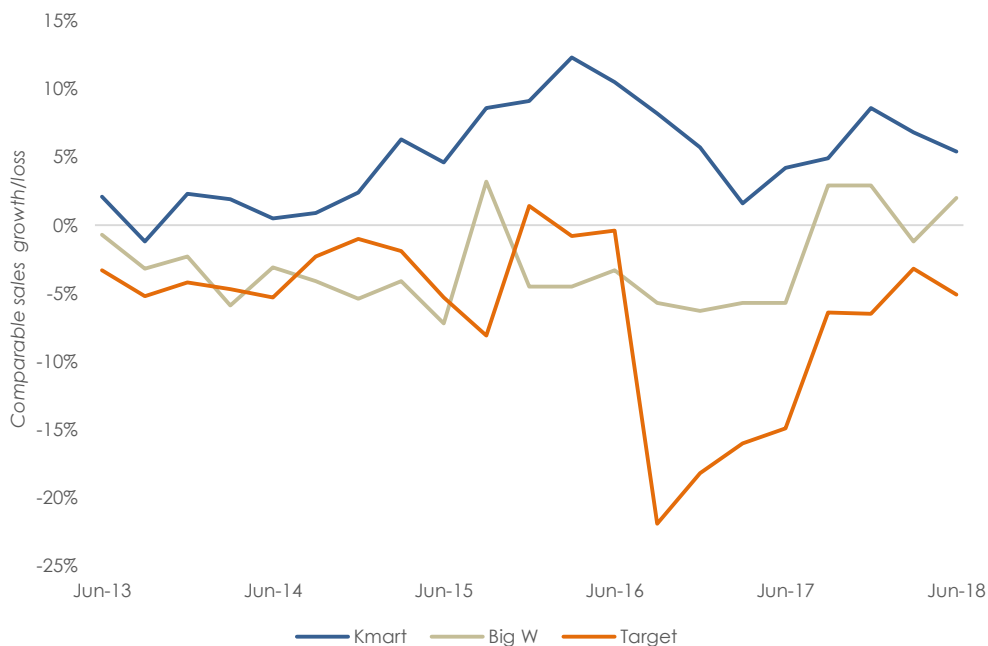
4_Future Opportunities Assessment

4.5_Retail

While discount department stores have been a popular retail format in the past, they have experienced a tough trading environment over recent years and is one of the sectors most likely to be vulnerable to digital disruption. The discretionary spending market has generally been in decline over the past decade, particularly when compared to the food retail market. In addition, growth in online retailing and the introduction of a range of international entrants in the Australian market has put increasing pressure on the sales and profit performance of discount department stores. For example, the recent introduction of Amazon in Australia, whose offer and pricing points was described as 'patchy' in its opening, contained many similar discount department stores product lines at a cheaper cost.

As a result, comparable store sales (sales minus incremental increases as a result of new store openings) have been flat or in decline for a number of years. In FY18, comparable sales growth of Big W was 0.9%, its first positive result in a decade, while Target continued to lose ground, with comparable sales contracting by 5.1%. Kmart has easily been the strongest operator in the discount department store market, and has consistently outstripped its competitors over the last 5 years (refer Chart 7) achieving a comparable sales growth rate of 5.4%.

Chart 8_Major DDS Brands Comparable Sales Growth, FY14-FY18



Source: Wesfarmers Annual Reports, Woolworths Group Annual Reports, MacroPlan Dimasi



4_Future Opportunities Assessment

Big W is actively trying to reduce its physical footprint, recently announcing the closure of 30 stores over the next 3 years, meanwhile Target, has no active plans to increase its store footprint. Therefore, it is considered highly unlikely that Big W or Target would consider opening a store at subject site. Kmart is likely the only plausible discount department stores operator that would consider the site. A high level gap analysis indicates the subject site could support the discount department store anchor, given that the nearest Kmart locations are located at Northland SC (7.1 km to the north-west), Northcote Plaza (11.1 km to the west) and at Stockland the Pines (8.2 km to the east).

A Kmart location at the subject site however, will also depend on whether the development can attract a supermarket anchor. Discount department stores, typically operate with at least one major supermarket operator such as Woolworths, Coles and Aldi, which has the effect of intensifying the offer of the centre. This allows the sub-regional centres to more effectively serve the convenience-oriented needs of its trade area. However, all major supermarket operators are represented, given the proximity of the subject site to the Heidelberg Major Activity Centre. One of the core functions of the Heidelberg Activity Centre is to serve the retail needs of residents in the surrounding area and encompasses Warringal SC – a double supermarket based centre anchored by Coles and Aldi. A Woolworths development is currently under construction at the southern end of the Activity Centre, replacing the dated store with a new 4,250 sq.m Woolworths supermarket.

The Heidelberg Major Activity Centre also boasts a busy and vibrant retail strip, predominantly situated on Burgundy Street, and includes numerous restaurants, cafes, pharmacies, newsagents, fresh food stores (including a Leo's Fine Food and Wine outlet), independent apparel retailers and professional services businesses. The surrounding retail provision adds critical mass and broadens the draw of the Warringal SC, making it an attractive shopping destination for residents in the surrounding region.

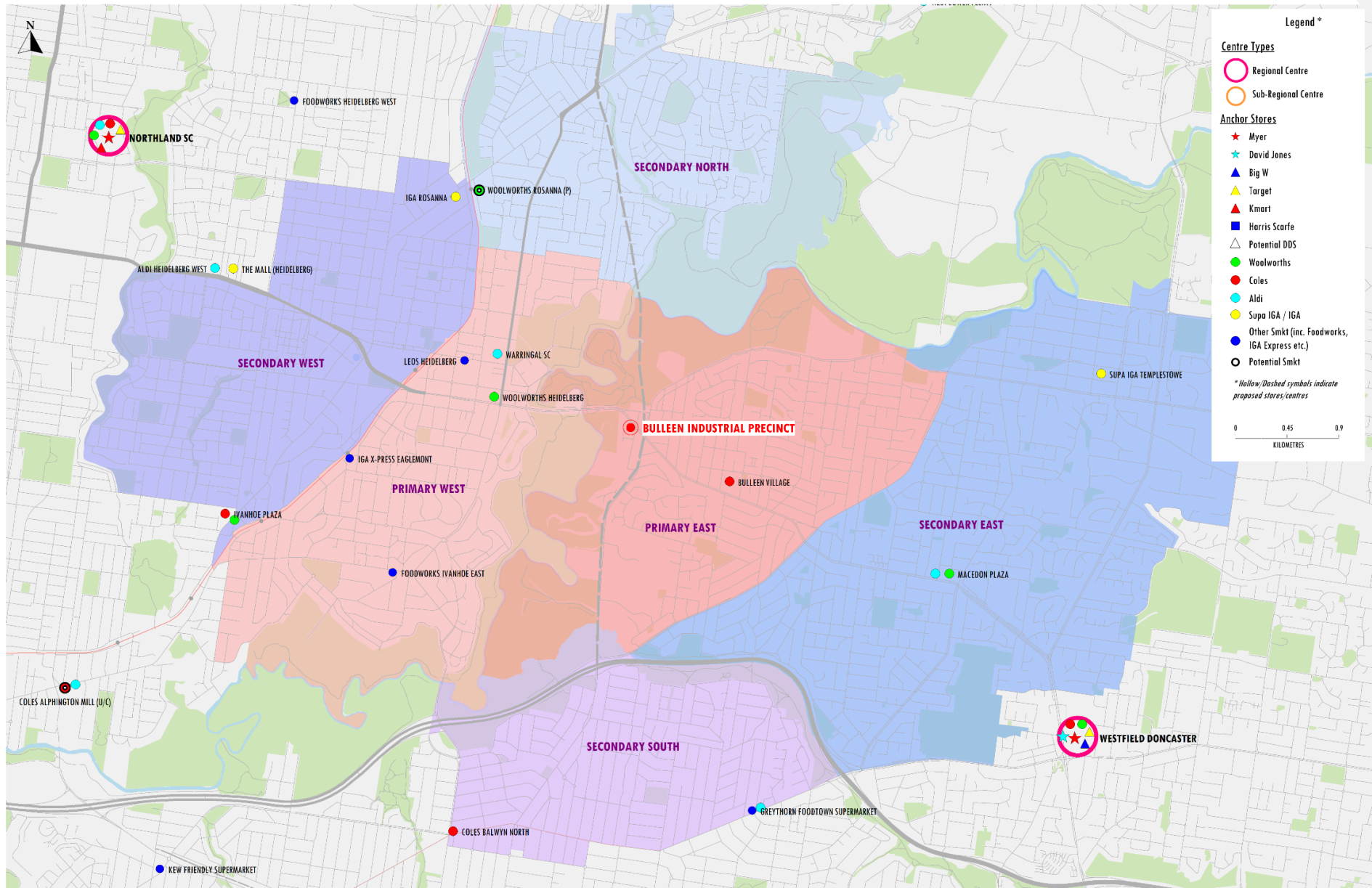
To the east of the subject site, Coles is represented at Bulleen Plaza (1.2 km to the east), while Woolworths and Aldi trade at Lower Templestowe, around 3 km from the subject site.

It is noted that Westfield Doncaster SC is the dominant Super Regional Shopping Centre located approximately 4.5 km south-east of the site. The recently approved Amendment C104 will allow the proposed expansion of approximately 43,000 sqm of retail floor space.

For a traditional retail development to work at the subject site, it is imperative that the development meets the anchor criteria. While a high-level gap analysis indicates that a Kmart can be accommodated, it is likely the discount department store will only be attracted to the site if it is co-located with a major supermarket anchor.

Map 13 overleaf illustrates an indicative trade area for the subject site, if it were to attract Kmart and a major supermarket anchor, as well as the surrounding network of competitive retail facilities.

Map 13 Traditional Retail Trade Area



Source: MacroPlan Dimasi



4_Future Opportunities Assessment

Table 19 shows the recent and projected resident population levels for the defined trade area. The main trade area population is estimated at over 99,000 at 2019, including almost 27,500 in the combined primary sectors. The main trade area population is projected to reach 114,000 at 2031, reflecting an average annual growth rate of 1.2% over the period.

Table 20 overleaf presents projections of total retail spending generated by the main trade area population over the period from 2018 to 2031, while Tables 21 details the estimated retail spending capacity of the main trade area by retail category. Spending forecasts are presented in inflated, (i.e. 1.5% inflation per annum) and include GST.

The retail expenditure capacity of the main trade area is estimated to grow from \$1.5 billion at 2019 to almost \$2.4 billion at 2031, at an average annual growth rate of 3.7% over the forecast period. FLG expenditure, which is the main retail category for supermarket is projected to increase to \$976 million at 2031.

In conclusion, it is likely a Kmart may be supportable at the site, however, it is dependent on the ability to attract a major supermarket operator as a co-anchor.

Table 20_Main Trade Area Population, 2011-31

Trade area sector	Estimated population			Forecast population		
	2011	2016	2019	2021	2026	2031
Primary sectors						
• West	12,710	13,260	14,460	15,260	16,760	18,010
• East	<u>12,130</u>	<u>12,410</u>	<u>13,010</u>	<u>13,410</u>	<u>14,160</u>	<u>14,410</u>
Primary	24,840	25,670	27,470	28,670	30,920	32,420
Secondary sectors						
• North	12,520	13,300	13,780	14,100	14,800	15,600
• East	25,710	26,550	27,750	28,550	30,300	31,800
• South	10,940	11,280	11,520	11,680	11,930	12,180
• West	<u>16,590</u>	<u>17,550</u>	<u>18,750</u>	<u>19,550</u>	<u>21,050</u>	<u>22,050</u>
Total secondary	65,760	68,680	71,800	73,880	78,080	81,630
Main trade area	90,600	94,350	99,270	102,550	109,000	114,050

Trade area sector	Average annual growth (no.)					
	2011-16	2016-19	2019-21	2021-26	2026-31	
Primary sectors						
• West		110	400	400	300	250
• East		<u>56</u>	<u>200</u>	<u>200</u>	<u>150</u>	<u>50</u>
Primary		166	600	600	450	300
Secondary sectors						
• North		156	160	160	140	160
• East		168	400	400	350	300
• South		68	80	80	50	50
• West		<u>192</u>	<u>400</u>	<u>400</u>	<u>300</u>	<u>200</u>
Total secondary		584	1,040	1,040	840	710
Main trade area		750	1,640	1,640	1,290	1,010

Trade area sector	Average annual growth (%)					
	2011-16	2016-19	2019-21	2021-26	2026-31	
Primary sectors						
• West		0.9%	2.9%	2.7%	1.9%	1.4%
• East		<u>0.5%</u>	<u>1.6%</u>	<u>1.5%</u>	<u>1.1%</u>	<u>0.4%</u>
Primary		0.7%	2.3%	2.2%	1.5%	1.0%
Secondary sectors						
• North		1.2%	1.2%	1.2%	1.0%	1.1%
• East		0.6%	1.5%	1.4%	1.2%	1.0%
• South		0.6%	0.7%	0.7%	0.4%	0.4%
• West		<u>1.1%</u>	<u>2.2%</u>	<u>2.1%</u>	<u>1.5%</u>	<u>0.9%</u>
Total secondary		0.9%	1.5%	1.4%	1.1%	0.9%
Main trade area		0.8%	1.7%	1.6%	1.2%	0.9%

Source: ABS Census 2016, VIF 2016, Forecast.id, MacroPlan Dimasi



4_Future Opportunities Assessment

Table 21_Main Trade Area Retail Expenditure (\$M), 2019-31

Year ending June	Primary sectors		Primary sectors	Secondary sectors			Main TA	
	West	East		North	East	South		West
2019	245	188	433	208	413	184	286	1,524
2020	258	195	453	216	429	189	300	1,587
2021	271	203	474	224	446	195	314	1,653
2022	284	211	495	231	463	201	327	1,717
2023	297	218	515	239	480	207	340	1,781
2024	310	226	536	248	497	213	353	1,847
2025	323	234	557	256	515	219	367	1,915
2026	337	242	580	265	534	225	382	1,985
2027	351	250	601	274	553	231	396	2,055
2028	365	257	622	284	572	238	409	2,125
2029	379	264	643	294	591	245	423	2,196
2030	394	271	666	304	612	252	437	2,270
2031	409	279	688	314	633	259	452	2,346
<u>Average annual growth (\$M)</u>								
2019-2031	13.7	7.6	21.3	8.9	18.3	6.3	13.8	68.5
<u>Average annual growth (%)</u>								
2019-2031	4.4%	3.4%	3.9%	3.5%	3.6%	2.9%	3.9%	3.7%

Source: MarketInfo, MacroPlan Dimasi

Table 22_Main Trade Area Retail Expenditure by Category (\$M), 2019-31

Year ending June	FLG	Food catering	Apparel	Household goods	Leisure	General retail	Retail services	Total retail
2020	655	218	179	296	71	119	50	1,587
2021	682	228	185	308	73	123	52	1,653
2022	709	238	192	319	76	128	54	1,717
2023	736	249	198	331	79	132	57	1,781
2024	764	260	205	342	81	136	59	1,847
2025	793	271	211	355	84	141	61	1,915
2026	823	282	218	367	87	145	63	1,985
2027	852	294	225	379	89	150	66	2,055
2028	882	306	232	392	92	154	68	2,125
2029	913	318	239	404	95	159	70	2,196
2030	944	330	246	417	97	163	73	2,270
2031	976	343	253	430	100	168	75	2,346
<u>Average annual growth (\$M)</u>								
2019-2031	29.0	11.3	6.7	12.1	2.7	4.4	2.2	68.5
<u>Average annual growth (%)</u>								
2019-2031	3.7%	4.3%	3.2%	3.5%	3.2%	3.2%	3.8%	3.7%

Source: MarketInfo, MacroPlan Dimasi



4_Future Opportunities Assessment

4.6 Short-Stay Accommodation & Convention Centre

Tourism Market

The study area experienced fluctuation in visitation numbers during the past decade. During the past five years between 2014 and 2018, the total visitation to both study area LGAs averaged at approximately **1 million trips p.a.**, over 70% of which were daytrips. From 2014 to 2018, total visitation has increased by 8,300 trips p.a. on average.

There has been fluctuation in the number of visitor nights as well, with the last five years averaging at approximately 2.8 million visitor nights within both study area LGAs. From 2014 to 2018, total visitor nights has grown by 181,200 nights p.a. on average.

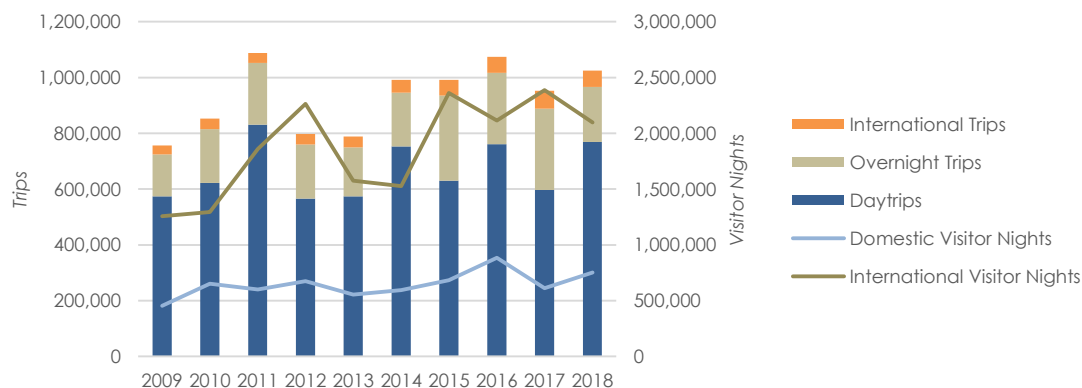
This equates to an average length of stay at 2.9 nights for domestic overnight visitors and 37.2 nights for international visitors during 2014-18.

Reasons for Visit

During the five years from 2014 to 2018, an average of 40% of all day-trippers travelled to the study area LGAs for visiting friends and relatives, followed by 28% visited for holiday. There were also 20% day-trippers visited for other reasons including education, employment, medical reasons and others, plus another 12% visited for business.

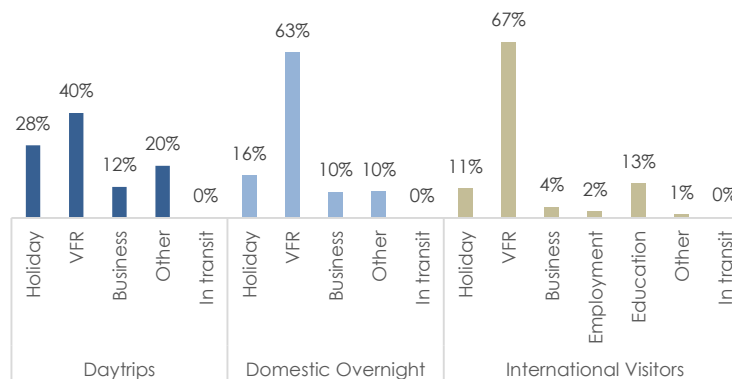
For overnight visitors, both domestic and international, the majority was for visiting friends and relatives.

Chart 9_Visitation & Visitor Nights, Study Area LGAs, 2009-2018



Source: TRA, Macroplan Dimasi

Chart 10_Reasons of Visit, Study Area LGAs, 5-year Average



Note: VFR refers to visiting friends and relatives
Source: TRA, Macroplan Dimasi



4_Future Opportunities Assessment

Commercial Short-Stay Accommodation Penetration

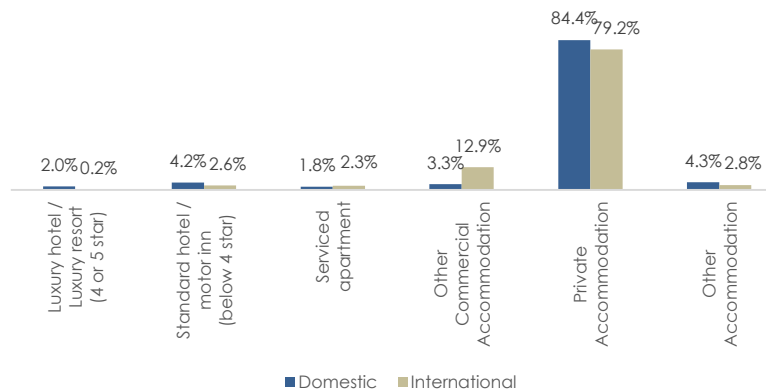
Because the majority of overnight visitors travelled to the study area for visiting friends and relatives, it is likely that a large proportion of visitors to the area do not require commercial short-stay accommodation.

This can be observed in Chart 11, which shows that 84.4% of domestic overnight visitors and 78.8% of international visitors stayed in private accommodation (i.e. their own house or a friend/relatives property) during their visit to the study area.

Only an average of **8.0%** of domestic overnight visitors and **5.2%** of international visitors stayed in commercial accommodation, including luxury hotels, standard hotels, motor inns or serviced apartments.

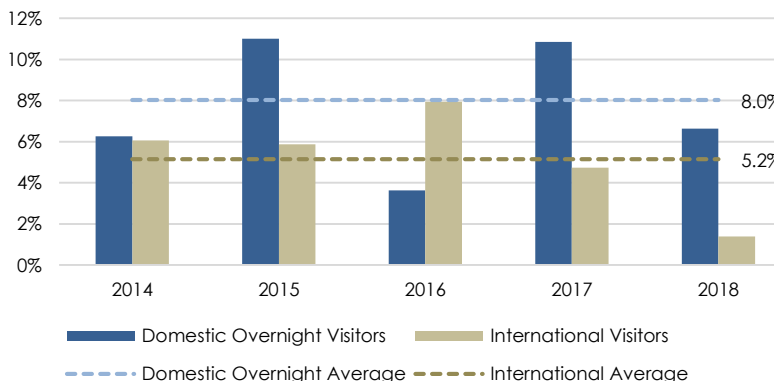
The penetration rates for commercial accommodation fluctuated heavily during the period of the last five years. In particular, the penetration rate for international visitors staying in commercial accommodation dropped significantly from 7.9% in 2016 to 1.4% in 2018.

Chart 11_Accommodation Used, Study Area LGAs, 5-year Average



Note: Other commercial accommodation includes guest house, bed & breakfast, rented house / apartment / flat / unit, caravan park, commercial camping ground, backpacker, hostel, commercial boat / houseboat / cabin cruiser / cruise ship and others
Source: TRA, Macropplan Dimasi

Chart 12_Commercial Accommodation Penetration, Study Area LGAs, 2014-2018



Source: TRA, Macropplan Dimasi



4_Future Opportunities Assessment

Supply for Commercial Short-Stay Accommodation & Convention Centres

Commercial Short-Stay Accommodation Supply

There are a number of commercial short-stay accommodation supply within the study area LGAs, totalling **220 keys**. Of all supply, Punthill Apartment Hotel Ivanhoe is the largest and relatively better quality.

Punthill Apartment Hotel Ivanhoe is a recently completed 4-star hotel and serviced apartment offering 52 rooms, with prices ranging from \$185 to \$355 per night. The hotel is located within proximity to the nearby Austin Health Precinct, making it convenient for those who are visiting patients.

Convention / Events / Function Centre Supply

There is a very limited number of convention / Events / Function centre offerings in the study area LGAs. These facilities generally cater towards private events, such as weddings and birthday parties, with a less focus on corporate events.

Potential Future Supply

There are currently no commercial short-stay accommodation or convention centre projects reported in the development pipeline.

Table 23_Existing Short-stay Accommodation Supply, Study Area LGAs

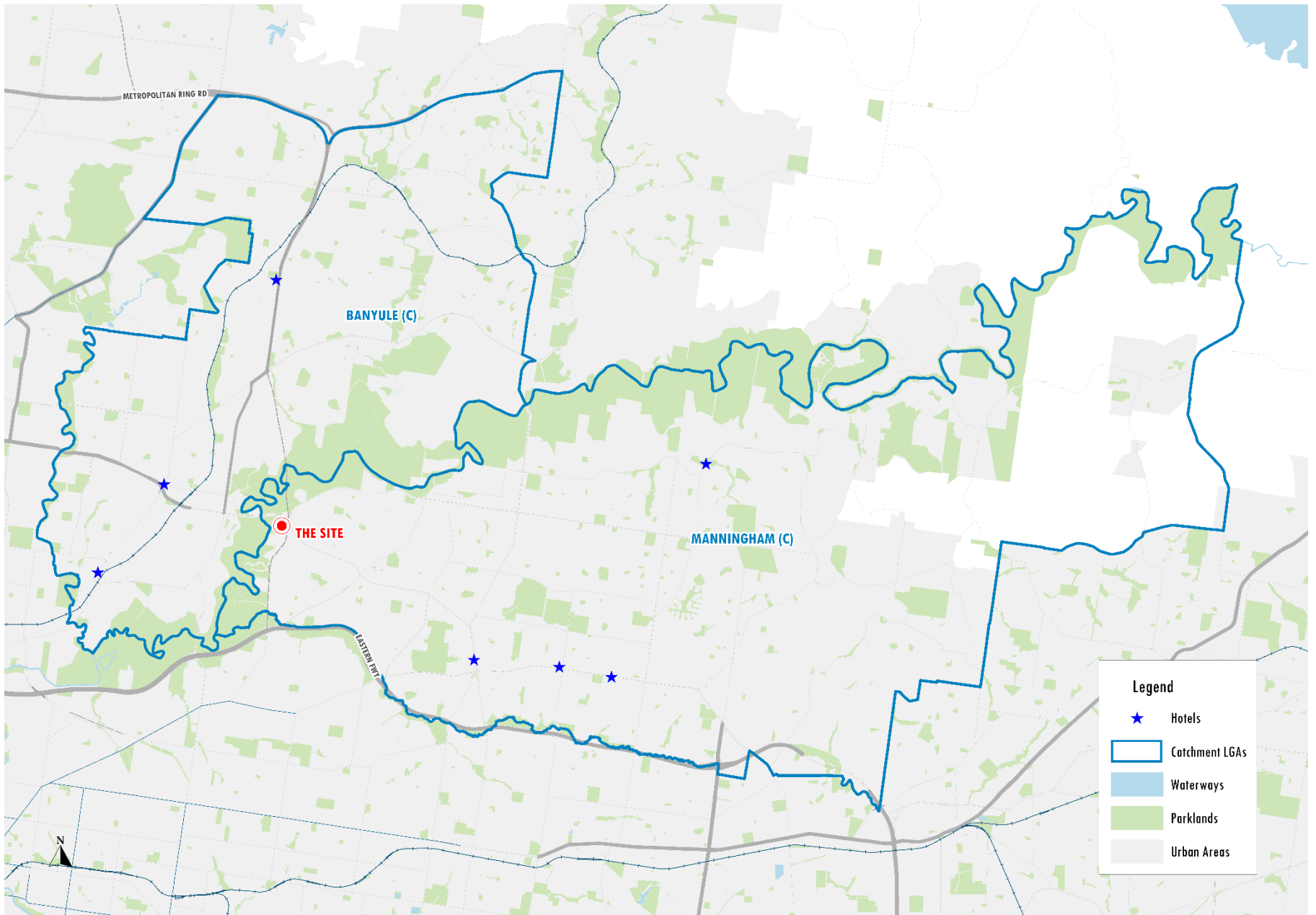
Hotel Name	Type	Suburb	Keys	Room Rate
Crystal Brook Tourist Park	3-star hotel	Doncaster East	30	\$104-\$197
Beau Monde International	4-star hotel	Doncaster East	30	\$89-\$223
Nightcap at Shoppingtown Hotel	3-star hotel	Doncaster	14	\$128-\$170
Quest Doncaster	4-star services apt	Doncaster	35	\$179-\$399
Quest Ivanhoe	4-star services apt	Ivanhoe	35	\$179-\$369
Punthill Apartment Hotel Ivanhoe	4-star hotel / serviced apt	Ivanhoe	52	\$185-\$355
Comfort Inn Greensborough	3-star hotel	Greensborough	24	\$140-\$210

Source: Various, Macroplan Dimasi

Table 24_Existing Convention / Events / Function Centre Supply, Study Area LGAs

Convention Centre Name	Suburb	Capacity	Type
The Centre Ivanhoe	Ivanhoe	800	Function Centre
Manningham Function Centre	Doncaster	500	Function Centre

Source: Various, Macroplan Dimasi





4_Future Opportunities Assessment

Demand / Supply Gap

The historic tourism statistics in the study area indicates the following findings regarding to the demand for commercial short-stay accommodation:

- The overall visitation level within the study area fluctuates and experienced moderate growth during recent years.
- A large share of the visitors who visited the study area LGAs were day-trippers.
- A large share of the overnight visitors, both domestic and international, visited the study area for visiting friends and relatives. This results in a relatively strong preference for private accommodation which are more suitable for the purpose of visit.
- There is a relatively low level of market penetration for commercial short-stay accommodation within the study area LGAs.
- The demand for commercial short-stay accommodation are mainly driven by holiday makers, business travellers and medical visitors who account for a relatively small share of current visitation in the study area.

The assessment indicates a relatively constrained demand for commercial short-stay accommodation within the study area LGAs.

The supply of commercial short-stay accommodation indicates a total of 220 rooms within the study area LGAs, totalling 80,300 room nights available per annum. There is no proposed supply in the foreseeable future.

In order to assess current and future demand / supply balance for commercial short-stay accommodation, the following assumptions have been made based on historic tourism statistics:

- Visitation growth remains on trend;
- Market penetration for commercial short-stay accommodation remains unchanged at 7.5% on average for all overnight visitors;
- Average length of stay remain unchanged at 3.5 nights for all overnight visitors;
- An average of 1.5 guest per room;
- An average room occupancy at 75% per annum.

As presented in Table 24, it is estimated an average of approximately 22,755 visitors per annum stayed at commercial short-stay accommodation at current market penetration level. This translates into a total of 80,349 visitor nights per annum at 3.5 night per stay and 53,566 room nights occupied per annum at 1.5 guests per room. Comparing with current room nights available, this equates to approximately **67%** room occupancy which is considered relatively low for operation of commercial short-stay accommodation. However this indicates the current supply is sufficient to accommodate current demand in a suburban context.

Assuming current short-stay accommodation supply reached 75% average occupancy rate, this would require over 3,000 additional guests per annum on top of the current level. Given current penetration rate, this indicates an estimate of up to 41,000 extra overnight visitors per annum required within the study area LGAs. This is significant compared to the average annual growth of 8,320 overnight visitors during the past five years.

To stack up any additional short-stay accommodation in the study area, a significant growth in overnight visitation would be required.

In the absence of a substantial change in the current visitation patterns and/or major tourism destinations that drive significant underlying tourist accommodation demand, there is unlikely to be a 'demand driven' requirement for new short-stay accommodation development in the study area in the future.

Table 25_Short-stay Accommodation Demand / Supply Balance, Study Area LGAs

Per Annum	Current	At 75% room occupancy
Rooms available	220	220
Room nights available	80,300	80,300
Total overnight visitors	305,016	345,981
Penetration Rate	7.5%	7.5%
Visitors stayed at commercial short-stay accommodation	22,755	25,811
Average nights of stay	3.5	3.5
Visitor nights at commercial short-stay accommodation	80,349	90,338
Average guests per room	1.5	1.5
Room nights occupied	53,566	60,225
Room occupancy	67%	75%

Source: TRA, MacroPlan Dimasi



4_Future Opportunities Assessment

4.7_Health Services

Health Care Industry Overview

In recent years, population-related services such as healthcare, personal services and retail have grown in employment share across Victoria. The health and social services sector is one of the largest employers and contributors to the state's economy. It is reported that employment in health services accounted for 12.1% of the total across Greater Melbourne as at 2016 and has risen to 13.3% in Feb 2019.

Plan Melbourne (2017) has identified a number of health precincts across Greater Melbourne. Within the study area, the most notable is the Austin Health precinct. The Austin health precinct is anchored by three major hospitals, and also contains a large number of health care related services .

Given the current agglomeration of primary health care facilities in the study area, this section will mainly focus on medical centres and allied health services instead of hospitals.

Health Service Supply

There are 2 public hospitals and 2 private hospitals located within the study area. Three of these hospitals are located at the Austin Health Precinct, with the remaining private hospital in Templestowe Lower.

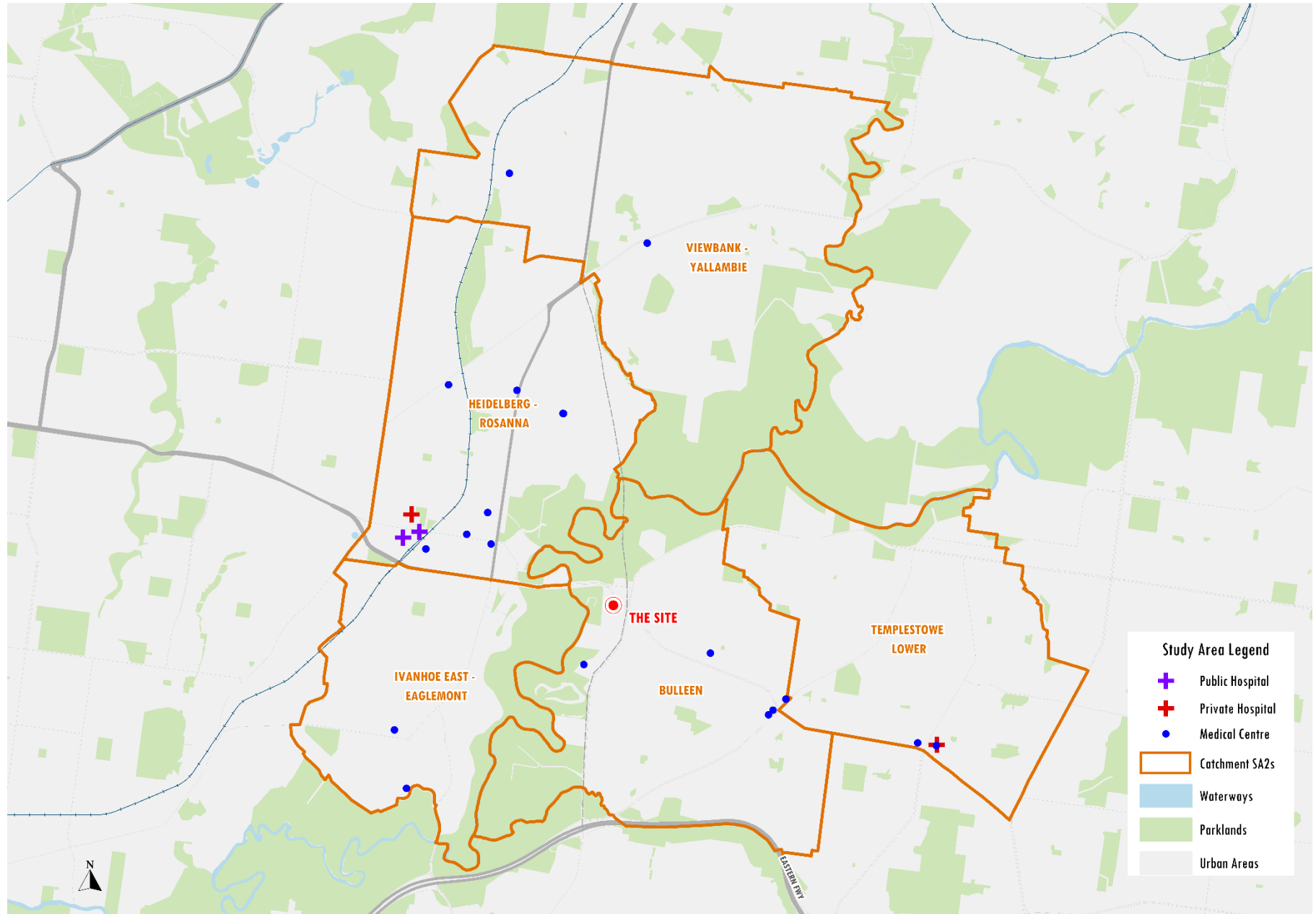
There are also 22 medical centres and 112 allied health services scattered throughout the study area. In particular, a large number of health service providers are clustered in the Austin Health Precinct surrounding Austin Hospital. Within the Bulleen SA2, 7 medical centres and 23 allied health facilities are identified.

Map 15 on the following page presents current supply of health care facilities within the study area.

Table 26_Health Facilities Supply, Study Area

SA2	Medical Centre	Allied Health
Bulleen	7	23
Templestowe Lower	2	27
Ivanhoe East - Eaglemont	1	9
Heidelberg - Rosanna	10	49
Viewbank - Yallambie	2	4
Total Study Area	22	112

Source: Healthdirect.gov.au, *MacroPlan Dimasi*





4_Future Opportunities Assessment

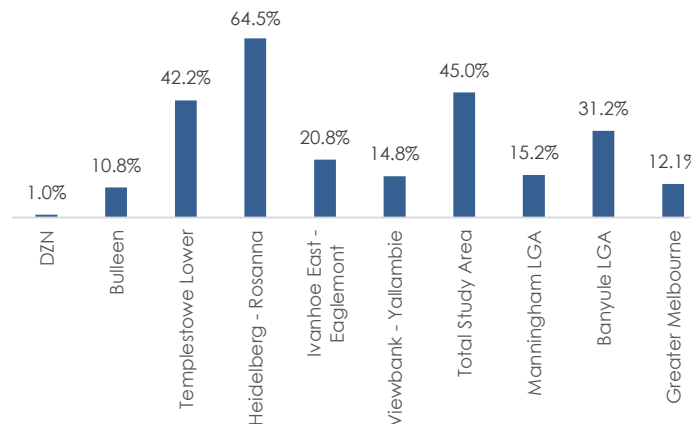
Health Related Employment

The health sector is the largest employing sector within the study area, accounting for 45.0% of all workers working within the study area as at 2016.

With the presence of Austin Health Precinct, Heidelberg-Rosanna SA2 employs an above average share of health care workers, at almost 65%. Comparatively, there are only 10.8% of current workers in Bulleen SA2 working in health care related jobs.

A breakdown by employment type has also been assessed for health related employment in the study area. As shown in table 26, over 70% of those employed in health services were hospital workers. Within the Bulleen SA2, there were approximately 180 workers working in medical services and allied health services, representing 94% of all health workers in Bulleen.

Chart 13_Health Care & Social Assistance Workers, Study Area SA2s & LGAs, 2016



Source: ABS Census 2016

Table 27_Health Related Employment by Type, Bulleen & Study Area, 2016

2016	Bulleen		Total Study Area	
Hospitals	7	3.7%	6,550	71.1%
Medical Services	99	52.7%	677	7.3%
Allied Health Services	78	41.5%	578	6.3%
Pathology and Diagnostic Imaging Services	7	3.7%	829	9.0%
Other Health Care Services	6	3.2%	586	6.4%
Total Health Care Related Employment	197	100.0%	9,220	100.0%

Source: ABS Census 2016



4_Future Opportunities Assessment

Health Services Pipeline

The key future health facility identified in the study area is the Powlett Street & Martin Street Mixed Used Development. This includes a planned 5 practitioner medical centre as part of the proposed 7-storey building at Powlett and Martin St. Another facility of note is the Joint Health Command Garrison Health Facility which provides comprehensive healthcare to Australian Defence Force personnel around Australia.

There are also a number of proposed developments with planned health facilities possible in the study area. Within close proximity of the site, there is an development application for the Manningham Road Mixed Use Building, which is 2.5 km from the subject site.

Demand for Health Services

The demographic profile of the study area indicates continuing demand for health services now and in the future underpinned by the following:

- Continuous steady population growth historically and in the next 20 years in the study area establishes the population base for demand of health services;
- Continuing growth in the number and share of the aged cohorts (i.e. 55+ years) in the next 20 years, who are more likely to require health services;

- The increases in growing families with children in the next 20 years who will also require health services.
- Increasing wealth in the region resulting in increased capacity to spend on allied health.

With the current demographic profile and its future structural change, there is likely to be increasing demand for health services in the study area and broader region.

Table 28_Health Services Pipeline, Study Area, 2019+

Project Name	Address	Suburb	Type	Stage	Est. Completion
Powlett Street & Martin Street Mixed Used Development	12 Powlett St & 9-11 Martin St	Heidelberg	Medical Centre	Firm	2021
Joint Health Command Garrison Health Facilities Upgrade	Simpson Barracks, Puckapunyal Military Area & Latchford Barracks	Yallambie	Medical Centre	Firm	2020
Thompsons Road Commercial & Community Development	1/420 Thompsons Rd	Templestowe Lower	Medical Centre	Development Approval	2021
Manningham Road Mixed Use Building	124-128 Manningham Rd	Bulleen	Medical Centre	Development Application	2021
Lower Heidelberg Road Community Development	321 Lower Heidelberg Rd	Ivanhoe East	Medical Centre	Development Application	2022

Source: Cordell



4_Future Opportunities Assessment

Health Services Provision Rate

Health service provision rates have been used to assess the relative demand / supply level of health facilities. These include:

- Provision of facilities per 1,000 ERP; and
- Provision of relevant staff per 1,000 ERP.

Both rates have been applied to medical centres and allied health facilities in Bulleen SA2 and the study area benchmarking to Greater Melbourne, as presented in Table 28.

Current provision rates indicates:

- The service provision rate and staff provision for medical centres in Bulleen is relatively high compared to Greater Melbourne, with rates more than doubling the average Melbourne rate. This indicates that there is potentially an over service of medical centres in Bulleen, which may be explained by the aging population in the area requiring greater levels of healthcare.
- Both service provision and staff provision rates for allied health in Bulleen are also higher than Greater Melbourne.
- Due to the establishment of Austin health precinct and clustering effect of relevant services, the provision rates for the overall study area are significantly high.

Demand / Supply Gap

The assessment indicates the study area is well serviced with primary medical centres and allied health services (in terms of both number of facilities and scale / staff).

This supply is expected to cater for future population growth, ageing and demographic structural changes in the future.

This existing and future demand / supply gap suggests there is limited potential for medical and allied health services to locate in the area, given close proximity to Austin Health Precinct.

Table 29_Health Services Provision Rates, Study Area SA2 and Greater Melbourne

	Bulleen	Templestowe Lower	Ivanhoe East - Eaglemont	Viewbank - Yallambie	Heidelberg - Rosanna	Total Study Area	Greater Melbourne
Medical Centre							
# Medical Centres	7	2	1	2	10	22	1,383
Service Provision Rate (services / 1,000 ERP)	0.61	0.14	0.06	0.25	0.53	0.32	0.29
# Related Employment	99	110	23	32	413	677	15,074
Staff Provision Rate (workers / 1,000 ERP)	8.56	7.69	1.48	3.94	21.72	9.88	3.11
Allied Health							
# Allied Health Facilities	23	27	9	4	49	112	8,229
Service Provision Rate (services / 1,000 ERP)	1.99	1.89	0.58	0.49	2.58	1.63	1.70
# Related Employment	78	95	39	44	314	570	20,835
Staff Provision Rate (workers / 1,000 ERP)	6.74	6.64	2.51	5.42	16.51	8.32	4.30

Source: ABS 3218, ABS Census 2016, HealthDirect.gov, MacoPlan Dimasi



4_Future Opportunities Assessment

4.8_Retirement Living & Aged Care

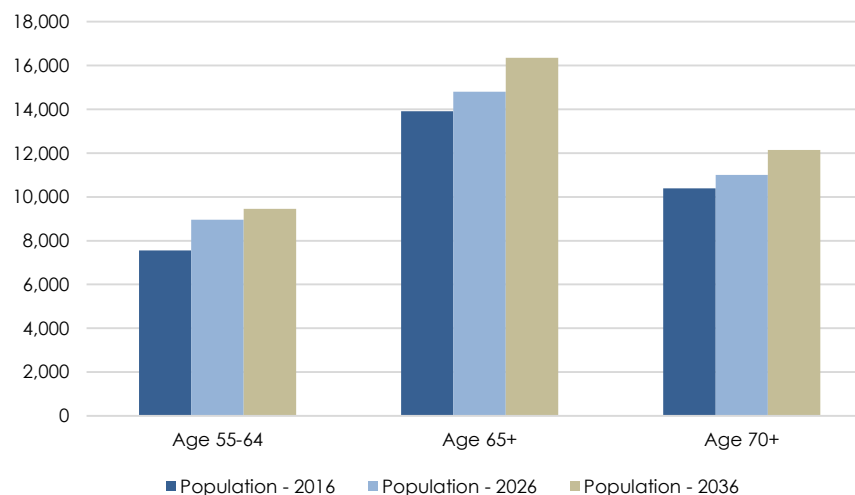
Population Growth – 55-64, 65+ & 70+

According to forecast.id, the estimated resident population (ERP) aged 55 and over in the study area was **21,466 persons** in 2016. This was projected to increase to 23,756 in 2026 and then to **25,814** in 2036, representing an average annual growth rate of 0.93% over the period.

For residents aged 70 and over, the ERP in 2016 was **10,398 persons** within the study area. This was projected to increase to 10,999 in 2026 and then increase to **12,146** in 2036, representing an average annual growth rate of 0.78% over the period.

This demonstrates steady growth in the aging population within the study area, which will eventually require greater retirement living and aged care facilities in order to service aging residents who may require downsizing or assisted living in the future.

Chart 14_Population Growth, Age Cohorts 55-64, 65+ & 70+, Study Area, 2016-36



Source: Forecast.id, Macroplan Dimasi

4_Future Opportunities Assessment

Retirement Living ILU Supply

Within the study area, there are currently 6 retirement living villages operating, providing **338 independent living units (ILUs)**.

The largest of the retirement living villages operating within the study area are Aveo Springthorpe and Streeton Park on Yarra.

Aveo Springthorpe, a retirement village located in Macleod, offers a total of 88 ILUs with prices starting at around \$500,000. The surrounding area has a range of desirable amenities, such as parks/reserves and is located close to a number of health/medical facilities.

Streeton Park on Yarra is a premium retirement apartment living complex located in Heidelberg, offering 85 independent living apartments (ILAs). There are one or two bedroom apartments that feature a 'flexi-room', which can be used for a variety of applications.

There are currently no retirement villages in the development pipeline.

It is interesting to note that many of the suburbs within the study area currently have no active retirement villages despite having aging populations, including Bulleen, Eaglemont, Rosanna, Yallambie and Ivanhoe East.

Map 16_Existing Retirement Village Supply, Study Area, 2019



Table 30_Existing Retirement Village Supply, Study Area, 2019

Facility Name	ILUs	Suburb
Templestowe Manor Independent Living	20	Templestowe Lower
Streeton Park on Yarra	85	Heidelberg
Viewbank Gardens Retirement Village	53	Viewbank
Aveo Springthorpe	88	Macleod
Mayflower Macleod Independent Living Units	47	Macleod
Baptcare Strathalan Community Retirement Living	45	Macleod
Total ILUs	338	

Source: Macroplan Dimasi

4_Future Opportunities Assessment

Retirement Living Demand

According to the ABS 2016 census, there were 267 dwellings categorised as Retirement Living or Manufactured Home Estate within the study area in 2016.

Most of these dwellings were located in Viewbank – Yallambie and Heidelberg – Rosanna, which contained 164 and 81 retirement living dwellings respectively.

Provision rates have been used to assess the relative demand / supply balance for retirement living facilities. Provision rate is defined as the number of retirement living dwellings per person aged 65+.

As presented in table 30, there is no retirement living provision in Bulleen as well as Ivanhoe East. The average provision rate for the overall study area is **1.94%**. This is significantly lower than the Greater Melbourne average, indicating that the study area is likely to be underserved.

Table 31_Retirement Living Provision Rate, Study Area, 2016

Study Area	Bulleen	Templestowe Lower	Heidelberg - Rosanna	Ivanhoe East - Eaglemont	Viewbank - Yallambie	Study Area	Manningham	Banyule	Greater Melbourne
Retirement Living & Manufactured Home Estates	0	22	81	0	164	267	959	419	25,710
Population 65+ Years	2,652	3,457	2,816	1,438	3,418	13,781	20,086	21,233	629,488
Provision Rate	NA	0.64%	2.88%	NA	4.80%	1.94%	4.77%	1.97%	4.08%

Source: ABS, Macroplan Dimasi

Demand / Supply Gap

The assessment indicates an existing under-provision of retirement living facilities within the study area. This is expected to be further exacerbated with population aging and limited future supply.

The average penetration rate of Greater Melbourne has been used as a benchmark. Targeting a provision rate of 4.08%, an addition of 668 ILUs will be required by 2036 to achieve a demand / supply balance in line with the Greater Melbourne average.

Considering existing supply and limited future supply, there is estimated to be a theoretical market gap of **330 ILUs** by 2036.

Given that there is no current supply in Bulleen, the site has great potential to absorb a large portion of the current market gap.

Table 32_Theoretical Demand / Supply for ILUs, Study Area, 2016

Study Area	2016	2026	2036
ERP - 65+	13,781	14,801	16,359
ILU Required	563	605	668
ILU Supply	267	338	338
Theoretical Demand / Supply Gap	296	267	330

Source: Forecast.id, ABS, Macroplan Dimasi

4_Future Opportunities Assessment

Aged Care Supply

Within the study area, there are 12 residential aged cares centres providing a total of **941 beds**. Of the existing supply, the largest offerings are Assisi Centre Aged Care and Baptcare Strathalan Community Aged Care.

Assisi Centre Aged Care is a specialised aged care facility that caters to Melbourne's aging Italian population, offering a total of 150 beds.

Baptcare Strathalan is a recently redeveloped aged care facility located in Macleod, with a total capacity of 124 beds. This facility offers both palliative and respite care, and features a large range of amenities such as a landscaped courtyard, sheltered winter garden and two onsite coffee bars.

There is currently 1 aged care facility in the development pipeline, the lower Heidelberg road community development located at 321 Heidelberg road, owned by TLC Aged Care. This proposed facility is currently in the development application stage.

Table 33_Existing Aged Care Supply, Study Area, 2019

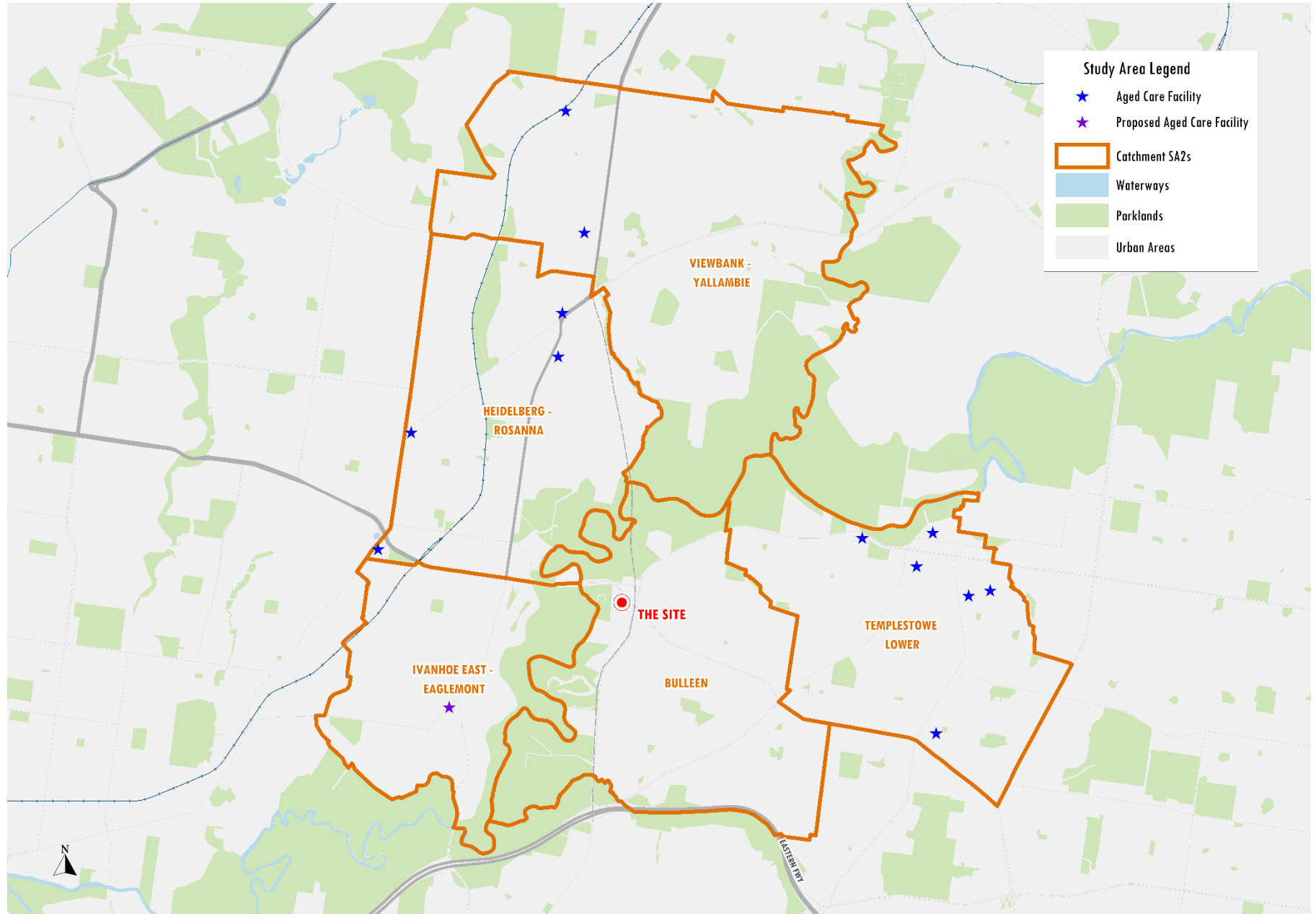
Facility Name	# Beds	Type of Care	Suburb
Bluecross Ashby	78	Respite	Templestowe Lower
Greenslopes SRS	40	Respite	Templestowe Lower
Mercy Place Templestowe	52	Respite, Palliative	Templestowe Lower
Allity Templestowe Manor Aged	60	Palliative	Templestowe Lower
Menarock Life Emmavale	50	Respite	Templestowe Lower
Froniditha Lower Templestowe Aged	60	Dementia	Templestowe Lower
Benetas - The Views at Heidelberg	103	Respite	Heidelberg
Bluecross Clevedon Terrace	51	Respite, Palliative	Heidelberg
Japara Rosanna Views	96	Respite, Palliative	Rosanna
Assisi Centre Aged Care	150	Respite	Rosanna
Regis Macleod	77	Palliative	Macleod
Baptcare Strathalan Community Aged Care	124	Palliative, Respite	Macleod
Total Aged Care Supply	941		

Source: Macroplan Dimasi

Table 34_Proposed Aged Care Supply, Study Area, 2019+

Facility Name	# Beds	Stage	Est. Completion	Suburb
Lower Heidelberg Road Community Development	NA	Development Application	2022	Ivanhoe East

Source: Cordell, Macroplan Dimasi



4_Future Opportunities Assessment

Demand from Local Residents

Demand for residential aged care services is primarily driven by an increasingly aging population in the study area:

- The population aged 70+ within the study area is forecast to grow by 601 people during 2016 – 2026 and then by a further 1,147 people during 2026 – 2036.
- Population aged 70+ within the study area as at 2016 represents 15.2% of the total population, which is significantly higher than the Greater Melbourne average.

Demand / Supply Gap

The federal government has set national benchmarks for the provision of aged care places. At present, the government has indicated that their benchmark is to provide 80 residential care places for every 1,000 persons aged 70 or over.

The gap analysis indicates that as of 2019, the supply of aged care beds in the catchment exceeded local demand, meaning there was a slight oversupply in the study area.

There is currently one aged care facility proposed and applying for a development permit. If this project is not to be delivered, demand for aged care places will be exceeded by **31 beds** by 2036. As such, there is limited opportunity for a new aged care facility in the study area during the short to mid-term future.

Despite this, there is currently no existing supply of residential aged care in Bulleen, meaning there is still some potential for the site for aged care services of unique types with a point of difference.

Table 35_ Theoretical Demand / Supply Gap for Aged Care, Study Area 2019-36

Study Area	2019	2026	2036
Persons Age 70+	10,575	10,999	12,146
Aged Care Demand (Beds)	846	880	972
Total Aged Care Supply	941	941	941
Theoretical Demand / Supply Gap	95	61	-31

*Note: Aged Care Demand is calculated by assuming that for each 1000 residents aged 70 or over, 80 beds will be required
Source: Forecast.id, Macroplan Dimasi*



4_Future Opportunities Assessment

4.9_Childcare

Overview

According to the Department of Education and Training of Victoria, services that provide education or care (child care) for a number of children in the absence of their parents or guardians must generally have a service approval or license – this includes kindergartens, long day care services, occasional care, outside school hours care services and family day care services.

- Long Daycare – typically operate for at least eight hours a day on normal working days, and cater to children aged 0-4 whose parents are working.
- Family Daycare – are usually based in an educators home and deliver home-based education services and care for children.
- Preschool and kindergartens – offer morning, afternoon or full day care from 9.00am to 3.00pm during school terms to children aged 4 to 5 years old.
- Before/after school care – are generally located at a school or community hall, and provide care for primary school children whose parents must drop them off early or pick them up late.

The following analysis examines the supply and demand for childcare based on residential population, and will focus on long daycare and kindergarten/preschool programs.

Childcare Supply

There are currently 29 long daycare and kindergartens in the study area, providing a total of **1,642 childcare places**.

The majority of childcare service supply is located in Heidelberg – Rosanna with 621 places, Viewbank – Yallambie with 384 places, Templestowe Lower with 324 places and Bulleen with 288 places. There is only 1 childcare centre/kindergarten operating in Ivanhoe East – Eaglemont offering 25 childcare places.

According to Cordell, there are 12 proposed childcare centres in the development pipeline within the next 3 years, which will potentially provide 1,110 places within the study area.

Of all proposed childcare, 222 places are currently under construction, 298 places have received development approval and 590 places are applying for a development permit.

Table 36_Existing Day Care and Kindergarten Supply, Study Area, 2019

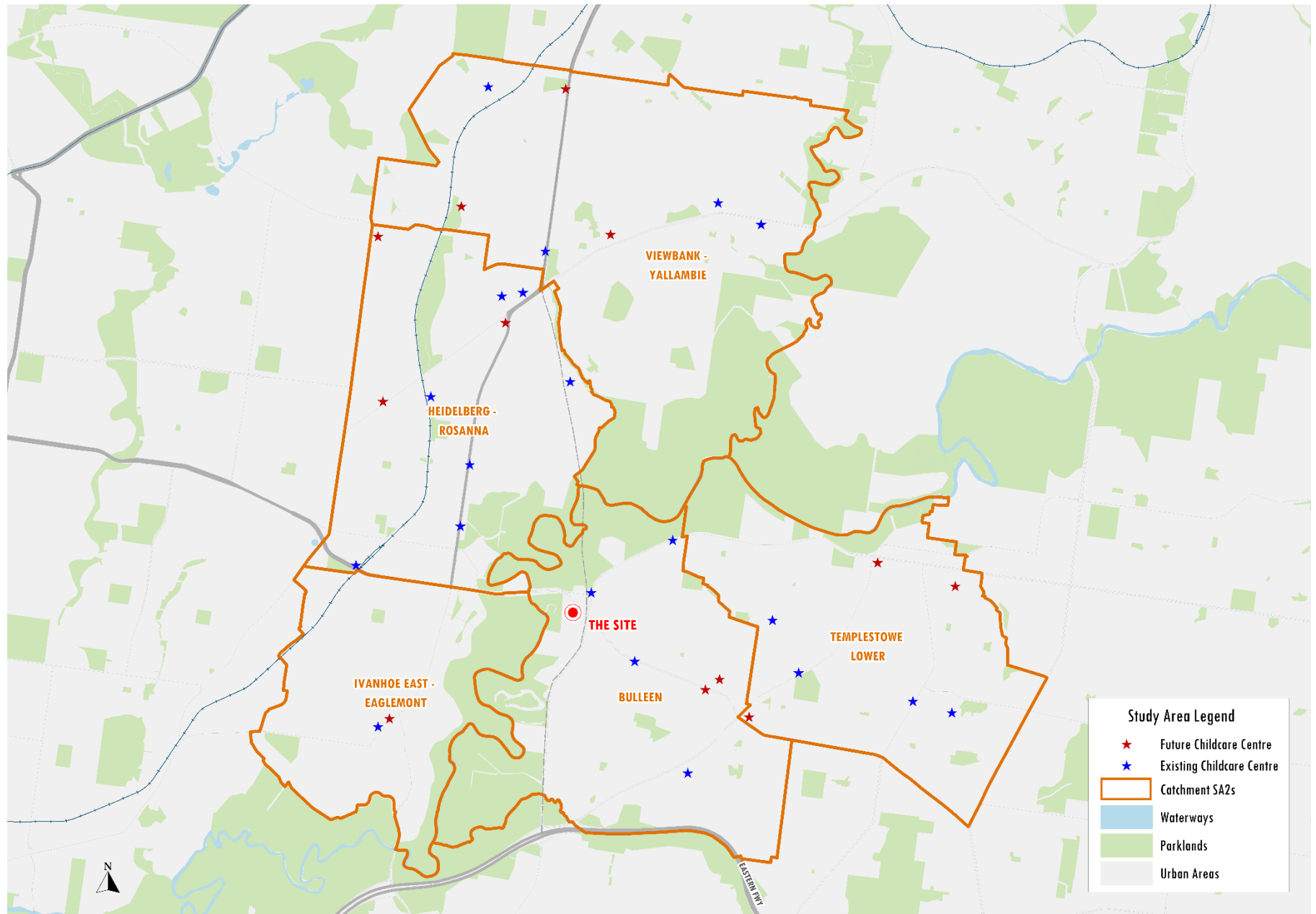
SA2	Number of Centres	Number of Places
Bulleen	5	288
Templestowe Lower	8	324
Heidelberg - Rosanna	8	621
Viewbank - Yallambie	7	384
Ivanhoe East - Eaglemont	1	25
Total Study Area	29	1,642

Source: Macroplan Dimasi

Table 37_Proposed Day Care and Kindergarten Supply, Study Area, 2019+

SA2	Number of Centres	Number of Places
Bulleen	2	156
Templestowe Lower	3	308
Heidelberg - Rosanna	3	344
Viewbank - Yallambie	3	242
Ivanhoe East - Eaglemont	1	60
Total Study Area	12	1,110

Source: Cordell, Macroplan Dimasi





4_Future Opportunities Assessment

Childcare Demand

Suburbs within the study area are typically residential, and as such demand for childcare will largely be derived from local residents.

Socio-demographic analysis indicates key factors influencing childcare demand within the study area.

- The catchment has an older age structure when compared to Greater Melbourne. Census 2016 shows that the population aged 20-34 accounted for 17.1% of the study areas population, which was much lower than that of Greater Melbourne (23.7%).
- The proportion of the study areas population aged 0-4 was 5.9%, which is lower than the Greater Melbourne average of 6.4%.
- Household structure analysis of the study area indicates that 38.3% of households were couples with children and 9.6% of households were one parent families.

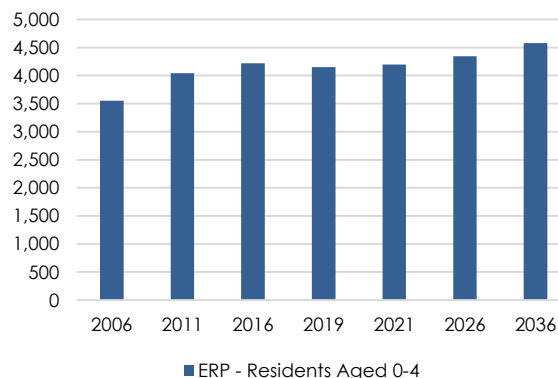
The above analysis implies that a smaller proportion of young families in the study area are at the childbearing age (20-34), meaning that there will be lower level of growth in demand for childcare services in the future when compared to Greater Melbourne.

The historic population for children aged 0-4 was 3,553 in 2006 and increased significantly to 4,216 in 2016. There was a slight downturn from 2016-2019 and the number of children aged 0-4 in the study area fell slightly to 4,148.

The future trend for growth in residents aged 0-4 is forecast to be steady in the long run, with the projected 2036 population at **4,580 persons**, representing an average annual growth rate of 0.6% from 2019 to 2036.

Slow growth in the proportion of children aged 0-4 means that there is likely to be limited demand for additional childcare services within the study area.

Table 15_Population Growth, Age Cohort 0-4, Study Area, 2006-36



Source: ABS, Forecast.id, Macroplan Dimasi



4_Future Opportunities Assessment

Demand / Supply Gap

In order to assess the current and future demand / supply gap, the following assumptions have been made:

- The potential penetration rates of childcare facilities has been assumed at 35% based on the benchmark for metropolitan Melbourne for formal childcare usage as reported in the ABS Childhood Education and Care release.
- An attendance rate of 70% has been assumed based on the average time of 28.5 hours that children spend in long daycare in Victoria, according to the Report on Government Services 2019 – Volume B Chapter 3 Childcare, education and training.
- All proposed childcare facility developments will continue on course to be completed by their estimated completion date.
- An average occupancy rate of 85% has been assumed, which accounts for sick days and other absences on short notice.

It is also noted that this analysis does not take into account the fact that people who live outside of the defined study area may use childcare centres within the local area.

The gap analysis indicates that there is currently an oversupply of long day care places of around 534 places within the study area.

A large number of the proposed childcare facilities are scheduled to be completed by 2021, further exacerbating the oversupply of childcare places within the study area. The oversupply of childcare places will increase to **1,275** by 2026.

It is expected that the oversupply of childcare services is likely to continue during the forecast period largely due to slow population growth in the 0-4 age group and large number of existing and future supply of childcare places.

Table 38_ Theoretical Childcare Demand / Supply Gap, Study Area, 2019-2036

Study Area	2019	2026	2036
Children Aged 0-4 Years	4,148	4,345	4,580
Penetration Rate	35%	35%	35%
Potential Demand	1,452	1,520	1,603
Attendance Rate	70%	70%	70%
Est. Daily Demand	1,016	1,064	1,123
Existing Supply	1,642	1,824	2,752
Potential Future Supply	182	928	0
Total Childcare Supply	1,824	2,752	2,752
Childcare Places at 85% Occupancy	1,550	2,339	2,339
Theoretical Demand / Supply Gap	534	1,275	1,216

Source: Cordell, Macroplan Dimasi




4_Future Opportunities Assessment

4.10_Highest & Best Use Summary

This section assessed a range of potential uses and explored possible highest and best uses on the residual land in order to maximise local employment and economic outcomes.






The key findings of the HBU assessment for various candidate uses are summarised in the table below.

Table 39_Highest & Best Use Summary

Candidate Uses	Overall Market Potential	Demand	Supply	Issues & Opportunities
Industrial 	LOW	<ul style="list-style-type: none"> Declining zoned industrial land and limited industrial land consumption indicating minimal demand for industrial uses 	<ul style="list-style-type: none"> The site as well as the study area sits outside the SSIPs and other major industrial precincts Limited zoned industrial land supply Some industrial land has been rezoned to other uses resulting in net loss of zoned industrial land 	<ul style="list-style-type: none"> The site is highly constrained for industrial uses due to land size, fragmentation and capacity for buffer / expansion Industrial uses are not likely to support continuing employment growth and meet the demand of growing population in the future Industrial uses are more likely to move out to larger industrial precincts and benefit from clusters of established supply chain links and networks
Commercial Office 	HIGH / MODERATE	<ul style="list-style-type: none"> Key employment nodes such as Austin Health Precinct and a number of activity centres Large share of service based employment with a key focus on health sector Relatively high levels of job density, employment servicing ratio and self-containment / sufficiency 	<ul style="list-style-type: none"> Limited employment land Limited existing and proposed commercial office supply 	<ul style="list-style-type: none"> Gap analysis indicates up to 20,000 sqm GFA theoretical market gap within the study area during the forecast period of 2016-36 The site has great potential to absorb a large portion of this gap Flexible spaces and/or coworking spaces can be made available to attract SEMs It is important to seek pre-commitment from a coworking space operator and understand their specific requirements
Residential 	HIGH	<ul style="list-style-type: none"> Steady population growth Generally higher levels of household income and home ownership Median sales prices higher than metropolitan average and strong price growth 	<ul style="list-style-type: none"> Homogenous dwelling type and lack of diversity Increasing levels of development activities 	<ul style="list-style-type: none"> Gap analysis indicates a theoretical market gap of approx. 524 dwellings in Bulleen and 1,556 dwelling in the overall study area by 2036 This gap is likely to moderate in the long term due to low population growth The site has great potential to accommodate a large portion of this gap owing to its locational attributes, proximity to the Yarra River and parklands, and improved transport connectivity with the delivery of NEL, noting the site will not be available after 2027 when NEL is completed

4_Future Opportunities Assessment

Table 39_Highest & Best Use Summary (Cont.)

Candidate Uses	Overall Market Potential	Demand	Supply	Issues & Opportunities
 Retail	MODERATE / LOW	<ul style="list-style-type: none"> The retail expenditure capacity of the main trade area is estimated at \$1.5 million at 2019 and is projected to reach \$2.3 million by 2031 	<ul style="list-style-type: none"> The site is located within close proximity to Heidelberg AC which is designated to serve the surrounding area 	<ul style="list-style-type: none"> A sub-regional centre is supportable at the site, however, is dependent on whether Kmart locates to the site and the ability to attract a major supermarket operator as a co-anchor
 Short-stay Accommodation & Convention Centre	LOW	<ul style="list-style-type: none"> Fluctuated visitation levels Large share of day-trippers Large share of overnight visitors were visiting friends and relatives Low levels of market penetration for short-stay accommodation 	<ul style="list-style-type: none"> Moderate existing supply of short-stay accommodation, most of which are small scale No known proposed supply 	<ul style="list-style-type: none"> Gap analysis indicates current demand for short-stay accommodation can be met by current supply There is unlikely a 'demand driven' requirement for additional short-stay accommodation, in absence of a substantial change in the current visitation patterns and/or major tourism destinations that drive significant underlying tourist accommodation demand
 Health Services	LOW / MODERATE	<ul style="list-style-type: none"> Steady population growth particularly the elderly and families with children Generally higher levels of household wealth 	<ul style="list-style-type: none"> Established Austin Health Precinct Large number of supply for medical centres and allied health services Health service provision rates higher than Greater Melbourne 	<ul style="list-style-type: none"> Gap analysis indicates a significant high level of health service provision and this is expected to support the demand from future population growth and ageing There is some / limited potential for medical and allied health services to locate on site given close proximity to Austin Health Precinct
 Retirement Living & Aged Care	Retirement Living – HIGH Aged Care – LOW / MODERATE	<ul style="list-style-type: none"> Generally older age profile Increasingly ageing population 	<ul style="list-style-type: none"> Relatively low provision of retirement living facilities in the study area, with no retirement village located in Bulleen Supply of aged care facilities is largely in balance to serve the population Limited future supply for both facilities 	<ul style="list-style-type: none"> Gap analysis for retirement living facilities indicates a theoretical market gap of up to 330 ILUs by 2036 The site has great potential to accommodate a large portion of this retirement living gap owing to its locational attributes and amenities Gap analysis for aged care facilities indicates limited market gap of up to 30 beds during the forecast period Given no existing facilities in Bulleen, there is still some potential for aged care services of unique types with a point of difference
 Childcare	LOW	<ul style="list-style-type: none"> Relatively slow population growth in the 0-4 years age cohort Relatively small proportion of population at childbearing age 	<ul style="list-style-type: none"> Large number of existing and future supply 	<ul style="list-style-type: none"> Gap analysis indicates there is currently an oversupply of childcare centres and this is expected to continue due to low population growth in the 0-4 years age cohort and large number of existing and future supply

5_Conclusions & Key Considerations

Based on the key findings of the site, regional context, current situation and future opportunity assessments, this section identifies and recommends the optimal suite of strategic land uses options for Bulleen Industrial Precinct in order to mitigate the economic and employment impacts of the North East Link. This section includes the follows:

- Recommended land use options
- Impact assessment of potential economic and social benefits
- Key considerations regarding to ingress / egress, employment and integrated transport outcomes in the context of existing employment nodes (e.g. Austin Health Precinct, La Trobe NEIC and Doncaster Hill), and financial viability
- Development concept specification

The section addresses relevant issues relating to the second, third, fourth, fifth, sixth and seventh points of the study scope.

5_Conclusions & Key Considerations

5.1_Recommended Land Use Options

Considering the site's gateway location, improved transport connectivity, policy alignment, market conditions and potential gaps, maximising local employment, and complementing key existing employment nodes, **a commercial mixed use development** could be constructed at the residual land of Bulleen Industrial Precinct.

This commercial mixed use development could be anchored by a new office park with coworking space and some incubator space and could also comprise a major share of affordable housing and retirement living complemented by various amenities on site and surrounds.

The development could involve the following uses:

- **Office:** up to 20,000 sqm office park, coworking space and some incubator space;
- **Residential, affordable housing and retirement living:** approximately 1,000-1,500 dwellings;
- **Retail** of two potential options:
 - **Option 1 – a small shopping centre** with a small range of shops such as a small super market (approximately 1,000 sqm), convenience stores, bottle shops, specialty shops and food and beverage (F&B) totalling approximately 2,500 sqm, or

- **Option 2 – a sub-regional shopping centre** of up to 15,000 sqm which is considered opportunistically depending on whether Kmart (approximately 5,000-7,000 sqm) locates to the site and the ability to attract a major full line supermarket (approximately 3,000-5,000 sqm) operator as a co-anchor.

The potential development at the site could also provide a gateway to the Yarra River, major parks, end of trip facilities and picnic facilities.

A summary of the recommended land uses is presented in Table 39.

Table 40_Recommended Land Uses



20,000 sqm
office park, coworking space & incubator space



1,000-1,500 dwellings
residential, affordable housing & retirement living



2,500 sqm
small shopping centre
OR
15,000 sqm
sub-regional shopping centre

5.2_Impact Assessment

It is indicated that of the existing 110 businesses and 960-1,000 jobs currently located within Bulleen Industrial Precinct, over 80 businesses and up to 830 jobs are estimated to be displaced due to land acquisition for the proposed Manningham Road interchange for the NEL.

However, if a commercial mixed use development as suggested earlier is to be developed on the residual land, it could potentially offset the current job loss and further increase employment opportunities within the precinct.

In order to estimate potential impacts on direct employment on site, the following average employment densities are assumed:

- Office: 20 sqm GFA per 1 full time equivalent (FTE) job;
- Retail option 1 – small shopping centre: 22 sqm GFA per 1 FTE job;
- Retail option 2 – sub-regional shopping centre:
 - Discounted department store (i.e. Kmart): 50 sqm GFA per 1 FTE job,
 - Major supermarket: 25 sqm GFA per 1 FTE job,
 - Retail specialty shops: 20 sqm GFA per 1 FTE job.

5_Conclusions & Key Considerations

Using these assumptions, the total direct on-site employment potentially generated upon completion is estimated at approximately **1,114 FTE jobs** (with retail option 1) up to **1,530 FTE jobs** (with retail option 2).

Some of the existing uses which are to be displaced may potentially locate back on site within the proposed commercial mixed use development, such as eateries, dry cleaners and fitness centres.

A summary of estimated direct on-site employment potentially generated by use is presented in Table 40.

Table 41_Direct On-site Employment Generation

Proposed Uses	GFA	Direct Jobs
	sqm	FTE
Office	20,000	1,000
Retail Option 1 - Small Shopping Centre	2,500	114
Retail Option 2 - Sub-regional Shopping Centre	15,000	530
Total	22,500-35,000	1,114-1,530

Source: *Employment Density Guide, 2015, Macroplan Dimasi*

Overall, there are a range of economic and social benefits in developing the commercial mixed use development on the residual land of Bulleen Industrial Precinct, including:

- Effectively utilise the residual land, minimise negative impact of job loss due to land acquisition, and maximise local employment and economic outcomes.
- Create a gateway landmark and local employment node at the Southern Portal of NEL, with improved transport connectivity to other employment nodes and activity centres.
- Strong alignment with Council's policies and strategic directions involving:
 - Attracting and retaining businesses, developing leading local businesses, and integrating economic development as stated in Manningham Economic Development Strategy 2011-2030 (2018);
 - Bulleen as a major gateway and encouraging improvement and enhancement of the function of the Bulleen Gateway area as identified by Manningham Planning Scheme;
 - Bulleen Industrial Precinct identified as a key site for 'potential development opportunities' and proposed future use for 'employment and community' as proposed by the draft Yarra river – Bulleen Precinct Land Use Framework Plan (2019).
- Generate construction related employment and economic output during construction phase both directly on site and indirectly elsewhere in the economy.

- Generate ongoing employment and economic output upon completion both directly on site and indirectly flow-on impacts through the economy, increase on-site employment density, encourage skill upgrade, and improve employment self-sufficiency and self-containment within the area.
- The proposed office park will make more office floor space, coworking space and incubator space available for local businesses, which is currently limited within the municipality and is consistent with Council's intention of retaining and encouraging employment related uses within the municipality.
- The proposed 1,000-1,500 dwellings has the capacity to accommodate up to 2,600-3,900 residents on site assuming average household size at 2.6 persons, with increased levels of housing diversity and close proximity to various amenities such as the Yarra River and parklands.
- With increased on-site residents and workers, it will create 'demand induced' expenditure multipliers within the precincts, resulting in increased day-time / night-time and weekday / weekend visitation and activities with positive impact on retail expenditure.

However, it is important to note the significant negative impacts due to the displacement of BIP, including loss of jobs within the local economy both directly and indirectly, reduced local availability of employment and certain services, loss of existing customer bases, induced relocation costs, increased travel time, and potential operational risks. The Remplan Economic Impact Assessment estimated approximately 1,116 direct and indirect jobs will be lost to the local economy.

5_Conclusions & Key Considerations

5.3_Key Considerations

Ingress / Egress

There are currently two construction design options for the proposed Manningham Road interchange. Discussions regarding to ingress / egress are based on these two current design options.

Option 1

As illustrated in Map 19 overleaf, the design option 1 indicates access to the NEL tunnel via:

- On ramp from Bulleen Road (south section) and off ramp to Manningham Road in the northbound direction; and
- On ramp from Manningham Road (west section) and off ramp to Bulleen Road (south section) southbound.

There appears to be no direct access to the NEL tunnel in the southbound direction from the areas to east of the tunnel.

This option involves three main intersections including:

- The existing Manningham Road and Bulleen Road intersection;
- The intersection of Manningham Road and Bridge road / northbound off ramp; and
- The intersection of Bulleen Road and northbound on ramp / southbound off ramp.

It is suggested these intersections to be signalised.

This design indicates the residual land is fragmented and there is no direct access from the residual land parcels to the NEL tunnel. However ingress / egress points (mostly likely left in / left out) from the parcels to Manningham and Bulleen Road will be required to access the NEL tunnel via on / off ramps.

Considerations should also be given to direct access from NEL to basement in the event a major project outcome.

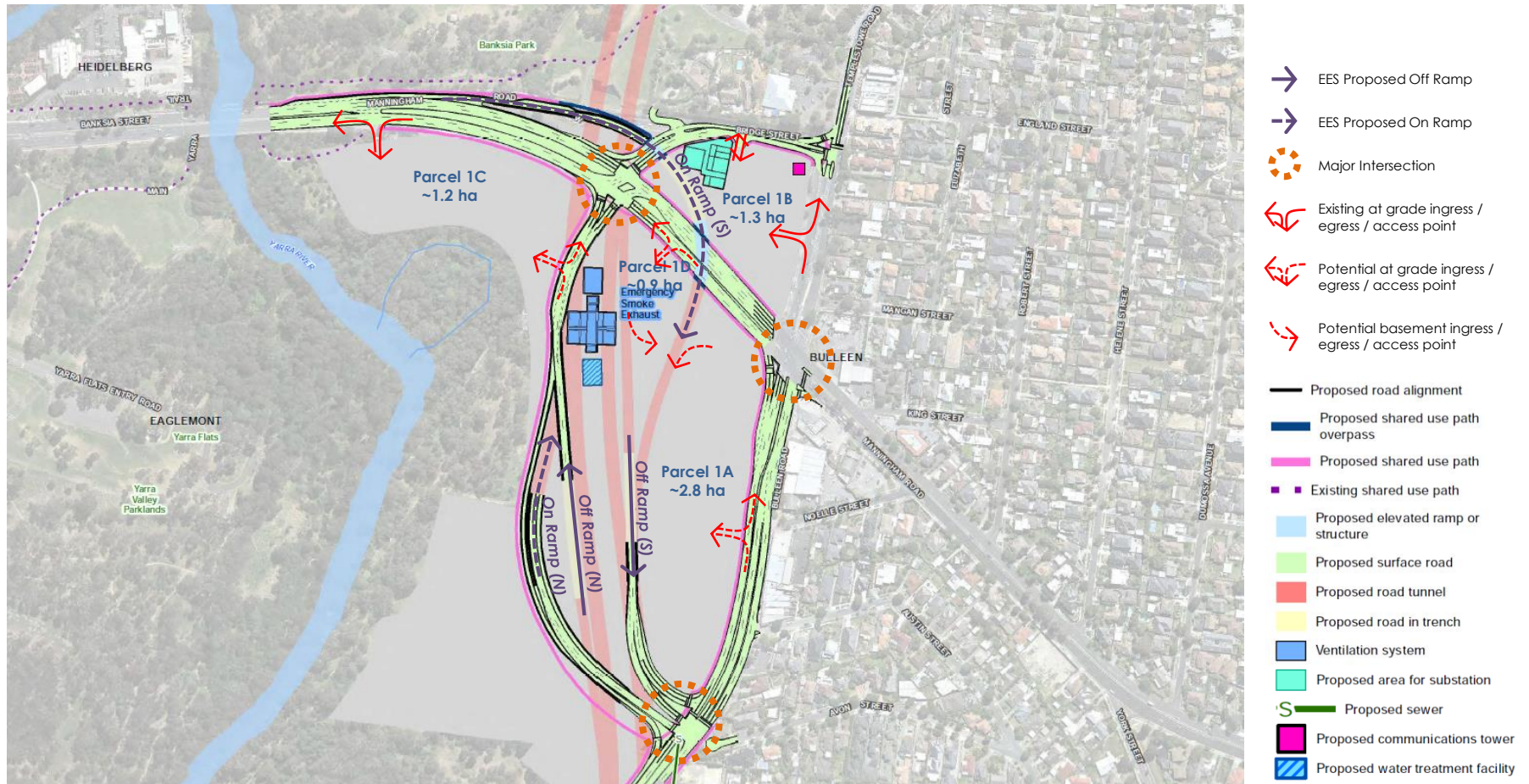
Having regard to access for post-construction residual land, the following observations have been made:

- Potential at grade ingress / egress from Bulleen Road and Manningham Road to Parcel 1A;
- The basement of Parcel 1A would benefit from direct ingress / egress from the NEL tunnel;
- Existing at grade ingress / egress from Bulleen Road and Bridge Road to Parcel 1B;
- Existing at grade ingress / egress from Manningham Road and potential at grade ingress / egress from the northbound off ramp to Parcel 1C.

In order to mitigate negative impacts from land fragmentation, internal roads and potentially pedestrian overpass may be required to connect the residual land parcels.

5_Conclusions & Key Considerations

Map 19_Indicative Ingress / Egress – Option 1



Note: Indicative only
 Source: North East Link Project Environment Effects Statement (2019), MacroPlan Dimasi

5_Conclusions & Key Considerations

Option 2

As illustrated in Map 20 overleaf, the design option 2 indicates access to the NEL tunnel via:

- On ramp from both Manningham Road (east section) and Bulleen Road (south section) and off ramp to Manningham Road northbound; and
- On ramp from Manningham Road (west section) and off ramp to Bulleen Road (south section) southbound.

Similar to Option 1, there appears to be no direct access to the NEL tunnel in the southbound direction from the areas to east of the tunnel.

This option also involves three main intersections including:

- The existing Manningham Road and Bulleen Road intersection;
- The intersection of Manningham Road and Bridge road / northbound off ramp; and
- The intersection of Bulleen Road and southbound off ramp.

It is suggested these intersections to be signalised.

This design indicates the residual land is highly fragmented. Particularly the northbound on ramps from Manningham Road and Bulleen Road would cut through Parcel 2A and the southern corner area of Manningham Road and Bulleen Road, resulting in smaller land area available for potential development.

There is no direct access from the residual land parcels to the NEL tunnel. Ingress / egress points (mostly likely left in / left out) from the parcels to Manningham and Bulleen Road will be required to access the NEL tunnel via on / off ramps. Particularly the northbound on ramps from both Manningham Road and Bulleen Road would possibly limit ingress / egress points of Parcel 2A to be located in the frontage of Manningham Road.

Again, considerations should be given to direct access from NEL to basement in the event a major project outcome.

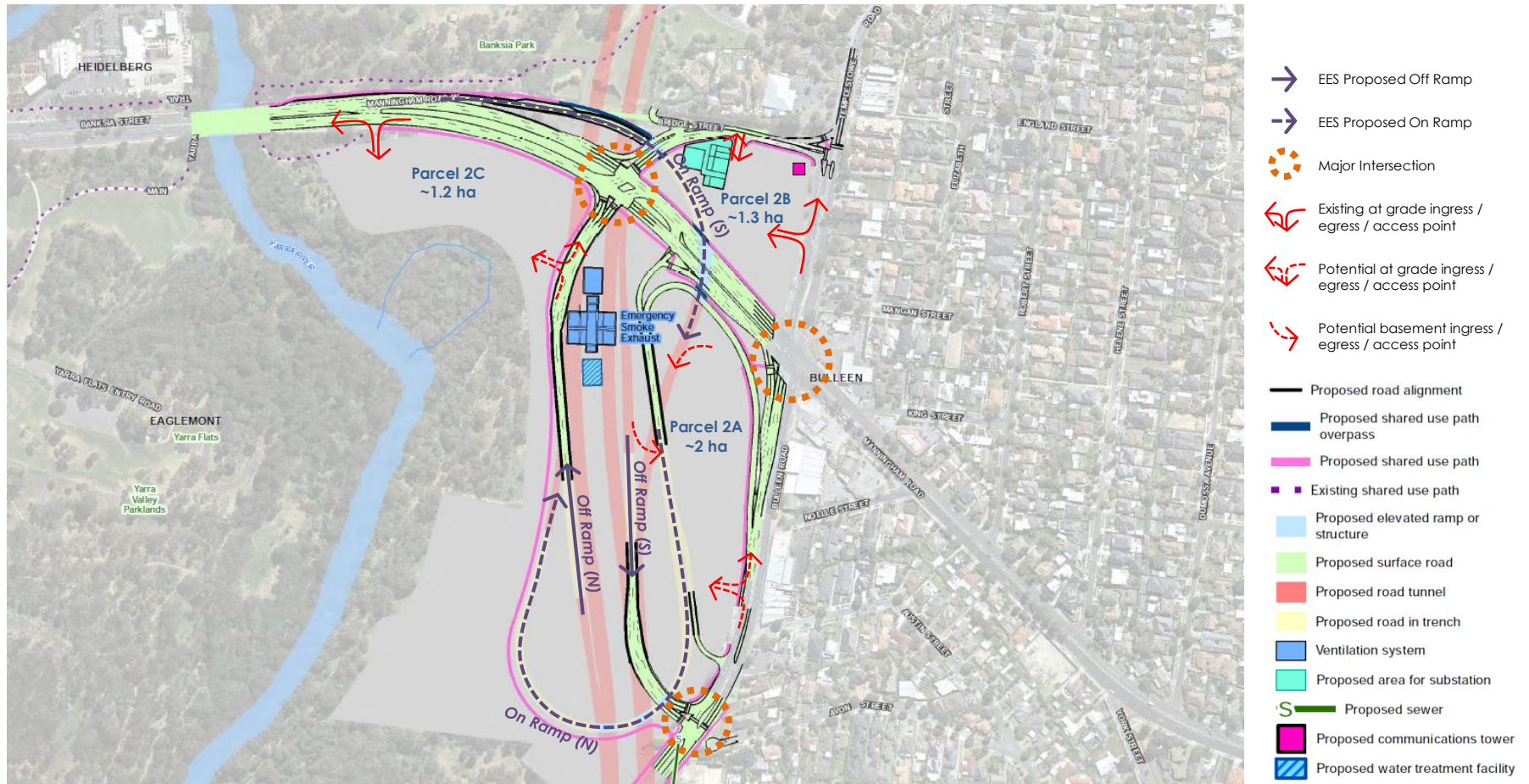
Having regard to access for post-construction residual land, the following observations have been made:

- Potential at grade ingress / egress from Bulleen Road to Parcel 2A;
- The basement of Parcel 2A would benefit from direct ingress / egress from the NEL tunnel;
- Existing at grade ingress / egress from Bulleen Road and Bridge Road to Parcel 2B;
- Existing at grade ingress / egress from Manningham Road and potential at grade ingress / egress from the northbound off ramp to Parcel 1C.

The on-grade ramps proposed under this option also make each residual land parcel relatively more isolated. Properly located internal roads and pedestrian overpass would be potentially required to connect the residual land parcels in order to mitigate negative impacts from land fragmentation.

5_Conclusions & Key Considerations

Map 20_Indicative Ingress / Egress – Option 2



Note: Indicative only
 Source: North East Link Project Environment Effects Statement (2019), MacroPlan Dimasi

5_Conclusions & Key Considerations

Employment & Integrated Transport

The possible commercial mixed use development on the residual land of the site would be likely to result a southern anchor along the NEL and operate within the context of existing employment nodes with improved transport access and connectivity.

Key considerations would be given to the follows.

- The site has great potential to absorb a large portion of the current and future market demand for commercial floorspace from local businesses and SMEs within the study area particular in Manningham where employment land use is limited.
- The proposed commercial mixed use development at the site could have the capacity to accommodate some levels of overflow demand for commercial floorspace from the Austin Health Precinct and Heidelberg Activity Centre given close proximity and distance.
- The proposed commercial mixed use development the site could be established as the southern anchor along the NEL and a gateway to Manningham from the NEL, with improved connectivity to the La Trobe NEIC.

- This could also improve potential links between Manningham and various employment nodes in Banyule (e.g. Austin Health Precinct, Heidelberg Activity Centre and La Trobe NEIC), increasing the levels of employment self-sufficiency and self-containment within the eastern and north-eastern regions, which currently appears to be limited.
- It is noted the Westfield Doncaster Regional Shopping Centre is proposing potential expansion with an addition of up to 43,000 sqm of retail floor space and 18,000 sqm of commercial office space. However, it is considered there is unlikely to be direct competition between the proposed commercial mixed use development at the site and the Doncaster Shopping Centre, given their relative locations, development use mix, scales and positioning, potential market catchments, and road connectivity.

Financial Viability

With the respect to financial viability, it is considered that the location of the site would be highly sought after residentially. From a commercial point of view, it suggests the project will be most likely to be viable.

5.4_Development Concept Specification

A preliminary development concept specification has been prepared based on the HBU assessment, recommended land use option and a number of key considerations. This will form the basis for concept designs to communicate project outcomes.

It is estimated that the proposed commercial mixed use development could take up to **1.0 to 1.5 hectares** in terms of building footprint. Given different scales of residual land available under the current construction design options, discussions regarding to development concept specification are provided on the basis of these two options.

Some overall development considerations relating to the supportable uses are outlined as follows.

- Office park, coworking and incubator space would require direct access from main road and/or via public transport as well as car parking; flexible spaces with business centre leasable meeting rooms can be made available whilst seeking pre-commitment from a coworking space operator.
- Residential uses particularly retirement living could be located relatively separated from the other commercial uses to create a sense of privacy and favourable living environment; residential uses could be also benefited from close proximity and direct access to the amenities along the Yarra River and parkland.
- Retail uses would require high exposure from main road, street frontage, direct access from main road and/or via public transport and easy access to car parking.

5_Conclusions & Key Considerations

Option 1

There will be 4 residual land parcels potentially available for development post construction based on option 1 of the current construction design.

Parcel 1A (approximately 2.8 ha) and **Parcel 1D (approximately 0.9 ha)** are located to the east of the NEL tunnel bounded by Manningham Road and Bulleen Road. These two parcels can be considered as a whole given the southbound on ramp is located underground. These two parcels make up the largest land area of all residual land, has the longest street frontages along both roads, and sits highly exposed at one of the main intersections.

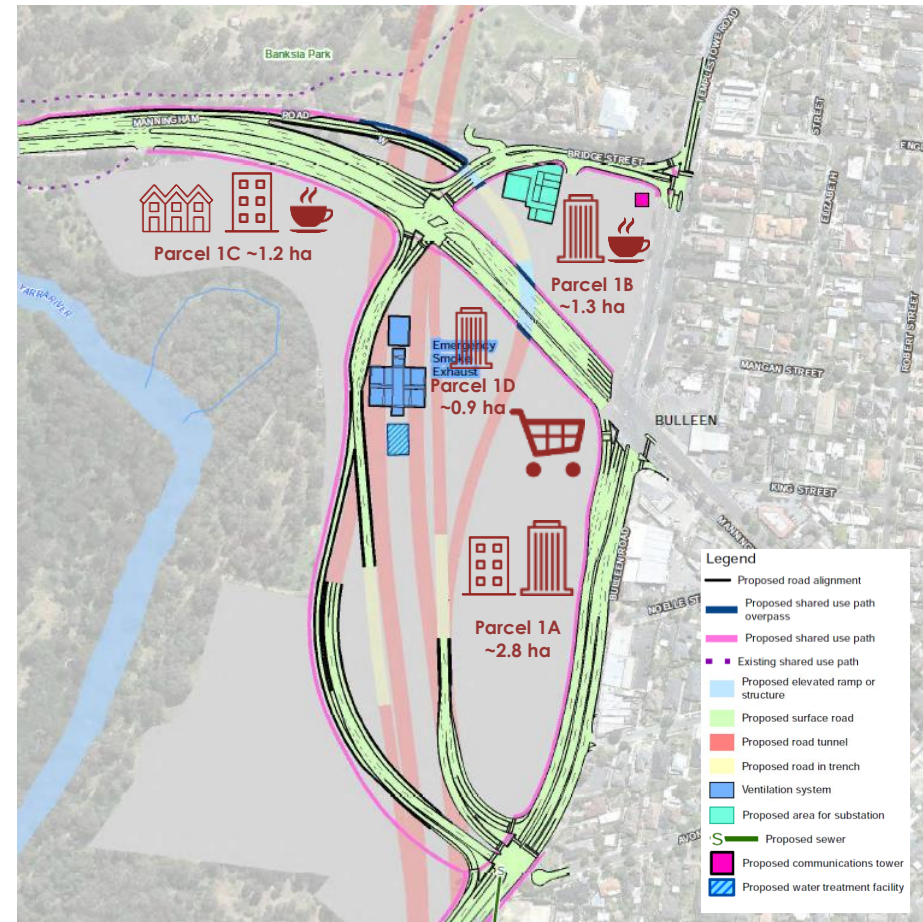
These features make the parcel ideal for retail uses, particularly the sub-regional shopping centre option (approximately 15,000 sqm GFA) with potential colocation of Kmart and a full line supermarket plus specialty shops. This parcel is also suitable for the proposed office park considering site capacity and main road access, where a number of campus style office buildings at approximately 3,000-5,000 sqm GFA per building could be located either standalone or on top of the retail podium. A proportion of the proposed dwellings could be also accommodated on this parcel in a built form of mid to high rise apartment towers.

A number of issues require considerations and design solutions including access points, adequate on-site parking spaces for each use, internal vehicle and pedestrian circulations given movements of customers, workers, residents and visitors, and potential impacts of tunnel and ramps.

Parcel 1B (approximately 1.3 ha) is bounded by Manningham Road, Bulleen Road and Bridge Street. This parcel could be developed complementary to Parcel 1A with campus style office buildings at a smaller scale i.e, 2,000-4,000 sqm GFA per building supported by ancillary retail uses such as F&B and convenience stores.

Parcel 1C (approximately 1.2 ha) is located to the west of the NEL tunnel and relatively separated from the other parcels by tunnel open cuts. With close proximity and direct access to the Yarra River, this parcel is well positioned for the majority of residential with a diverse mix of products such as townhouses and apartments, supported by ancillary retail uses.

Map 21_Indicative Siting – Option 1



Note: Indicative only

Source: North East Link Project Environment Effects Statement (2019), MacroPlan Dimasi

5_Conclusions & Key Considerations

Option 2

There will be 3 residual land parcels with relatively smaller land area potentially available for development post construction based on option 2 of the current construction design.

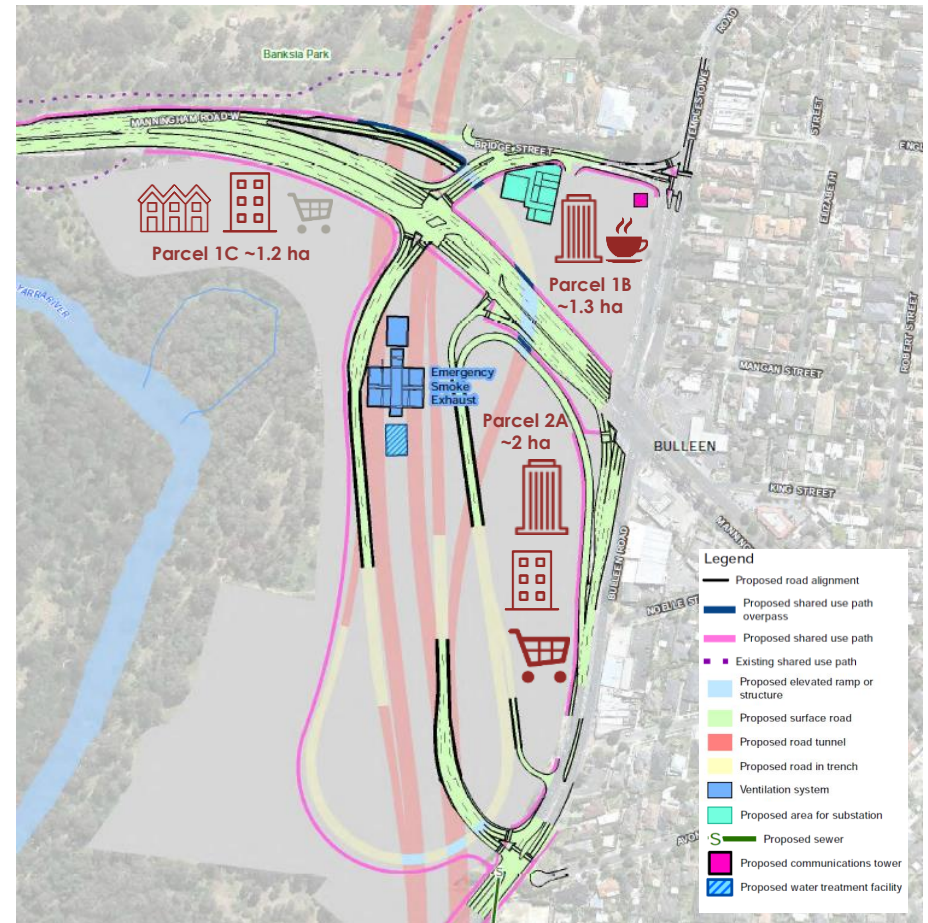
Parcel 2A (approximately 2 ha) is located to the east of the NEL tunnel. However the parcel is largely bounded by the northbound on ramps, which significantly reduce the size of developable area and the level of corner exposure and main road frontage. This parcel still has the potential to accommodate the proposed retail centre, the majority of office space and a proportion of mid to high rise apartments. However, the locations of potential access points would be highly constrained due to the ramps. This would also put more pressure on the traffic flows relating to ingress / egress and internal circulation of the site considering various vehicle and pedestrian movements generated from a mix of uses.

Parcel 2B (approximately 1.3 ha) is bounded by Manningham Road, Bulleen Road and Bridge Street. Similar to Option 1, this parcel could be developed complementary to Parcel 1A with campus style office buildings at a smaller scale supported by ancillary retail uses.

Parcel 2C (approximately 1.2 ha) is located to the west of the NEL tunnel and relatively separated from the other parcels by tunnel open cuts and ramps. Similar to Option 1, with close proximity and direct access to the Yarra River, this parcel is well positioned for the majority of residential with a diverse mix of products supported by ancillary retail uses.

Considering access constraints of Parcel 2A, the parcel could be also used as an alternative for the proposed retail centre taking advantages of corner exposure and main road frontage.

Map 22_Indicative Siting – Option 2



_Annexure

A1_Data Pack



A1_Data Pack

Demographic Profile, 2016

Census 2016	Bulleen	Templestowe Lower	Heidelberg - Rosanna	Ivanhoe East - Eaglemont	Viewbank - Yallambie	Total Study Area	Manningham LGA	Banyule LGA	Greater Melbourne
ERP 2018	11,763	14,449	16,127	8,251	19,214	69,804	125,508	130,237	4,963,349
<i>Population Density (persons/ha)</i>	17.6	24.3	25.3	19.3	18.8	20.8	11.1	20.8	5.0
Age Distribution (% ERP)									
0-4	5.1%	5.3%	7.1%	4.5%	6.5%	5.9%	4.8%	6.4%	6.4%
5-19	15.6%	16.7%	16.3%	20.4%	18.0%	17.2%	17.8%	17.3%	17.9%
20-24	5.8%	5.1%	5.6%	6.3%	5.6%	5.6%	6.2%	6.1%	7.4%
25-34	11.3%	9.9%	13.8%	9.2%	11.9%	11.5%	11.1%	13.3%	16.3%
35-44	12.3%	13.1%	15.1%	10.8%	15.0%	13.7%	12.1%	14.3%	14.2%
45-54	14.7%	13.8%	12.5%	15.4%	13.3%	13.7%	14.3%	13.3%	13.1%
55-64	11.3%	10.7%	10.4%	14.8%	10.9%	11.3%	12.4%	11.9%	10.6%
65-74	10.4%	11.5%	8.2%	10.8%	9.8%	10.0%	10.6%	9.4%	7.7%
75+	13.6%	14.0%	10.9%	7.9%	8.9%	11.1%	10.7%	8.0%	6.4%
<i>Median Age (years)</i>	44	44	39	44	40	42	39	43	36
Birthplace (% ERP)									
Australian	57.9%	60.6%	73.1%	77.5%	73.2%	68.5%	58.3%	75.4%	63.9%
Overseas	42.1%	39.4%	26.9%	22.5%	26.8%	31.5%	41.7%	24.6%	36.1%
Household Composition (% Households)									
Couples with no children	28.6%	27.2%	24.7%	26.4%	25.4%	26.3%	27.1%	25.1%	24.2%
Couples with children	37.6%	40.0%	34.6%	43.6%	38.6%	38.3%	41.1%	35.7%	35.4%
One parent families	9.5%	10.7%	8.5%	7.5%	10.8%	9.6%	9.8%	10.8%	10.6%
Other families	1.1%	1.2%	1.4%	1.3%	0.9%	1.2%	1.2%	1.4%	1.5%
Lone person	20.7%	19.1%	27.3%	19.6%	22.0%	22.2%	18.6%	23.8%	23.2%
Group households	2.4%	1.8%	3.4%	1.6%	2.3%	2.4%	2.2%	3.2%	5.0%
<i>Average Household Size (persons)</i>	2.7	2.7	2.5	2.8	2.6	2.6	2.6	2.8	2.7
Average Household Income (\$ pa)	\$115,935	\$114,967	\$116,192	\$187,165	\$113,871	\$123,224	\$125,317	\$114,421	\$108,488
<i>Variation from Greater Melbourne</i>	6.9%	6.0%	7.1%	72.5%	5.0%	13.6%	15.5%	5.5%	0.0%

Source: ABS Census 2016

A1_Data Pack

Resident Workforce Profile, 2016

Census 2016	Bulleen	Templestowe Lower	Heidelberg Rosanna	Ivanhoe East - Eaglemont	Viewbank - Yallambie	Total Study Area	Manningham LGA	Banyule LGA	Greater Melbourne
Employed Residents	4,921	5,883	7,057	3,897	8,747	30,505	52,818	58,915	2,115,493
Resident Workforce	5,242	6,258	7,460	4,102	9,232	32,294	56,269	62,344	2,269,119
Employment Rate (%)	93.9%	94.0%	94.6%	95.0%	94.7%	94.5%	93.9%	94.5%	93.2%
Participation Rate (%)	55.9%	55.3%	62.1%	64.9%	62.4%	60.0%	57.7%	62.4%	61.9%
Industry of Employment (% employed residents)									
Agriculture, Forestry and Fishing	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.6%
Mining	0.1%	0.2%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%
Manufacturing	5.8%	5.4%	5.4%	4.8%	5.8%	5.5%	5.6%	5.8%	7.7%
Electricity, Gas, Water and Waste Services	0.8%	0.9%	0.9%	0.8%	0.9%	0.9%	0.8%	0.9%	1.0%
Construction	7.0%	7.5%	6.6%	6.2%	7.4%	7.0%	7.7%	8.3%	8.2%
Wholesale Trade	3.8%	3.9%	2.8%	3.4%	2.9%	3.3%	4.2%	3.0%	3.5%
Retail Trade	12.6%	12.2%	8.4%	9.6%	8.7%	10.1%	11.9%	8.9%	10.1%
Accommodation and Food Services	7.2%	6.9%	4.8%	4.7%	4.8%	5.6%	7.0%	5.0%	6.5%
Transport, Postal and Warehousing	3.3%	3.5%	3.1%	2.5%	3.5%	3.2%	3.3%	3.6%	5.0%
Information Media and Telecommunications	2.2%	2.0%	2.5%	2.6%	2.3%	2.3%	2.2%	2.2%	2.2%
Financial and Insurance Services	5.4%	5.6%	5.0%	5.8%	5.0%	5.3%	5.3%	4.6%	4.5%
Rental, Hiring and Real Estate Services	2.2%	1.9%	1.6%	2.9%	1.2%	1.8%	2.2%	1.6%	1.7%
Professional, Scientific and Technical Services	10.4%	10.9%	11.7%	14.8%	9.4%	11.1%	10.5%	9.8%	9.0%
Administrative and Support Services	3.5%	3.0%	3.2%	2.2%	2.7%	2.9%	3.5%	3.0%	3.6%
Public Administration and Safety	4.6%	4.3%	6.4%	4.9%	10.9%	6.8%	4.0%	7.1%	5.0%
Education and Training	8.7%	9.3%	12.6%	11.0%	11.4%	10.8%	8.6%	11.3%	8.6%
Health Care and Social Assistance	11.6%	12.3%	15.9%	14.3%	14.3%	13.9%	12.7%	15.1%	12.0%
Arts and Recreation Services	1.8%	2.0%	2.2%	2.3%	2.0%	2.1%	1.8%	2.2%	2.1%
Other Services	3.7%	3.6%	2.8%	2.8%	2.9%	3.1%	3.6%	3.3%	3.6%
Other	5.0%	4.5%	3.5%	3.6%	3.3%	3.9%	4.7%	3.8%	4.9%
Occupation of Employment (% employed residents)									
Managers	15.7%	16.6%	14.4%	19.0%	13.6%	15.4%	16.8%	13.6%	13.2%
Professionals	27.3%	29.8%	37.1%	39.0%	30.1%	32.4%	28.5%	30.2%	25.0%
Technicians and Trades Workers	10.6%	10.3%	9.2%	6.3%	13.2%	10.4%	10.5%	12.2%	12.6%
Community and Personal Service Workers	9.4%	8.6%	8.5%	6.2%	10.3%	8.9%	8.9%	10.1%	10.2%
Clerical and Administrative Workers	14.3%	13.6%	13.8%	14.3%	15.2%	14.3%	14.3%	14.8%	13.9%
Sales Workers	11.9%	11.1%	8.4%	9.9%	8.4%	9.7%	11.1%	8.7%	9.7%
Machinery Operators and Drivers	2.8%	2.4%	2.3%	0.9%	3.0%	2.4%	2.6%	3.1%	5.6%
Labourers	6.0%	5.8%	4.9%	3.2%	5.0%	5.1%	5.6%	5.8%	8.1%
Other	2.0%	1.7%	1.5%	1.2%	1.2%	1.5%	1.7%	1.5%	1.7%

A1_Data Pack

Workers' Profile, 2016

Census 2016	DZN	Bulleen	Templestowe Lower	Heidelberg Rosanna	Ivanhoe East - Eaglemont	Viewbank - Yallambie	Total Study Area	Manningham LGA	Banyule LGA	Greater Melbourne
Workers	1,142	2,710	2,998	13,566	1,338	2,722	23,334	28,927	40,353	2,046,163
Job Density (workers/ha)	5.4	4.1	5.0	21.3	3.1	2.7	7.0	2.6	6.5	2.0
Job Servicing Ratio (workers/resident)	-	0.23	0.21	0.87	0.16	0.14	0.34	0.24	0.32	0.43
Industry of Workers (% workers)										
Agriculture, Forestry & Fishing	0.4%	0.3%	0.7%	0.1%	0.0%	0.1%	0.2%	0.4%	0.2%	0.6%
Mining	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.2%
Manufacturing	3.5%	5.1%	1.7%	0.7%	1.4%	0.7%	1.5%	2.5%	5.4%	7.9%
Electricity, Gas, Water & Waste Services	0.5%	0.2%	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.2%	1.0%
Construction	13.6%	9.8%	4.3%	2.1%	11.1%	7.6%	4.9%	8.4%	6.8%	6.7%
Wholesale Trade	4.0%	2.4%	1.0%	1.2%	2.1%	0.5%	1.4%	2.3%	1.9%	3.6%
Retail Trade	11.8%	12.2%	8.7%	5.7%	10.3%	2.6%	7.0%	18.8%	9.7%	10.4%
Accommodation & Food Services	11.5%	8.7%	6.3%	3.6%	5.5%	5.7%	5.2%	8.5%	5.7%	6.6%
Transport, Postal & Warehousing	2.4%	2.3%	1.1%	0.3%	0.9%	1.2%	0.8%	2.4%	1.6%	5.0%
Information Media & Telecommunications	0.5%	1.1%	0.6%	0.3%	2.6%	0.7%	0.6%	1.2%	0.8%	2.2%
Financial & Insurance Services	0.5%	1.6%	0.9%	0.8%	4.0%	1.4%	1.2%	2.3%	1.4%	4.7%
Rental, Hiring & Real Estate Services	1.3%	1.1%	0.8%	0.5%	2.1%	0.7%	0.8%	2.5%	1.2%	1.8%
Professional, Scientific & Technical Services	4.1%	6.0%	5.5%	4.2%	16.8%	8.9%	5.7%	7.8%	6.0%	9.3%
Administrative & Support Services	3.7%	3.1%	2.4%	1.1%	3.7%	2.2%	1.9%	2.9%	2.5%	3.3%
Public Administration & Safety	0.5%	0.9%	0.5%	4.9%	0.6%	30.4%	6.3%	3.1%	5.9%	5.2%
Education & Training	22.3%	17.9%	13.3%	5.4%	7.4%	15.3%	9.8%	11.3%	10.8%	8.8%
Health Care & Social Assistance	1.0%	10.8%	42.2%	64.5%	20.8%	14.8%	45.0%	15.2%	31.2%	12.1%
Arts & Recreation Services	3.9%	4.7%	3.9%	0.4%	1.7%	2.4%	1.7%	1.9%	1.5%	2.1%
Other Services	9.2%	7.0%	2.6%	1.3%	5.1%	1.9%	2.7%	4.4%	3.5%	3.6%
Other	5.2%	4.9%	3.5%	2.7%	3.8%	2.8%	3.2%	4.0%	3.7%	4.9%
Occupation of Workers (% workers)										
Managers	13.5%	13.2%	9.8%	6.4%	12.5%	11.8%	8.8%	12.1%	9.4%	13.5%
Professionals	18.3%	21.3%	23.0%	49.5%	29.8%	24.8%	37.9%	20.7%	31.5%	25.5%
Technicians and Trades Workers	18.2%	14.6%	8.3%	7.5%	12.6%	16.6%	10.2%	11.9%	12.9%	11.5%
Community and Personal Service Workers	13.3%	15.2%	30.5%	11.4%	15.0%	22.7%	15.7%	15.7%	13.7%	10.3%
Clerical and Administrative Workers	13.5%	13.0%	11.4%	13.1%	14.0%	11.0%	12.7%	11.2%	12.7%	14.3%
Sales Workers	7.0%	9.3%	7.9%	4.8%	8.6%	4.0%	5.9%	16.8%	8.8%	9.9%
Machinery Operators and Drivers	4.5%	3.9%	1.2%	1.4%	0.6%	2.1%	1.8%	2.8%	3.1%	5.6%
Labourers	10.2%	8.1%	6.4%	4.7%	5.6%	5.1%	5.6%	7.3%	6.6%	7.6%
Other	1.5%	1.5%	1.5%	1.3%	1.3%	2.0%	1.4%	1.4%	1.4%	1.7%

A1_Data Pack

Output by Industry, 2017

Output by Industry 2017	DZN	Bulleen	Templestowe Lower	Heidelberg - Rosanna	Ivanhoe East - Eglemont	Viewbank - Yallambie	Total Study Area	Manningham LGA	Banyule LGA	Greater Melbourne
Agriculture, Forestry & Fishing	0.6%	1.1%	1.3%	0.1%	0.0%	0.0%	0.4%	0.5%	0.2%	0.7%
Mining	0.0%	0.0%	0.0%	0.2%	0.1%	0.2%	0.2%	0.1%	0.2%	0.6%
Manufacturing	8.2%	13.3%	4.5%	1.1%	0.5%	0.6%	3.1%	5.0%	12.2%	18.1%
Electricity, Gas, Water & Waste Services	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.4%	0.4%	0.6%	2.8%
Construction	30.8%	21.5%	11.5%	6.0%	23.9%	15.1%	11.8%	20.3%	15.8%	12.8%
Wholesale Trade	8.0%	3.9%	0.8%	2.9%	2.0%	0.0%	2.2%	3.4%	2.9%	4.3%
Retail Trade	5.2%	5.6%	4.8%	3.9%	3.9%	0.8%	3.7%	8.4%	4.5%	3.7%
Accommodation & Food Services	5.3%	3.8%	3.6%	2.5%	2.3%	2.0%	2.7%	4.0%	2.8%	2.7%
Transport, Postal & Warehousing	3.2%	2.7%	0.7%	0.6%	0.3%	1.6%	1.1%	2.4%	2.0%	5.6%
Information Media & Telecommunications	2.1%	1.6%	1.8%	1.2%	2.6%	0.9%	1.4%	2.7%	1.7%	4.3%
Financial & Insurance Services	1.1%	3.7%	3.7%	2.5%	9.9%	3.0%	3.5%	5.4%	3.3%	9.2%
Rental, Hiring & Real Estate Services	11.8%	12.7%	17.4%	9.8%	18.7%	14.2%	12.6%	17.1%	12.7%	9.3%
Professional, Scientific & Technical Services	4.1%	6.5%	6.8%	6.8%	16.6%	7.2%	7.6%	8.3%	6.5%	7.7%
Administrative & Support Services	1.5%	2.3%	3.5%	2.1%	2.9%	1.6%	2.3%	3.3%	3.1%	3.3%
Public Administration & Safety	0.2%	0.3%	0.2%	5.2%	0.5%	40.0%	9.9%	2.3%	6.6%	3.2%
Education & Training	10.0%	8.6%	7.7%	4.3%	2.8%	5.7%	5.5%	5.3%	5.6%	4.0%
Health Care & Social Assistance	0.4%	5.1%	26.0%	48.2%	9.8%	5.4%	28.8%	7.5%	16.3%	4.7%
Arts & Recreation Services	2.8%	3.4%	4.0%	0.5%	0.9%	1.6%	1.6%	1.3%	1.1%	1.5%
Other Services	4.9%	4.0%	1.5%	1.0%	2.1%	0.5%	1.5%	2.3%	2.0%	1.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Remplan

A1_Data Pack

Business Count, 2018

2018	Bulleen	Templestowe Lower	Heidelberg - Rosanna	Ivanhoe East - Eaglemont	Viewbank - Yallambie	Total Study Area	Manningham LGA	Banyule LGA
Business Count	1,332	1,316	1,489	1,133	1,044	6,314	13,979	11,048
Business by Employemnt Size								
Non employing	899	911	932	777	714	4,233	9,282	7,050
1-19 Employees	415	390	522	353	324	2,004	4,565	3,835
20-199 Employees	18	15	35	3	6	77	128	159
200+ Employees	0	0	0	0	0	0	4	4
Business by Industry								
Agriculture, Forestry & Fishing	0.6%	0.5%	0.7%	1.7%	1.0%	0.9%	0.9%	0.9%
Mining	0.0%	0.0%	0.0%	0.3%	0.3%	0.1%	0.0%	0.1%
Manufacturing	2.8%	2.0%	1.9%	2.4%	2.1%	2.2%	2.1%	3.5%
Electricity, Gas, Water & Waste Services	0.2%	0.3%	0.4%	0.3%	0.3%	0.3%	0.2%	0.2%
Construction	15.9%	16.9%	14.7%	10.3%	22.8%	16.0%	16.8%	19.5%
Wholesale Trade	4.1%	5.0%	2.2%	2.9%	3.7%	3.6%	5.0%	3.4%
Retail Trade	5.7%	6.5%	4.8%	4.6%	5.4%	5.4%	6.0%	5.6%
Accommodation & Food Services	3.7%	4.5%	4.8%	2.0%	3.2%	3.7%	4.7%	3.4%
Transport, Postal & Warehousing	5.4%	6.1%	4.6%	2.3%	6.6%	5.0%	5.1%	6.0%
Information Media & Telecommunications	0.7%	0.8%	0.8%	1.6%	0.8%	0.9%	0.7%	0.8%
Financial & Insurance Services	10.2%	10.8%	10.9%	15.4%	8.3%	11.1%	12.0%	10.1%
Rental, Hiring & Real Estate Services	18.8%	13.8%	10.3%	18.1%	8.0%	13.9%	15.5%	10.4%
Professional, Scientific & Technical Services	11.7%	13.8%	17.0%	18.7%	17.5%	15.6%	13.6%	15.3%
Administrative & Support Services	2.1%	3.3%	4.0%	2.8%	4.2%	3.2%	3.3%	3.7%
Public Administration & Safety	0.2%	0.2%	0.6%	0.3%	0.6%	0.4%	0.2%	0.3%
Education & Training	1.5%	1.9%	2.4%	1.2%	2.3%	1.9%	1.4%	1.7%
Health Care & Social Assistance	9.3%	7.9%	15.4%	11.1%	6.6%	10.3%	7.3%	8.6%
Arts & Recreation Services	1.2%	1.6%	1.0%	1.1%	1.7%	1.3%	1.0%	1.3%
Other Services	4.9%	3.5%	2.8%	2.2%	3.7%	3.4%	3.2%	4.2%
Other	1.0%	0.7%	0.7%	1.0%	1.0%	0.9%	1.0%	1.0%

Source: ABS 8165



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